The Sky that Wraps the World Round, Past the Blue and Into the Black by Jay Lake

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I believe that all things eventually come to rest. Even light, though that's not what they tell you in school. How do scientists know? A billion billion years from now, even General Relativity might have been demoted to a mere Captain. Photons will sit around in little clusters of massless charge, bumping against one another like boats in the harbor at Kowloon.

The universe will be blue then, everything from one cosmic event horizon to the other the color of a summer sky.

This is what I tell myself as I paint the tiny shards spread before me. Huang's men bring them to me to work with. We are creating value, that gangster and me. I make him even more immensely wealthy. Every morning that I wake up still alive is his gratuity to me in return.

It is a fair trade.

My life is comfortable in the old house along the alley with its central court crowded with bayberry trees. A gutter trickles down the center of the narrow roadway, slimed a greenish black with waste slopped out morning and evening from the porch steps alongside. The roofs are traditional, with sloping ridges and ornamented tile caps. I have studied the ones in my own courtyard. They are worn by the years, but I believe I can see a chicken stamped into each one. "Cock," my cook says with his thick Cantonese accent, never seeing the vulgar humor.

Even these tired old houses are topped with broadband antennae and tracking dishes which follow entertainment, intelligence or high finance beamed down from orbit and beyond. Sometimes the three are indistinguishable. Private data lines sling on pirated staples and cable ties from the doddering concrete utility poles. The poles themselves are festooned with faded prayer flags, charred firecracker strings, and remnants of at least half a dozen generations of technology dedicated to transmission of *something*.

Tesla was right. Power is nothing more than another form of signal, after all. If the lights come on at a touch of your hand, civilization's carrier wave is intact.

Despite the technology dangling overhead in rotting layers, the pavement itself holds life as old as China. Toddlers wearing only faded shirts toss stones in the shadows. A mangy chow dog lives beneath a vine-grown cart trapped against someone's garden wall. Amahs air their families' bedding over wooden railings worn shiny with generations of elbows. Tiny, wrinkled men on bicycles with huge trays balanced behind their seats bring vegetables, newspapers, meat and memory sticks to the back doors of houses. Everything smells of ginger and night soil and the ubiquitous mold.

I wake each day with the dawn. Once I overcome my surprise at remaining alive through another sunrise, I tug on a cheaply printed yukata and go hunting for coffee. My cook, as tiny and wrinkled as the vendors outside but decorated with *tong* tattoos that recall another era long since lost save for a few choppy-sockie movies, does not believe in the beverage. Instead he is unfailing in politely pressing a bitter-smelling black tea on me at every opportunity. I am equally unfailing in politely refusing it. The pot is a delicate work of porcelain which owes a great deal to a China before electricity and satellite warfare. It is painted a blue almost the shade of cornflowers, with a design of a round-walled temple rising in a stepped series of roofs over some Oriental pleasaunce.

I've seen that building on postage stamps, so it must be real somewhere. Or had once been real, at least.

After the quiet combat of caffeine has concluded its initial skirmish, I shuffle to my workroom where my brushes await me. Huang has that strange combination of stony patience and sudden violence which I have observed among the powerful in China. When my employer decides I have failed in my bargain, I am certain it is the cook who will kill me. I like to imagine his last act as the light fades from my eyes will be to pour tea down my throat as a libation to see my spirit into the next world.

There is a very special color that most people will never see. You have to be out in the Deep Dark, wrapped in a skinsuit amid the hard vacuum where the solar wind sleets in an invisible radioactive rain. You can close your eyes there and let yourself float in a sensory deprivation tank the size of the universe. After a while, the little mosaics that swirl behind your eyelids are interrupted by tiny, random streaks of the palest, softest, sharpest electric blue.

I've been told the specks of light are the excitation trails of neutrinos passing through the aqueous humor of the human eye. They used to bury water tanks in Antarctic caves to see those things, back before orbit got cheap enough to push astronomy and physics into space where those sciences belong. These days, all you have to do is go for a walk outside the planet's magnetosphere and be patient.

That blue is what I capture for Huang. That blue is what I paint on the tiny shards he sends me wrapped in day-old copies of the high orbital edition of *Asahi Shimbun*. That blue is what I see in my dreams.

That blue is the color of the end of the universe, when even the light is dying.

Out in the Deep Dark we called them caltrops. They resemble jacks, that old children's toy, except with four equally-spaced arms instead of six, and slightly larger, a bit less than six centimeters tip to tip. Many are found broken, some aren't, but even the broken ones fit the pattern. They're distributed in a number of places around the belt, almost entirely in rocks derived from crustal material. The consensus had long been that they were mineral crystals endemic to Marduk's surface, back before the planet popped its cork 250 megayears ago. Certainly their microscopic structure supported the theory — carbon lattices with various impurities woven throughout.

I couldn't say how many of the caltrops were discarded, damaged, or simply destroyed by being slagged in the guts of some ore processor along with their enclosing rock. Millions, maybe.

One day someone discovered that the caltrops had been manufactured. They were technology remnants so old that our ancestors hadn't even gotten around to falling out of trees when the damned things were fabricated. The human race was genetic potential lurking in the germline of some cynodont therapsid when those caltrops had been made.

It had not occurred to anyone before that discovery to consider this hypothesis. The fact that the question came up at all was a result of a serious misunderstanding of which I was the root cause. In my greed and misjudgment I forced the loss of a device one of my crewmates discovered, an ancient piece of tech that could have allowed us to do *something* with those caltrops. My contribution to history, in truth, aside from some miniscule role in creating a portion of Huang's ever-growing millions. That the discovery of the caltrops' nature arose from human error is a mildly humorous grace note to the confirmation that we are indeed not alone in the universe.

Or at least weren't at one point.

The artificial origin of the caltrops has been generally accepted. What these things are remains a question that may never be answered, thanks to me. Most people prefer not to discuss the millions of caltrops lost to Belt mining operations over the decades that Ceres Mineral Resources has been in business.

Despite their carbon content, caltrops viewed under Earth-normal lighting conditions are actually a dull grayish-blue. This fact is not widely known on Earth. Not for the sake of being a secret — it's not — but because of *Deep Dark Blues*, the Academy Award-winning virteo about Lappet Ugarte. She's the woman who figured so prominently in the discovery of the artificial origin of the caltrops. The woman I tried to kill, and steal from. In their wisdom, the producers of that epic Bollywood docudrama saw fit to render the caltrops about twice as large as they are in real life, glowing an eerie Cherenkov blue. I suppose the real thing didn't look like much on camera.

So most of the citizens of planet Earth don't believe that they're seeing actual outer space caltrops unless they're seeing end-of-the-universe blue.

Huang sends me paint in very small jars. They're each cladded with lead foil, which makes them strangely heavy. When I take the little lead-lined caps off, the paint within is a sullen, radioactive copy of the color I used to see behind my eyelids out there in the Deep Dark.

Every time I dip my brush, I'm drawing out another little spray of radiation. Every time I lick the bristles, I'm swallowing down a few drops of cosmic sleet. I'm the last of the latter day Radium Girls.

Huang doesn't have to order the old cook to kill me. I'm doing it myself, every day.

I don't spend much time thinking about where my little radioactive shards go when they leave my house off the alleyway here in Heung Kong Tsai. People buy them for hope, for love, to have a piece of the unspeakably ancient past. There's a quiet revolution in human society as we come to terms with that history. For some, like a St. Christopher medal, touching it is important. Cancer will be important as well, if they touch them too often.

The truly odd thing is that the shards I sit here and paint with the electric blue of a dying heaven are actual caltrop shards. We're making fakes out of the real thing, Huang and I.

A truth as old as time, and I'm dressing it in special effects.

I swear, sometimes I kill myself.

This day for lunch the cook brings me a stir fry of bok choi and those strange, slimy mushrooms. He is as secretive as one of the Japanese soldiers of the last century who spent decades defending a lava tube on some Pacific island. There is tea, of course, which I of course ignore. We could play that ritual with an empty pot just as easily, but the cook executes his culinary warfare properly.

The vegetables are oddly ragged for having recently spent time in a searing hot wok. They are adorned with a pungent tan sauce the likes of which I had never tasted before entering this place. The whole mess sits atop a wad of sticky rice straight from the little mauve Panasonic cooker in the kitchen.

Food is the barometer of this household. When the cook is happy, I eat like a potentate on a diplomatic mission. When the cook is vexed by life or miffed about some slight on my part, I eat wretchedly.

I wonder what I have done this day to anger him. Our morning ritual was nothing more than ritual, after all.

When I meet the cook's eyes, I see something else there. A new distress lurks in the lines drawn tight across his forehead. I know what I gave up when I came here. It was no more than what I'd given up long ago, really, when the fates of people and planets were playing out somewhere in the Deep Dark and I went chasing the fortune of a dozen lifetimes. Still, I am not prepared for this new tension on the part of my daily adversary.

"Have you to come to kill me?" I ask him in English. I have no Cantonese, and only the usual fractured, toneless pidgin Mandarin spoken by non-Chinese in the rock ports of the asteroid belt. I've never been certain he understands me, but surely the intent of my question is clear enough.

"Huang." There is a creaky whine in his voice. This man and I can go a week at a time without exchanging a single word. I don't think he speaks more than that to anyone else.

"He is coming here?"

The cook nods. His unhappiness is quite clear.

I poke the bok choi around in my bowl and breathe in the burnt ginger-and-fish oil scent of the sauce. That Huang is coming is a surprise. I have sat quietly with my incipient tumors and withering soul and made the caltrop shards ready for market. They are being handled by a True Hero of the Belt, just as his advertising claims. Our bargain remains intact.

What can he want of me? He already holds the chitty on my life. All my labors are his. I have no reputation left, not under my real name. I bear only the memory of the heavens, and a tiny speck of certain knowledge about what once was.

It should be enough.

After a while, by way of apology, the cook removes my cooling lunch bowl and replaces it with a delicate porcelain plate bearing a honey-laden moon cake. I suspect him of humor, though the timing is hideously inappropriate.

"Xie xie," I tell him in my Mandarin pidgin. He does not smile, but the lines around his eyes relax.

Still, I will not stoop to the tea.

Huang arrives to the sound of barking dogs. I stand behind a latticed window in my garden wall and look out into the alley. The gangster's hydrogen-powered Mercedes is a familiar shade of Cherenkov blue. I doubt the aircraft paint his customizers use is hot, though.

There is a small pack of curs trailing his automobile. The driver steps out in a whirr of door motors which is as much noise as that car ever makes. He is a large man for a Chinese, tall and rugged, wearing the ubiquitous leather jacket and track pants of big money thugs from Berlin to Djakarta. His mirror shades have oddly thick frames, betraying a wealth of sensor data and computing power. I wonder if he ever removes them, or if they are implants. Life in this century has become a cheap 1980s science fiction novel.

The driver gives the dogs a long look which quiets them, then opens Huang's door. The man himself steps out without any ceremony or further security. If there is air cover, or rooftop snipers, they are invisible to me.

Huang is small, with the compact strength of a wrestler. His face is a collapsed mass of wrinkles that makes his age impossible to guess. There are enough environmental poisons which can do that to a man without the help of time's relentless decay. Today he wears a sharkskin jacket over a pale blue cheongsam. His eyes when he glances up to my lattice are the watery shade of light in rain.

I walk slowly through the courtyard. That is where Huang will meet me, beneath a bayberry tree on a stone bench with legs carved like lions.

He is not there when I take my seat. Giving instructions to the cook, no doubt. The pond

occupies my attention while I wait. It is small, not more than two meters across at its longest axis. The rim is walled with rugged rocks that might have just been ejected from the Earth moments before the mason laid them. Nothing is that sharp-edged out in the Belt, not after a quarter billion years of collision, of dust, of rubbing against each other. The water is scummed over with a brilliant shade of green that strikes fear in the heart of anyone who ever has had responsibility for a biotic air recycling plant.

They say water is blue, but water is really nothing at all but light trapped before the eyes. It's like glass, taking the color of whatever it is laced with, whatever stands behind it, whatever shade is bent through its substance. Most people out in the Deep Dark have a mystical relationship with water. The very idea of oceans seems a divine improbability to them. As for me, my parents came from Samoa. I was born in Tacoma, and grew up on Puget Sound before finding my way Up. To me, it's just water.

Still, this little pond choked with the wrong kind of life seems to say so much about everything that is wrong with Earth, with the Deep Dark, with the little damp sparks of colonies on Ceres and Mars and elsewhere. I wondered what would happen to the pond if I poured my blue paint out of its lead-lined bottles into the water.

"Your work holds fair," says Huang. I did not hear him approach. Glancing down, I see his crepe-soled boat shoes, that could have come straight off some streetcorner vendor's rack to cover his million dollar feet.

I meet his water-blue eyes. Pale, so pale, reflecting the color of his golf shirt. "Thank you, sir."

He looks at me a while. It is precisely the look an amah gives a slab of fish in the market. Finally he speaks again: "There have been inquiries."

I reply without thinking. "About the radioactives?"

One eyebrow inches up. "Mmm?"

I am quiet now. I have abandoned our shared fiction for a moment, that pretense that I do not know he is poisoning thousands of homes worldwide through his artifact trade. Mistakes such as that can be fatal. That the entire present course of my life is fatal is not sufficient excuse for thoughtless stupidity.

Huang takes my silence as an answer. "Certain persons have come to me seeking a man of your description."

With a shrug, I tell him, "I was famous once, for a little while." One of history's villains, in fact, in my moment of media glory.

"What you paid me to keep you...they have made an offer far more generous."

I'd sold him my life, that strange, cold morning in a reeking teahouse in Sendai the previous year. Paid him in a substantial amount cash, labor and the last bare threads of my reputation in exchange for a quiet, peaceful penance and the release of obligation. Unfortunately, I could imagine why someone else would trouble to buy Huang out.

He was waiting for me to ask. I would not do that. What I would do was give him a reason not to send me away. "My handiwork meets your requirements, yes?" Reminding him of the hot paint, and the trail of liability which could eventually follow that blue glow back to its source.

Even gangsters who'd left any fear of law enforcement far behind could be sued in civil court.

"You might wish me to take this offer," he says slowly.

"When has the dog ever had its choice of chains?"

A smile flits across Huang's face before losing itself in the nest of wrinkles. "You have no desires in the matter?"

"Only to remain quietly in this house until our bargain is complete."

Huang is silent a long, thoughtful moment. Then: "Money completes everything, spaceman." He nods once before walking away,

It is difficult to threaten a man such as myself with no family, no friends, and no future. That must be a strange lesson for Huang.

I drift back to the latticed window. He is in the alley speaking to the empty air - an otic cell bead. A man like Huang wouldn't have an implant. The dogs are quiet until he steps back into the blue Mercedes. They begin barking and wailing as the car slides away silent as dustfall.

It is then that I realize that the dog pack are holograms, an extension of the car itself.

Until humans went into the Deep Dark, we never knew how kindly Earth truly was. A man standing on earthquake-raddled ground in the midst of the most violent hurricane is as safe as babe-in-arms compared to any moment of life in hard vacuum. The smallest five-jiao pressure seal, procured low bid and installed by a bored maintech with a hangover, could fail and bring with it rapid, painful death.

The risk changes people, in ways most of them never realize. Friendships and hatreds are held equally close. Total strangers will share their last half-liter of air to keep one another alive just a little longer, in case rescue should show. Premeditated murder is almost unknown in the Deep Dark, though manslaughter is sadly common. Any fight can kill, even if just by diverting someone's attention away from the environmentals at a critical moment.

So people find value in one another that was never been foreseen back on Earth. Only the managers and executives who work in the rock ports and colonies have kept the old, human habits of us-and-them, scheming, assassination of both character and body.

The question on my mind was whether it was an old enemy come for me, or someone from the Ceres Minerals Resources corporate hierarchy. Even setting aside the incalculable damage to our understanding of history, in ensuring the loss of the first verifiable nonhuman artifact, I'd also been the proximate cause of what many people chose to view as the loss of a billion tai kong yuan. Certain managers who would have preferred to exchange their white collars for bank accounts deeper than generations had taken my actions very badly.

Another Belt miner might have yanked my oxygen valve out of sheer, maddened frustration, but it took an angry salaryman to truly plot my ruin in a spreadsheet while smiling slowly. Here in Huang's steel embrace I thought I'd managed my own ruin quite nicely. Yet someone was offering good money for me.

Oddly, Huang had made it all but my choice. Or seemed to, at any rate. Which implied he saw this inquiry as a matter of honor. Huang, like all his kind, was quite elastic in his reasoning about money, at least so long as it kept flowing, but implacable when it came to his notions of honor.

Even my honor, it would seem.

All of this was a very thin thread of logic from which to dangle. I could just keep painting shards until any one of several things killed me — radiation sickness, cancer, the old cook. Or I could tell Huang to break the deal he and I had made, and pass me back out of this house alive.

Given how much trouble I'd taken in order to surrender all control, there was something strangely alluring about being offered back the chitty on my life.

That night when the cook brought me the tea, I poured some into the tiny cup with no handles. He gave me a long, slow stare. "You go out?"

"With Mr. Huang, yes," I told him.

The cook grunted, then withdrew to the kitchen.

The tea was so bitter that for a moment I wondered if he'd brewed it with rat poison. Even as this thought faded, the cook came back with a second cup and poured it out for himself. He sat down opposite me, something else he'd never done. Then he drew a small mesh bag on a chain out from inside his grubby white t-shirt.

"See this, ah." He tugged open the top of the bag. Out tumbled one of my little blue caltrop fragments. I could almost see it spark in his hand.

"You shouldn't be holding that."

The cook hefted the mesh bag. "Lead. No sick."

I reached out and took the caltrop arm. It was just that, a single arm broken off below the body. I fancied it was warm to my touch. It was certainly very, very blue.

"Why?" I asked him.

He looked up at the ceiling and spread one hand in a slow wave, as if to indicate the limitless stars in the Deep Dark far above our heads. "We too small. World too big. This—" He shook his bag "—this time price."

I tried to unravel the fractured English. "Time price?"

The cook nodded vigorously. "You buy time for everyone, everything."

I sipped my tea and thought about what he'd told me. I'd *been* out in the Deep Dark. I'd touched the sky that wraps the world round, past the blue and into the black.

"Blue," he said, interrupting my chain of thought. "We come from sea, we go to sky. Blue to blue, ah?"

Blue to blue. Life had crawled from the ocean's blue waters to eventually climb past the wide blue sky. With luck, we'd carry forward to the dying blue at the end of time.

"Time," I said, trying the word in my mouth. "Do you mean the future?"

The cook nodded vigorously. "Future, ah."

Once I'd finished eating the magnificent duck he'd prepared, I trudged back to my workroom. I'd already bargained away almost all of my time, but I could create time for others, in glowing blue fragments. It didn't matter who was looking for me. Huang would do as he pleased. My sins were so great they could never be washed away, not even in a radioactive rain.

I could spend what time was left to me bringing people like the old cook a little closer to heaven, one shard after another.