

They were called the “Kirin,” because some braggart poet amongst their ranks made himself a minor name, centuries ago, by composing an ode to them – arguably, to himself – comparing them to the virtues of the heavenly beast. The crystalline node upon their heads like the Kirin’s horn; their augmented intelligence like unto the wisdom of the guardian of sages. And were they not graceful as they flitted through the Core, their feet never harming a blade of grass?

It was, in Mayuya’s eyes, mostly dross. Some of other Kirin clans had, in her opinion, far too much time on their hands, and should be seriously considered for reassignments to more important tasks – assuming that they still retained the intellectual capability to be of some use to administrative, judicial and research purposes. At the very least, she supposed, their neuralware could be borrowed for the runtimes of some of the algorithmic studies – certainly, nanotech augments to their intellectual *potential* hasn’t made geniuses of some idiots she could name. Or diligent, nor critical, thinkers out of the slothful.

She was a bit stuck up about things like that.

As for graceful? In the Core, maybe. A lifetime of living in low-gravity environments adapts one to the quirks of traversal within such a framework. While it’s true they rarely crush grass underfoot, that fact had more to do with the matter that garden-observatories weren’t common, while the rest of the Core assembly was a pastiche of ceramics, steel, aluminum and taut carbon fiber.

And when they were out of the Core? Their continued care and avoidance of flora and fauna of all shapes and sizes was not due, despite the claim of some of the clan matriarchs more susceptible to the flattery of ancient poems, to their innate nobility.

It was because it would be easier to list the things they *weren’t* likely to have an allergy to. Or pick up an infection from. Or just get roasted by the ultraviolet glare of the solar lamps pointed outward from the Core Shaft.

“Item one: go through Core Immigration immunization process,” listed Spike as their maglev carriage stopped at a Spoke station. Mayuya groaned. “What? It’s just a short session.” “Easy for you to say,” sniffed Mayuya as she reluctantly pulled her luggage crate along. “You’re mostly inorganic. They just flush you with cleaning solution and UV rays on your way *back*.” She nodded inattentively to the two royal marines snapping to a salute at the entrance of the processing clinic – their duties, in this day and age, were mostly ceremonial. “*I’m* going to have a couple dozen needles stuck into me. Apparently, the doctors out here think it’s more reliable to stick a barbaric length of metal into you than use non-invasive delivery units.” She sighed miserably. “And I’ll still be sniffing when we finally reach the Surface, no thanks to the ongoing pollination efforts. Ugh. This is such a waste of time!”

“Oh c’mon, it won’t be that bad,” consoled Spike. “Besides, the Princess’s putting you up at the local library! There’s supposed to be a bunch of rare texts on rotation at the Hopesville community center. I’m sure you’ll have a great time.”

“...yes, yes you’re right.” Mayuya perked up, a steely glint in her eyes as she signed the waivers handed to her by the registrar. “Hopesville’s library has a collection on folklore and historical accounts. Not quite as good as the royal archives, but I’m sure it’ll have the evidence I need to *prove* that there’s a legitimate threat to the ship!”

Spike sighed. It was going to be a long couple of days.

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They were winged.

It was the first and most obvious thing about the Alkonosts, so named after the winged heralds of Russian folklore. It’s rather hard to miss the five-meter wingspan, framing what was often a small body, dark with eumelanin, drifting lazily in the thermal drafts amidst the solar lamps and Spoke towers leading between the worlds of the Surface and the Core. They were the products of the dreadful algebra of necessity – the *least* human of the three subraces... and arguably the most vital to the colony’s continued survival on its endless voyage.

Once, upon a distant time, there was a war. Though the details always shift, it was really no different from any other: the predominant theme, as always, was “sacrifice.” And what was sacrificed was “hope.” Many lives were lost – more, really, than could be spared. The fragile balance of a closed ecosystem, no matter how thoroughly redundant, is easily shattered. Were there enough, just barely, to grow food for the survivors? Was there medicine left for the sick and wounded? Perhaps – the ship was large, well-stocked, and well-engineered.

But the ship was designed to be *maintained* by an equally large, well-stocked, and well-prepared crew.

How many hundreds of thousands of square kilometers comprised the Inner Surface? How many *millions* of tons of biomass does that account for? With the war’s terrible wracking, how much of it was now slowly decomposing, choking the air with rot and disease?

And there was the matter of the forty-seven Spokes connecting the Core Shaft with the Inner Surface. Each could be measured in kilometers – and each was host to what remained of the ship’s climate controls and mechanical life support systems.

Necessity, they say, is the mother of invention. But desperation and, frankly, *madness* are good stand-ins too. They needed people that could survive regular journeys up the shattered Shaft to maintain what systems worked and repair, over decades, those that have ceased. They needed those sharp of both mind and reflex, adept in mechanical work and with more than a hint of a daredevil in their souls.

They, frankly, needed somebody *mad*.

Crazy enough, *insane* enough, to climb tens of kilometers to manually wrench open a stuck gas vent with the very real, very deadly risk of getting knocked off by the atmospheric turmoil naturally generated by *massive, multi-megaton superstructures* rotating at high speed through turgid, smog-thickened atmosphere. Prior to the war, the risk would have been mitigated by the Spokes themselves, their climate panels and vents and endless banks of fine-tuned sensors working in synchronous harmony to offset the perilous fluid dynamics with almost atomic precision. Now, only those that would dare the hurricane, and the fireballs of faulty solar lamps, need qualify.

Volunteers were treated as the walking dead. Respected... but given distance.

They had, to the estimates of the scientists that survived, roughly forty years to get it right before the environmental imbalance exhausted their oxygen reserves. And so they labored desperately against the fey winds. Parachutes were of no help – either shredded by the gale, or doomed by the fact that it was not “true” gravity dragging you in a predictable and exploitable direction, but the victim’s accelerating drift through low-gravity space towards a *rapidly rotating, high-kinetic surface*. Gliders fared a little better – *if* they survived the storm, it allowed greater control over their flight path, though much trial and error was required to learn how to fly along a rotational frame.

And then, one day, a technician looked up, half-crazed by the endless winds and scorching heat, and saw a vision of birds...

But that’s ancient history for Vaiva Kaptsov, Weather Modification Specialist (Moisture) II. The old war, her ancestor’s sacrifice of her very humanity, the role it had in the trifold formation of Modern Arcadia...

Dude, who cares?

Learning all that old stuff isn’t going to keep the aerosolizers running. Nor – more importantly! – is it going to help her figure out how to pull off that trick with the magnetized pinions and thundercloud she saw the ‘Bolts pull off!

Vaiva squinted as she took a plier to her aeroframe’s support arms, a critical eye judging the curve of the aluminum as it tapered into a construct of lightweight ceramics and electrically managed rotors. A grunt of grudging satisfaction, and she hoisted it over her back, two sets of shoulder blades shrugging into customized grooves as fasteners hissed into position. Many Alkonosts in the weather management industry were fond of the wing extension packs – the increased length and flight control support of the standard pack allowed extended coasting periods, better load limits and superior stability.

Vaiva preferred to modify hers in a completely different direction. Speed and agility were what

she craved – mostly *speed*. And if you had a Kirin buddy that owed you favors, a little tweaking here and here of the ceramic pinions, some software modification to the onboard computer... and, oh, yes, the flight goggles.

She adjusted the strap, wincing and pulling at chromatic hair pinched by the leather, and clicked it on. ...*there*. Huh. So this is how Kirins saw the world. Lots of otherwise meaningless squiggly lines... except for the electric-blue concentric arcs crackling over the immense entirety of the Hopesville Spoke. That would be the electromagnetic field of the Spoke – one generated *en masse* by the powerful machinery built into it.

And that thin red line, weaving through the rings, plotted after days of careful observation and calculation, was her flight path. Pulled off right, and all of Arcadia will know this as the *Kaptsov Corkscrew*. Screw up, and... well, she'll think of something. She had her wings, after all.

A ripple of tensing back muscles, her shuddering visible through her skin-tight, light blue worksuit. Alkonost fashion was, to the eyes of others, immodest – but wind drag, weight, and minimal flight performance was a bit more urgent than the judgment of people thousands of meters above and below you. Or ahead and behind you, as was the case as Vaiva stared down the length of the Spoke.

A timer seen only by her ticked to zero... and she lunged forward. A smooth, almost feline motion that sent her hurtling over the side of an alcove along the thickest part of the Spoke just as a supply carriage roared past, wings flapping once, twice, then folding tightly in as the wake dragged at her viciously.

Glee rose within her.

This... was going to be *awesome*.

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Mayuya grunted. The thing about the false gravity of a rapidly rotating surface – it was discernible from the real thing only by virtue of theory and calculation. About forty-five kilograms of luggage is a bit awkward in low-gravity due to inertia. The same amount of mass on the Inner Surface is a downright burden.

And the most embarrassing thing was that all she was carrying was a handbag – merely a data reader and the day's supply of immunoboosters and miscellanea. Not that vials of nanites and their primers weren't deceptively dense, but...

"Are you sure you're alright, milady?" asked the concerned guardsman as he carried maybe twenty times the piddling amount of weight she was burdened with. His dull yellow uniform, a partial carapace of ceramic plates and cloth, was polished to a gleam. "I could take the load off

your hands-“

“That... that will be quite alright,” said Mayuya tersely. “The carriage is not far from the station, yes?”

“Hmm. Just outside those doors,” said the guard, nodding down towards the far end of the corridor. “The Princess’s assigned a number of guards in town to help prepare with the festivities. If you wish, I can signal ahead so somebody can help you.”

“That *will not*-“

“We’d *absolutely love* to have some help,” interjected Spike. He glared at Mayuya and pulled on the long sleeves of her robe. “C’mon, the guy’s helped Kirin before. It’s his job. And *I’m* not carrying all that.” Mayuya flushed, angry and embarrassed. “Besides, it’s your fault for bringing so much stuff with you.”

“I forgot that they’d weigh so much down here!” protested Mayuya. “And besides, what was I supposed to leave behind? Hopesville’s an agricultural zone – there’s almost no infrastructure here!”

The guard coughed politely as they exited the attached building. Non-commodity traffic to and from Hopesville was minimal, though the multi-g lifts, traveling well in excess of hundreds of kilometers a second, made regular trips back and forth along the Spoke. Mayuya winced as the bright lights of the lamps intruded upon unattenuated eyes. “*My hometown*,” he stressed. “Prides itself in its technological autonomy. We attempt to be as close a simulation as possible to the agricultural practices to be used post-colonization. There is infrastructure, but it is cautiously utilized – though our hospices and quarters for Kirin fully meet standard quality guidelines, I assure you.”

“I’m... I’m sorry. I didn’t mean to suggest...” started Mayuya. She glanced at the cloak on the guard’s back. It was clearly designed to detach at-will, and behind it was two large masses, trailing down nearly to his ankles. “You said you were born here?”

The guard noticed her glance and nodded as the horse-drawn carriage clattered to a stop in front of them, to Mayuya’s clear fascination and trepidation. “It’s mostly a Kuguzan town, yes, as are most agricultural settlements. But weather affects agricultural work, so it isn’t uncommon for Alkonost engineers, such as my parents, to take up residence here. I take it you’ve never been on a carriage before?”

“This is a... horse, right?” asked Mayuya, dredging up dusty old biology lessons. “Is it... sanitary?”

The guard tried not to laugh. “Probably not. Horses tend to roll in the dirt, miss. She’s a fine and

healthy specimen, though, and Hopesville's not terribly far away. You'll be safe in the carriage, no doubt."

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*She was on her deathbed, surrounded by her dearly beloved... dearly warped... children. Would it be fair to call them victims of a madwoman's retrovirus? They had gone under the proverbial and sometimes literal knife willingly. For some, they had sought her out in desperation. There were... it would not be inaccurate to call them nests, high above the clouds, high above the once-palatial Core. A small and growing heaven and refuge for the deviant, the maverick, the wild and the desperate.*

*They say that she would take anybody, anybody at all, under her... wings. And through her acceptance, you would be... reborn.*

*She was on her deathbed, and surrounded by ten thousand loved ones, up here in the weightless skies. For one said to have been driven mad, driven visionary her followers assert, by the clawing winds and reeking heat, by the once-endless hurricanes that dried the lands and wasted the farms, driven mad by the loss of all she had once loved in the war of all against all... She was happy. Not yet into her sixth decade of life, as time was once measured, and she was happy for things to end this way.*

*"I don't know whether to canonize or demonize you," she once said, during geneticist turned life support guru Petra Velox's last days. "It would've taken longer, maybe too long, to reach equilibrium if you didn't make a lifestyle out of recklessness... but we did, and you did."*

*The woman wheezed a laugh, skin like parchment from constant exposure to the revived lamps, at least where malignant tumors did not yet claim domain. "As a child, I once saw you plunge into the very core of a wildfire, burning white hot and reeking of poison. I remember vividly that a child was saved that day. And you call me reckless?"*

*"There are... resources afforded to the Royal Family," she had replied coolly, a hand gently holding the old woman's clawlike fingers. "I... can extend your time. Were I at the height of my power, I could do more, but my capabilities are diminished, Petra. But you deserve this. You deserve a whole lot more."*

*The old woman's breathe caught, and released slowly. She stared out at an unseen distance, breathing quietly. "No... no. Hasn't this old woman earned her rest, your Majesty?" A languishing arm waved at the many around her. "My children... are they not adequate? They will serve, Princess. Though their forms cause fear amongst those of the False Ground."*

*"But... for how long?" asked the Princess. "How long without their Matron?"*

*A low, knowing chuckle escaped from dried lips. "Shall I entrust you with a lifetime's work? They call us Albatrosses and Stormbringers, fearing us not just for our terrible visage, but for the bad news we bring when we deign to dirty our feet upon the False Ground – and perhaps it is my own mistake, to treat the alarms of failure as a generosity to those, hah, below us. You tempt me with the gift of time, and perhaps..." A weary silence passed. "Princess... a boon."*

*"Anything, Petra," she had said earnestly.*

*They said that Petra Velox died in peace and comfort, and that the strain of years of abuse by the winds and the hundred-thousand small suns had miraculously drained from her upon death. They said that the whole ship rang with the songs of her wake. They sang in mourning of her loss, and in celebration of her life. Her ashes were strung through the once high and churning winds, so that all of Arcadia would be claimed by her touch.*

*They say she was the first Alkonost. She was the first to have sung a melody of flight and dreams, the first to have been freed from the memories of loss and tragedy.*

*She was mother and inspiration to a new and slowly growing race. The first of the three to have been touched by Divinity... to grow and flourish into modern Arcadia.*

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The path from the southernmost Spoke to the town of Hopesville was a sequence of meandering switchbacks down the steep sides of a massive wall of dirt and rubble, weaving between an ancient and well-maintained system of lifts stretching from the station to the town. Laden cargo pallets and bright-orange overalls of workers and engineers floated on steel supports overhead, with only the faintest creaking as winds pushed against the meandering structure.

Hopesville existed along a wide and shallow basin, protected from the occasionally tempestuous winds guided by the 47th Spoke. There was little of interest about it, this far from the nexus of command, but for the idyllic agrarian scenery. The foothills gave way to a wide expanse of grass, stretching out to a distant lake. Further yet was a solid sea of green – a roiling forest curving sharply upward to a perpendicular angle from the small township at its foot. You could see, even from far out here, how Coriolis forces affected the untamed forest's growth – the splay of unkempt trees that narrowed and straightened the closer it was to the Core Shaft, and the weird, twisting zero-g vines that wrapped the around the Core at the center.

The Everfree Forest was considered too dangerous to develop on. Even the Core Shaft adjacent to it was only lightly maintained, and remotely at that, its tunnels and compartments sealed off for as long as anybody could remember.

The town beneath its vast bulk, however, was so quaint that “cute” was the only other word that justified it. The locals’ adherence to a limited set of technologies gave it what would’ve once been called an intimate, “small-town” dynamic found nowhere else in Arcadia. What roads were paved were done in naturally found cobblestone and gravel, and but for a few grudging accommodations to necessity aboard a long-term starship, even the buildings lacked the uniformity of the larger districts.

Mayuya sniffed – not out of contempt, but a growing realization that, yes, it was the smell of fresh flowers and grass she was getting through the open window, and, yes, she *should* probably close it, as strange and intoxicating as the rarely experienced scents were.

“Oh, drat,” she muttered as she rummaged through her handbag. “It’s already started. Spike, do you remember what I did with that hankerchief? I can’t seem to-“

“Whoa! Mayu, look! Look!” The dragon tugged excitedly at her sleeve as they made another turn around a switchback. “Open the window! Stop the carriage! There’s something around the Spoke!”

“What? Spike, we have to get to Hopesville as soon as-“

The dragon gesticulated wildly. “I’m serious! Look! I think it’s a person!”

“What do you mean ‘a person?’ There’s no scheduled maintenance crew today.” The carriage creaked to a halt, and Mayuya stepped out, treading carefully around recently watered grass. “Spike, what are you going on about?”

She squinted up, uttering a subvocalized command. Vision filters sorted through the spectrum, cutting through the glare until... yes. Yes, there was something moving. From the looks of the guard, it was even visible to those used to the bright lights. Though the filters dimmed it, there was an impression... a streak of bright, flitting colors, making shockingly quick, degenerating orbits around the Spoke.

Was it *accelerating*? What was it? The spiraling orbit suddenly broke, there was this growing dot, and a weird, high-pitched noise-

Wait.

It...

No. No way.

Wings, desperately flapping. *Screaming*. It was a person, and... and it was *headed right this way*.



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Vaiva blinked. Mud. Ground.

She sat up and took her bearings. Wings, alright. Gear... uh... gear could use a bit of fixing. No broken bones! Always good. Man, rotating reference frames are *hard*.

“Miss Kaptsov,” said the guard, nodding down from the driver’s seat of a horse-drawn carriage. “You seem to be doing well.”

“Oh, hey. What’s up? Didja see my new trick?” beamed Vaiva to her distant cousin. “Almost got it right! A degausser went off at the end there and messed up my flight plan, but-“

“Vaiva Kaptsov, you knocked the Princess’s personal protégé senseless. Her dragon too.”

“What are you talking-“ A faint groan from under her. “...oh, *damn*.”

“Indeed.”