

THE FUTURE FIRE  
SOCIAL POLITICAL & SPECULATIVE CYBERFICTION

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Cover art Barbara Candiotti

# The Future Fire 2025.72

“As climate movements, we’re often almost bullied into this belief that as soon as we talk about anything but emissions we’re losing sight of our actual issues. But as climate activists we need to stand up for democracy, we need to stand up for the truth.”

— Luisa Neubauer

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The Future Fire (<http://futurefire.net/>) is edited by Djibril al-Ayad, with associate editors Regina de Búrca, Valeria Vitale, Cécile Matthey and M.L. Clark; occasional guest editors Kathryn Allan, Emma Bridges, Fábio Fernandes and Lori Selke, and copyeditors Brian Olszewski and Hûw Steer.

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# Editorial

Djibril al-Ayad



For as long as I can remember we've been insisting that—while recognising that all art is political, and socio-political justice should be the end goal of all we do—this magazine is not interested in *partisan* political messaging, satire or allegory. It can be hard to make this distinction, especially when some are so dedicated to “culture wars,” to being as regressive, reactionary and discriminatory as possible in the name of their partisanship. For now let us only say that it is becoming ever more clear that the very existence of billionaires is an injustice, a commitment to radical inequality, inequality and corruption that our world cannot afford.

As always, these stories are better told in fiction and art than by this well-meaning but privileged small press editor whose words are not what you're here to read anyway—and our contributors are telling all of these stories and more. They ask us if we really can change the world in the face of all this. Maybe small hopes, small kindnesses matter, even if they're all we have. Sometimes we need to know when to give up, but

sometimes we also need to know when to stop giving up, when to allow ourselves some small joys and victories. They remind us that we are formed by our world (but that we also shape the world and those around us, so how we react matters too). Community, diversity, collective action and collaboration can help us find ourselves, as well as achieve more than any one of us can alone. Even more important is the recognition of found family and other alternative relationships; finding safety is more important than blood, or faith in tradition, or doing what is expected of us.

And for all the direct and literal harm caused by imperialism, exploitation, dehumanisation and cheap commodification, colonialism also brings its own monsters and horrors, its own cruelties and mythological hells. The identity of the villains is not always obvious or one-dimensional (although looking at who's getting rich is probably a good start). Finding the problem can be as important as knowing the solution. Art helps us to identify the ills around us; art helps us to imagine a better world; art gives us the community and hope to work together to find a way there.

We don't have all the answers, but this month's lovely stories, poems and art from Ana, Barbara, Carmen, Deborah, Devin, Elis, Fluffgar, Jaime, Joel, Katharine, Melkorka, Morris, Toeken, Veda and Ziggy are our contribution to a world that still has a bit of beauty, a bit of hope and, just maybe, a future.

Djibril al-Ayad, February 2025

Comment on the stories in this issue on the TFF blog:

<http://press.futurefire.net/2025/02/new-issue-202572.html>

# Minotaur

Jaime Gill



Art © 2025, Toeken.

We talk for comfort in this dark and frightening place,  
though we can't understand each other. The few words



we have in common are scraps of English learnt from cartoons. *Hello. Me. You. Sorry. Food. Monster. Run.*

I know she's called Serey, she's Cambodian and she's eleven, three years younger than me. She counted that out with her fingers. She doesn't speak my language, Burmese.

I first saw her face on the outside, in the huge Thai construction camp where our families live. The day after she went missing, her older brother walked over from one of the Cambodian sub-camps to our Burmese sub-camp, holding a photo of her. That was eight days ago, I think. She's been in the labyrinth long enough to turn her round face bony and her soft eyes hard. She looks like a stray cat, one made fearful and savage by her time in the wild. That's how I think of her now. Cat Girl.

I know nothing else about her and lack the words to learn more. The only Khmer I learnt was from some Cambodian boys from the camp when we tried to catch fish in the canal, and they're of no use here. *Tehk*—water. There's none in the labyrinth other than occasional dismal trickles down walls which we lick until our tongues are dry. *Trey*—fish. There's no food here at all. Even the idea of a fish makes my stomach squirm with yearning pain.

I might not understand the words Cat Girl says, but I still like to hear her talk. It was worse when there were no words.

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When I was first trapped in the labyrinth, frantic panic pummeled my head and heart, squeezing out any space for thinking. I was alone and trapped and I didn't know why, but there couldn't be a good reason.

I hammered at the metal door that had slammed behind me, screaming *help, come back!* When nobody answered, and after I'd shouted my throat sore, I started running. I was looking for another way out, but it only led me to another corridor that looked the same. I kept running, too desperate to think clearly. It took too long to realise that every turn took me to an identical corridor and even longer to realise they were leading me nowhere. I was in a labyrinth. A vast, frightening labyrinth.

I slumped to the floor, wrestling my breath under control. I realised with a sick feeling that all that running was the stupidest thing I could have done. I'd lost all sense of which direction I'd come from, couldn't even guess how far away I was from that first door. I didn't know how deep inside the labyrinth I was. How trapped.

That's how the best traps work. They use your fear against you. A fish that thrashes in a net is only going to tangle itself more surely.

I sat and tried to think think think.

Ma used to tell a story about when I was a baby. Half our house caved in during a heavy monsoon. I was trapped in my cot, alone and screaming for the hour it took to rescue me. I howled so much they thought I must have been crushed and was dying, but when they found me I was unharmed. It was just fear. I'd never been able to remember that night but I *felt* it then in the labyrinth: that terror, that helplessness, that aloneness. It came rushing out of somewhere deep inside me like bats from a cave.

But this time nobody could hear my screams. Nobody was coming to help.

I crushed my fists into my eyes, still trying to make my brain work, to pull clear thoughts out of the muddy



torrent of my mind. I was fourteen, now, not a baby, and fear wasn't my friend this time. It wasn't bringing anyone to help me. I had to help myself and my terror was getting in the way.

Another childhood memory came, one I really did remember. When I was little, Pa took me to Yangon in the days when everyone really thought good things were finally going to happen, when the army was promising democracy. We watched a snake charmer at a market. He overturned a basket to reveal a hissing, striking cobra, and then sang to it gently until it swayed, retreated, and coiled back placidly to sleep. Pa told me later it was a cheat, that the snakes were drugged and probably defanged, and I felt like some magic had been stolen from the world. Later, I'd think the army were the exact opposite of the snake. They pretended to be sleepy and toothless, then bit hard when we weren't looking.

But now I needed to become the snake charmer. I had to defang my panic and push it down.

Somehow, I did. I crushed it down deep into my belly and even though I still knew it was there, I could think without it lashing in my brain.

Calmer, I tried to work out the labyrinth. Every corridor I'd run down was nearly identical. A head higher and wider than my father was tall, which meant two metres. A single blue light was encased in each concrete ceiling, and the corridors were long enough that each end was dim and shadowy. That meant maybe twenty metres. At each end there was an exit, or sometimes two. Sometimes they led left, sometimes right, and—occasionally—both. The blue light froze the whole labyrinth in the last dying moments of the day, that

ghostly time just before the night comes, when colour is leeched from the world.

I pushed myself to my feet and began walking, not running.

Now I'd calmed myself a little, the thing I hated most about the labyrinth was the silence. It was sticky hot and the air smelt stale inside, but the noiselessness was the worst thing, squeezing in on me like the air before a storm. After the non-stop noise of the construction camp, the boom and clatter of building by day and the hubbub of families at night with their screaming babies, it was like waking up and finding myself struck deaf. I could hear my shallow breath, the echoing splats of my flip flops.

And then the silence was broken and that was worse.

Distant noises echoed down the corridors, often doubling like one noise was the ghost of another. It was impossible to know if the noises I heard were just on the other side of the wall or many corridors away, bouncing distorted off ceilings and corners.

Sometimes I heard light feet running, a percussive noise like monsoon rain, followed by the thunder of something much heavier in pursuit. Thump, thump, thump. Three times I heard screams, and once something bellowed and the vast angry sound of it reverberating down the walls made me sit and hold my head in my hands.

*Monster. Belu. Minotaur.* These three words looped around my brain, a Buddhist chant turned sinister.

Before I found Cat Girl, the only clear word I heard inside the labyrinth was a single cry in thick-accented English, on what might have been my first night. "Help!" By the time the word reached my ears, it was faint and

distorted, an echo from far away. It wasn't a scream. I'd never have run towards a scream, because that would have meant running towards the monster.

This sounded like someone lost. Someone like me.

"Where are you?" I called back. No reply.

I ran down corridors in the direction I thought the voice had come from. Soon I'd turned so many corners and run down so many empty passages that I stumbled to a halt, sweating and breathless, with no idea if I was nearer or further away.

I never heard that voice again. It wasn't Cat Girl. She doesn't know the word help. I had to teach her it.

I yelled *help* many times myself, in all the languages I knew. English. Burmese. Shan. Thai. Tamil. Mandarin. Nobody answered in any tongue. I wondered if loneliness was worse than being trapped, but even thinking this made the snake in my belly lash. *Ha*, it hissed.

I found Cat Girl a few hours ago. Maybe my second day or my second night. I don't know.

If she hadn't been sleeping when I found her, she'd have run from me. She tried, when her eyes snapped open to find me standing above her. She moved with the speed of a startled animal and when I grabbed her arm to stop her, she bit me. It hurt horribly, her teeth jagged sharp, but I held on because I had a terrible doomed feeling that if I didn't, I'd never see another human again.

I couldn't be alone anymore. I'd always been around people, never even slept in a room without my parents or my sister snoring beside me.

I held on.

It took a long time to calm Cat Girl and make her understand I didn't want to hurt her. At last, we began to walk together, talking in our own languages, trying to

find our way out. I tried to work out what she knew, but most of our attempts at communication failed. Only once did her miming make perfect sense. She held her arms in front of her and roared.

“Monster,” I said, and she nodded, wide-eyed.



She's faltering now, her steps beginning to drag. We've been walking many hours and nothing is changing. We're no less trapped than when we started. *More trapped*, snake hisses.

We're both so tired.

I say, “sleep” but she doesn't understand. I tilt my head, two hands as a pillow, then mime me watching the corridors. She nods. She probably hasn't slept much since she was trapped here, and then only the half-sleep of the terrified.

She curls up and her scrawny body goes limp in seconds. She really is a cat. Looking down at her bony legs, I don't know how she's still alive after all these days. How long can humans live without food? These are things I should know. There are many things I should know.

I should know more about where we are. I would know if I'd listened more to Pa when we first moved into the construction camp.

Pa had been a teacher back in Myanmar, but here in Thailand the only job he could find was building work. I'd seen Pa shouted at one day by a foreman who looked so dumb in his anger, so lacking in control, that I remembered the dog on our old street who'd caught rabies and had to be killed with a shovel. I'd asked Pa how he could stand being spoken to like that, and he said

it was the price of survival. He didn't say he had no choice and that the people who hired him knew it. He couldn't take us back home, where war still raged. He was trapped, we were trapped. He didn't say any of that, but I knew it.

Pa tried to make me feel better by telling me it wasn't just any old building he was working on. All these construction companies had been brought together to create what would one day be the largest shopping and entertainment mall in Southeast Asia. It was the brainchild of a multibillionaire from Korea or China or Thailand or America or maybe Europe, nobody was sure, just that it must be a rich country. The Thai call the billionaire men like that *chao-sua*.

Numbers and facts poured out of Pa's mouth: the hundreds of thousands of square metres the site covered, the three cinemas, four supermarkets, bowling alley, skating rink, and hundreds of shops the mall would one day contain. People would come from all over Asia to see it, and he'd have had a hand in it. That was something to be proud of.

I didn't think so, not really, but I wish I'd listened properly. Not because any of it had been true. I was now sure there was never going to be a single shop. That was why there were so many different construction companies and they all recruited people from different countries. The workers couldn't talk to each other about what they were working on even if they wanted to. Every construction company managed their own tiny piece of the puzzle, none realising that what they were really building wasn't a mall. It was a labyrinth.

Why? I don't know and I'm afraid to. I'm afraid to guess. But if I'd listened to Pa more, maybe I'd better

understand the size of the labyrinth at least. Maybe that would help me come up with a plan.

I need a plan—something to hold onto, some scrap of hope. Without one, I don't think I can hold the snake back long. I think he'll slide up through my stomach and into my mind and I won't ever think clearly again.

A distant cry bounces down the corridor from far away. I'm sure Cat Girl will wake, but she only shifts in her sleep. I don't call back this time. I've grown too afraid of the monster.

When the echoes have faded, I sit and drum my fingers on my knees, trying to keep my mind busy, trying not to think about my hunger. I try to work out again how long I've really been here, but this endless twilight means there are no days or nights, so time has become unmoored from anything real. I must have been here more than two days though. When we were smuggled out of Myanmar, there were whole days we didn't eat. That was bad, but this hunger is much worse, like it's grown teeth and is eating *me* from the inside. Hunger and the snake, coiled together in my belly, biting and hissing.

But this thinking, it takes me to bad places.

I was so stupid. When kids started disappearing from the camp—kids from Cambodia, Myanmar, Bangladesh, Laos, poorer parts of Thailand—I'd believed the gossip that they'd run away to the city, trying to make money whatever way they could. The adults didn't say what this meant but kids know. When you live dirt-poor you hear about most of the ways life can go wrong.

Why hadn't I been more worried when I heard about the missing kids? Maybe because they were all strangers from foreign lands or those distant parts of Myanmar where Burmese isn't even their first language. Maybe

because my family eats up all the worry I have. Ma hardly talks any more, my little sister gets sick all the time, and Pa works such long hours he comes home a month older every night.

I can't even remember how many kids went missing. I do remember the first boy, the older one who'd vanished just over a month ago. From Myanmar, like me, but from Kachin state in the far north, where they have their own language and their own lives. His grandmother came to our worker's hut, showing his picture on her cheap, cracked phone to my Ma. I peeked over her shoulder and saw a tough-looking boy with an angry white scar on his neck. Everyone from Myanmar knows what shrapnel wounds look like. The scar made me think he was tough enough to look after himself. He was probably running with a gang somewhere in Bangkok already.

There were more rumours of missing children, but the construction camps were chaotic and full of gossip, much of it mangled between all the different languages. I didn't keep count. I did remember Cat Girl but that was because she was the first one who looked *really* young. Much younger than me. The photo showed her hair in pigtails, with a sweet smile I find impossible to imagine on her face now.

As if she hears my thoughts, Cat Girl makes a startled movement in her sleep, and says a word I don't understand. "I'm sorry," I say, though I'm not sure what for.

I should have paid attention. I should have been more afraid. If I had, I wouldn't have listened to that stranger who asked me to help him find a bag he'd left inside the construction site. I wouldn't have taken the three thousand baht he gave me to help him look, even



knowing it was more than Pa made in a week. I wouldn't have followed him into the dark, his flashlight leading the way until it vanished and so did he and a door slammed shut behind me.

So stupid. I was a smart kid once, second smartest in my class. But I've felt stupid since we got to Thailand, like I left my brains in Myanmar. Maybe it's not going to school any more. Or maybe it's just the way people talk to me here, like I'm an idiot or an animal.

But I do know something about labyrinths. Phwar-Phwar, my Grampa, told me about them. He'd been old enough to be taught by the British, back when they were still wrecking our country, before they left it behind like an old broken toy. An English teacher told Phwar-Phwar the Greek myths and when I was little he told them to me at bedtime. Some bored me and some seemed silly, but there were others which terrified me. Medusa and her hissing hair. The blind cyclops, roaring. But, above all, the minotaur.

The minotaur felt more real to me than the other myths, more Burmese somehow. Maybe it was the ball of red thread Theseus took into the maze with him, so he could find his way out. Many Burmese tie red threads around our wrists as a blessing from Buddha—another way to try to not get lost in life. Or maybe it was because the minotaur, that half-bull beast, sounded like our own monster—the Belu, the shape-shifter, the human-eater.

It stuck in the back of my mind. Now it's at the front.

Is the monster sleeping now? Does it sleep?

I shake my head and try to think only about the labyrinth. If only I had red thread, some way to find my way back and to stop me from going where I've already been. Are we near the heart of the maze now, or nearer

its edges? Perhaps we're just looping around one tiny section, helplessly, like dumb moths trying to find their way through a closed window.

I close my eyes and picture a blue labyrinth, though the one I imagine is probably a child's miniature compared to the one we are really in. I will my brain to be sharp again, like it used to be. I picture me and Cat Girl as a little red dot and push that dot down corridors. I see how taking too many lefts or rights in a row could get you stuck in a loop. What we need to do is alternate between left and right. I picture the red dot zigzagging left, right, left, right. Eventually, a zigzag should lead us to one of the walls that encloses the labyrinth. Maybe to a door, or just somewhere we can scream and might be heard.

When Cat Girl wakes, that's what we'll do. We'll zigzag. Having a plan is soothing. Having Cat Girl with me is soothing.

The snake sleeps and I must too because I'm woken by a terrible noise—so close it seems to shake the walls. Cat Girl has grabbed onto me, cringes against me.

It's the sound of the minotaur, angrier, hungrier and closer than ever. I stare at the pocket of darkness at the corridor's end, expecting the beast to emerge, snorting, horned, and wild-eyed. But the shadows stay still. Whose heart do I feel? Mine? Hers? Both? The beat is so fast.

Another roar, but further away. The danger has passed. We part from each other, embarrassed but still shaking.

I could feel our bones on each other. She is so thin and I am getting thinner.

We have to get out. It's not just our bodies I fear for. It's our minds.

I remember my plan. I try to explain it, trace it in the dust on the wall, but Cat Girl gets confused and finally I just take her arm and tug her with me. We take the next right and then the next left and then there is no right, only a left, so we take that, and then another right, and then two lefts again. She keeps looking for something as we walk, head darting around, but she either can't explain or doesn't want to.

My brain is too tired to hold the picture of the labyrinth that seemed so clear before I fell asleep. I'm scared my plan might be failing and the panic snake hisses happily in my stomach. But there's no other choice. It's our only plan.

After many hours, something new.

We turn right onto a new corridor and see something small, crushed and mangled, surrounded by a dark stain. Walking slowly closer, I realise the stain is old blood that's seeped from scraps of fur, chewed bones, and a tiny crushed rat's skull.

Cat Girl breaks from my grip and drops to all fours. She starts chewing at the fur and bones, the crunching slurping noises making me gag. She glances up once, and there is no horror or shame in her eyes, only pleasure and relief.

She's done this before. That's how she's still alive. These scraps may be leftovers from her last meal, or abandoned by one of the other children we've heard in the labyrinth. Of course, there are rats in the labyrinth. Where there are people there are always rats, they find their way into everything. And rats can be food.

Is this the price of survival?

I won't pay.

When Cat Girl has finished chewing and sucking, I tug her again in the direction of escape, even though my faith in my plan is sputtering, like a dying candle. She talks but I don't find it comforting anymore. There's something in the torrent of words that makes me uneasy. If I could understand them, would they make sense, or would they sound like madness? I'm glad it's too dark to see her teeth.

I keep thinking about rat meat. My stomach hurts and I don't know if it's repulsion or hunger.

No.

I won't.

The labyrinth has broken her, but it won't break me.

I've tried not to think about why that *chao-sua* would want this place built, afraid the answer might crush all my hope, but watching Cat Girl eat made me realise I can't hide from this. I have to try to understand.

I don't think the labyrinth is for killing children. Or, at least, that can't be the main reason. It must have cost billions. For 50,000 baht, a *chao-sua* could have lured all of us children to some warehouse and killed us there. He could have strangled us, chopped us up, done whatever he wanted with our bodies. He could have brought his friends, could have filmed it all. Who would stop a *chao-sua*? For worthless nothing-kids like us?

So the point of the labyrinth can't be us. It must be the minotaur. In the story Phwar-Phwar told me, the minotaur was the son of a King, I think, whose wife gave birth to a half-bull, half-human baby. The King created the labyrinth to imprison his monster-child. Each year seven children were sent into the labyrinth to feed it.

Who is the *chao-sua*'s minotaur?



Art © 2025, Toeken.

A scream shreds the air, close enough to shatter my thoughts.

Cat Girl and I start running without a word exchanged and are immediately faced with a choice of left or right.

Cat Girl tries to tug me right, away from the scream, but I tug back and drag her left. *We must stick to the plan.* It might be working, it might. We don't know for sure how close the minotaur is and we can't wander aimlessly again. I can't be lost again. I need the plan.

We run through twilit gloom, our steps echoing over our ragged breath. Left. Right. Another forced right. Left.

And then another scream which sounds like it came from the same mouth as before. Close, echoing, and then—very suddenly—stopped.

Walls everywhere. Gloom everywhere.

Run. Run. Run.

A rat scurries past, fleeing our oncoming footsteps. Cat Girl stoops to snatch it but I yank her onwards.

We have to get out. That's all that matters.

We lurch right and see something black and shiny slicked across the blue-lit floor. I'm running too fast to stop in time, and my foot hits the black and I slip. I tumble through air until my head slams into concrete. A darkness roars inside my head like the sound of a monsoon breaking and then I am gone, I escape...



There's sunshine on the back of my neck, and a breeze kissing the heat away. I blink at the sudden light and breathe deeply, fill my lungs with the sweetness of outside air.

I'm on top of a hill in Myanmar, standing above a plain washed bright and clean by the sun. There are villages below, blooming like rusty red flowers from the green rice fields that surround them. One is the village I was born in. Motorbikes drive on dirt tracks between the

villages, passing straw-hatted farmers stooped over their work.

There is no war down there. Hunger, yes, but no fear of death, hot-breathed and close.

I could run in any direction I chose and nobody would stop me. I could scream to the skies that I am a King and nobody would tell me I am not.

Then the ground quakes beneath my feet and the sky's soft blue darkens and...



Cat Girl is shaking me. How long was I unconscious? Perhaps minutes or seconds. What does time mean in here?

She has her hand clamped hard over my mouth. It tastes of sweat, dirt, and raw meat.

She fixes her eyes on mine and doesn't need words, her whole being screams *quiet*.

I look behind her and see what spilled the blood I slipped on. It was a child once. Its head lies discarded a few metres away from what's left of the body, but I can only see the back. I'm glad I can't see the face—that nightmare of blood-matted hair is terrible enough. Everything else that was once the child has been ripped apart, leaving only bones and scraps of clothes and things that aren't clothes that I don't want to recognise.

That's when I hear the heavy, approaching steps. The minotaur. There's no echo, the beast is too close. I can hear its deep, bestial breathing, just out of sight.

The minotaur turns the corner into our corridor, a dark hulk in the gloom. It pauses, breath heaving, then steps slowly forward.

I see it.



I recognise it.

I recognise him.

It's the recognition that paralyses me as much as the fear.

The minotaur is the first of the children to disappear from the camp, the older one from Kachin. His face is disfigured by smeared dirt and old blood, but I recognise the white shrapnel scar denting his neck.

I moan a hopeless "mingalaba." *Hello*, in Burmese. How pathetic the word sounds. As if any word could mean anything right now.

The boy snarls back languagelessly. His teeth are black with blood. The boy is gone, the boy is beast.

For a whole month all he's had to eat is rats and madness and us, the other children. I think the labyrinth broke him a long time ago.

There's a flicker of confusion in his eyes as he comes closer, perhaps surprised to see that we are two. He cocks his head to one side, as though making a decision. But it's not the cool assessment of a human, it's the wary cunning of an animal.

I am the bigger one, the threat, and he rushes at me, roaring.

He throws himself on me as I'm scrambling to my feet and slams me back down on the concrete hard enough to smash all breath from my body.

His eyes and teeth fill my vision, black and savage. I can smell the metal tang of fresh blood from his mouth and under that something fouler. His hands are on my neck and he's crushing it. Something in my throat starts giving way. The pain is worse than anything I've felt. I can't breathe, my throat is on fire from the inside.

I'm dimly aware that Cat Girl is running away and that's good, that's good. *Remember the plan.*

I kick and my feet connect but his eyes don't even flash awareness, let alone pain. Is there still a boy inside him? I can't see him.

I try to pry his fingers from my throat as my vision begins to blur. My fingers are nothing to him, weaker than straw. He is bigger than me and he has fed and he is strong.

There is no glee or pleasure in his face as he watches me die. I wish it was sadness I saw but it isn't—it's blankness. This isn't evil, this is necessity. Only one of us can survive. His animal soul tells him it must be him. My animal soul says it must be me. But our souls don't matter. Only strength matters, and he has more of it.

Black stars swim and the corridor fades from twilight into night.

I'm pulled from the shores of the deepest sleep by a sickening crack.

Light oozes back into my eyes as the minotaur's grip eases. Blood trickles from his wild hair and down his face to his nose. A fat drop of it lands in my gasping mouth, I spit, gag and twist away.

His body slumps heavily onto mine, crushing me. Cat Girl stands behind him, holding aloft the leg bone she used to smash his skull. The leg bone that once belonged to that dead child. She brings it down on his head one more time, two more times, three more times, screaming curses in a language I can't speak, and even through his heavy body I feel the shuddering impact of her blows.

I summon what strength I have left and roll him off me, getting shakily to my feet.

The minotaur's eyes look up at me, very sad and very dead. He's a boy again. Just a boy.

And then I remember his name. I didn't even know I'd heard it, but there it was in my memory, hiding. I say it now, softly. "I'm sorry, Brang Seng."

Cat Girl stoops towards him, leans closer, opens her mouth and...

"No!" An English word everyone in the world knows. I grab her arm and she hisses words I don't understand, but surrenders. Do I imagine relief in her eyes?

I look down at the dead body and try not to see the meat.

"We go," I say in English, and point to the end of the corridor.

We will stick to our plan.

As we pass the other dead child, I see that its ragged shirt was once a cheap counterfeit Manchester United top. It is fraying, falling apart into its constituent red thread.

I grab the thread's end and as we walk it unspools behind us.

If we can't find our way out, we'll have to come back. One of us will, anyway.

A kind of numbness has crept into my brain now the boy is dead, a numbness that lets me think. This was never a place for trapping a minotaur, after all. It was a place for making one. Maybe more than one, but I can't think about that now, any more than I can think about why.

We turn left onto a new corridor. As we pass under the blue lightbulb I think dully that there could be a camera hidden inside. I saw something like that on a TV show once. Maybe that *chao-sua* who built this place is

watching us right now. Maybe his friends too. I could smash the bulb to find out.

But it doesn't matter. How would knowing help? I could never understand the mind of the rich man who made this place even if I could speak his language. A nothing-boy like me can no more understand the mind of a *chao-sua* than a mouse can understand the mind of a dragon.

Smashing the bulb would cost me energy and I have so little left.

The only thing that can help, the only thing that matters, is getting out. Zigzag.

We have to beat the labyrinth. We have to escape. We will. The red thread will lead us, just like it led Theseus. Forward, not backward. Not back to a corridor of dead children. Forward. Out.

The snake in my stomach hisses and hisses like laughter. *Ha. Ha. Ha.*

# **Featured Exhibit: Drop in a Bucket**

## **Ziggy Schutz**

In a museum's basement, at the end of a hall, is a humble little office. It used to be a storage space, although a sturdy wooden desk, a whiteboard along one wall, and a shiny new nameplate on the door has helped to make it feel more like a space someone can work wonders in.

In this office for the first time is a woman. She is tall, and seems to fit in her own skin well, comfortably worn in like a favourite sweater. Her hair is fully grey and kept short. Like her mother before her, she does not bother to dye it. She has a hefty ring of keys clipped to one belt loop, a box of various things in her arms, and a smile as wide as the room.

The first thing she does after putting her box down on the desk is take out a hammer and nail and gently tap it into the wall behind her seat. That done, she takes a framed degree out of the box, and puts it in its place of honour. The degree is a doctorate in chronoconsequentialist retrocontemporary archaeology, which sounds to Carolyn Thompson (PhD) like some poor academic throwing down train tracks as a bright new industry comes barrelling down them. Her colleagues have taken to calling themselves temporal archeologists. Shorter, catchier.

But don't let any of these words fool you. What this woman really is, what she has been studying and working towards for years and now, at the spry age of 47 has the right to call herself, is a time traveller.

She gives herself thirty seconds to just take in the moment. Then she takes out her journal, as worn-in as its owner, opens it up to a neatly-handwritten list of things to do, and gets to work.

Half an hour later, the office is starting to feel like a home. The whiteboard already has some scrawled notes on it, things she still needs to get, one-sided conversations with herself. She's humming along to a song she doesn't quite know, something from the 1990s. Tamir, one of her classmates, had panicked halfway through a study period one night and had put together a playlist for each decade the course covered. It had helped, and had the added effect of always being able to tell who was thinking about what time period based purely on the song they had stuck in their head.

Only after every pen is in its place, every paper filed away, computer plugged in and charging, does she let herself reach into the bottom of the box and pull the locked case from the bottom.

It looks like a briefcase, like something a man in a too-expensive suit would cart his life around in. Yuu had already transformed her own case, given to her officially at their graduation, gorgeous lace stretched across the metal, turning the utilitarian thing into an art installation. She's their fabric expert, somehow found time to fit in a degree in history of fashion into a schedule that had the rest of them gasping at the pace. She had gifted the other four inaugural graduates of their program with period-accurate underwear from their favourite points of history, which summed up her irreverent, detail-oriented personality to a tee.

Carolyn preferred to leave her case as it is—there's something she enjoys about the image of her carrying it

to work with her. She has an office and a briefcase, like her father always wanted for her. It's the location, the field of work, the ma'am (and now Doctor) that she gets that doesn't match the dream he had for his only son.

She thinks he'd be proud of her, but she is proud enough for the both of them. She has long since let go of any lingering skeletons in the back of a closet she waited too long to come out of. She has new family now—four colleagues who took to calling her Mom halfway through the last two years of their program, where they watched 75% of their peers drop out. She had watched a sea of hopefuls whittled down by quantum physics and endless discussions of ethical time travel. Carolyn made it, when no one thought she would, and she is proud enough for her and her dead father and her whole line of disgruntled relatives.

Anyway, all she has done is left behind one industry's expectations for another's. There's a long-standing tradition of time-travelling Doctors who used to be boys and are now women, after all.

Tomorrow, she will go into the museum's archives. Her job here is to look through them, use the artifacts there as anchors to send her spinning back into time, looking for good stories that will make the otherwise-unassuming plates and children's toys of the museum's backlog come to life. She has a year until the museum's new wing is finished, and she'll be hard-pressed to be finished by then, but there's no doubt in her mind that she'll get there.

That is for tomorrow.

Today, she starts another journey. One she's been dreaming of since her first time travelling, years ago now, their first practical. This one is tucked into her pocket, not



written in any of the journals that will stay on the shelves here.

It is the first day of her new job, and she is about to break all of the rules.

See, time is a tricky thing. The slightest thing can set it askew. An outfit slightly out of date can draw unwanted attention, and suddenly you've introduced a fashion trend a decade too early. The devices they use must be worn under their period-appropriate clothes—no cars or phone booths here. They can make no meaningful connections with the people of the past, can take nothing back with them but notes.

They are not superheroes, there is no Deus Ex Machina for the tragedies of the past. They are there to observe, to understand, and to leave without a trace.

And Carolyn understands this. It makes sense to her, in the way that hard things do. In a way that makes her heart ache even as she accepts it as law. The problem is that every bit of logic has a logical counter. And if she is right—if she pulls this off—then she has found a way to change nothing and everything, to sidestep the rules in a way that would leave perhaps even her Ethics professor scratching his head and admitting that it's a grey area.

If she pulls it off.

The piece of paper in her pocket has an equation on it. There are two ways to travel—one is with an anchor, an artifact to the past to focus in on. With this, the recommended way to travel, it's as easy as dialling back in the object's personal timeline and picking your point.

She has no anchor, so she is relying on numbers, a safety net solid in theory but temperamental in execution. It's why she leaves the scrap of paper on her desk, once she's done programming it into her travelling device. If

she doesn't come back, they'll be able to look and understand why she had to try.

When Carolyn goes to get dressed, pulling her clothing out of the garment bag she had brought with her, her fingers shake with each button. It's not nerves, which surprises her. Now that she is here, really doing this, all she can feel is excitement.

She slips a book into her bag, and she is almost ready. The last touch is a sign on the doorknob—another gift from one of her classmates. Richard had painted them, a two am craft project full of more love than sense. They are all identical and read "Gone Travellin', Back Soon" in a whimsical green font. There are four offices similar to hers, at some of the best museums in the country, and she is sure they will all be sporting their very own signs.

Something they always come back to is that it's the little things that make all the difference. These gifts, these connections, they burn bright against the backdrop of stress and exhaustion the last few years have been. Carolyn has no doubt they will continue to do so. They can all walk through time at will, now. A few thousand miles means nothing, to a family like theirs.

The travelling device is a familiar weight on her waist, something between a corset and a tool-belt. She doesn't need to look, as she presses the final button that will send her off. It's as familiar to her as her own skin.

Something she's not sure she'll ever get used to is how small big moments feel, when you're in them. The people walking past the alley she appears in do not know that they are living in a time that will be analyzed and picked over by every clever mind for the next hundred years. They are simply focused on this moment, and it is easy to

fall into step with them, pull her coat closer around her against the chill of late spring.

If this were a movie, she would fall in love here, in 1930s Berlin. She would fall for a revolutionary, and their passion would light up the sky here, serve as something bright on an increasingly dark horizon. But Carolyn has her own lover at home, who listens to her gush about history with a well-worn smile and kisses her hands like they're still young and sneaking into each other's dorm rooms. Rebecca's knees aren't made for sneaking anymore, although her paintings are still bold enough that Carolyn can't walk past one without stopping to stare, just like she did twenty five years ago when she got lost in the Art wing.

This is not a movie, so no music swells, as she approaches her destination. She can feel the heat before she can see the flames, and even after months of preparing herself her eyes water when she sees those books burning. It gives the scene a dreamlike quality, something slightly less than real, and in this strange bright night she takes the book out of her bag and clutches it in one tight fist.

Once she's close enough, she sees what she's looking for—a book on the edges of the fire. Left where it is, it's only a matter of time before it burns, but for the moment it is untouched. She leans over and in one fluid moment slips it into her bag as she stands, tossing the book she brought herself into the flames. It's nothing, something she grabbed from a thrift store at random, battered enough to not look too modern. It's nothing, because there are thousands of copies, because if the future has anything going for it, it's that things are harder to bury now.

Still, she can't help but whisper a thank you, as she watches it burn away. Her heart is pounding, but her steps are steady, as she walks away, finds an alley, flicks a switch and opens her eyes to her own office, her own time.

The book in her bag, rescued from ashes, more precious than gold, is with her.

Time is tricky. If you save a thing in the moment before its destruction, replace it in such a way that nothing changes, then nothing changes. Nothing changes, and everything changes, because books hold so much more than pages.

She clutches at the book she has stolen from time, and can't help but think of timelines. Personal timelines, but also the timeline of her people, which has grown so thin at times but never broken. With this, she thinks that line has strengthened. Just a little.

Doctor Carolyn Thompson knows, better than anyone, that one cannot change the past. But one can honour it, remember it, learn from it, and change the now.

One book, retroactively saved, isn't going to change the world. But.

But.

"A good start," Carolyn says, and opens the book.

# Safe in a Malachite Storm

Devin Miller



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I was trapped in the library when the storm of beetles came. The city was given no warning, though Kirin, the

head librarian, grumbled to me later that he'd bet the storm-seers had known it was coming. Being forewarned might not have helped; storms came on so suddenly that it was common for people to find themselves trapped in odd places with strange people.

The small branch library was due to close soon. I, a thirty-ish stonemason of unmarked gender, was there to borrow the poetry of Ronofice Quick, my favorite poet of our city's past. Assistant librarian Moro, a pint-sized, energetic woman I had seen forcibly eject rowdy library patrons, was recording my name on the book's loan card, but I wasn't paying attention. I was watching the only other library patron, a seventeen-year-old girl, as she packed up her books and notes. I had seen her in the library before, and something about her always discomfited me. She moved slowly, stiffly, seeming reluctant to stop studying, but she finished packing and moved towards the doors of the library. Then as always, my eyes slid away from the discomfort. Moro handed me my chosen book. The girl cried out, and I nearly dropped it.

I turned to look. Through the small panes of glass in the doors, I could see the glint of green, and I knew the malachite beetles had come.

Kirin, venerable head librarian, cheerfully offensive to those he found stupid or unkind, moved swiftly to bar the doors. It was too dangerous to go out in a storm of beetles. We could not go home now, could not contact family or friends to tell them where we were. I thought of Yalovin, my best friend and housemate. He would be at home, I thought, and safe, but it pained me to know he would worry about where I was.

There were only four of us in the library. Kirin, Moro, me, and the girl. When asked, she told us in barely more than a whisper that her name was Torice.

The library had few windows; it was cut of the thick stone of the city cliffs. We gathered around the doors to watch the malachite beetles swarm.

All of us had seen the beetles before, though Torice had been a small child when last they'd swarmed. We were still afraid, not knowing how long the storm would last. Moro, nervous energy fizzing under her skin, fretted about her wife and daughter. I worried, but I was also mesmerized by the storm's beauty. The insects were thick in the air, moving so quickly it looked as though they didn't move at all; each beetle took another's place as they sprang through the air. Their wings were green, veined like the lace of a dying leaf.



Kirin read from his favorite adventure novel, Moro from a 7th century comedy of manners (this was the only time her constant energy seemed to calm). Torice wouldn't read aloud, but she listened, tapping her fingers against her collarbone. There was little to look at but the people around us, and I watched Torice as I listened to Moro read, puzzling over what about her tapped at my brain. Perhaps it was because I was also worrying about Yalovin that it struck me that she reminded me of him, although I couldn't see what they had in common.

I read poetry, Ronofice Quick's and my other favorites. Our voices drowned out the hum of the beetles, lending variation to that unchanging rhythm.

“I always wondered about you,” Moro told me on the second day of the storm. “Coming in with stone-dusted clothes and borrowing the most beautiful poetry.”

“You think stonemasons don’t read poetry?” I asked, challenging her partly because I thought a challenge might expend some of her constant energy.

“I’m a librarian,” she said. “I know better than to think that. I’m just glad of the opportunity to hear which poems you like best.”



It was cold at night in the library. The malachite beetles’ storms were known to disturb the weather, their iridescent carapaces reflecting sunlight and cooling the ground. We slept wrapped in Kirin’s emergency blankets, close together on the floor of the librarians’ office.

On the second night, I woke to see Torice’s eyes open, catching some tiny sliver of light. When she saw my own eyes glimmer, she whispered, “I don’t want the storm to end.”

“No?” I asked softly.

“I like the library. It’s nice here.”

“It isn’t nice at home?”

Her eyes winked shut, but my sight had adjusted to the darkness, and I saw her lips move. “I like the people in the library.”

I did too. It was frustrating to be trapped with no choice in the company, and tempers frayed, chewed thin by nerves. But I liked how Kirin could be such an optimist and a realist at the same time. I liked Moro’s enthusiasm for things she enjoyed, her willingness to show it.





Art © 2025, Carmen Moran.

I hadn't been able to decipher enough of Torice's personality to be confident I liked her. But knowing she liked me changed the way I looked at her small form on the dark library floor.



The hum of the beetles' flight was loud, the usual hubbub of the city silent. Few were foolish or desperate enough to go out. The beetles were so thick in the air it was impossible to see the way through them. There were stories of people trying and becoming disoriented mere feet from their doors. And the sound of the beetles could overwhelm anyone.

"My father died because of malachite beetles," Kirin said on the third evening, as we huddled around the wood stove in the office making a thin bean soup.

"He went out in a storm?" I asked, shocked.

“No, no. But they used to say that eating the powder of crushed malachite beetles would make you a storm-seer.”

“Did it work?” Torice asked, grey eyes bright in her too-thin face.

Kirin shrugged. “I don’t know. It killed him in weeks, long before another storm came.”

After storms, the beetles were swept up and stored for use in medicines. I hadn’t known they could kill as well as heal.



We heard the quieting of the storm before we saw it. Moro rushed to the doors to look out, when I paused at the end of a poem and we heard the stillness in the absence of my voice. We followed her, Torice last. The beetles were dying, falling out of the air as if the hooves of a goat had ripped the moss from a stone. The ground was covered with them, ankle-deep in brilliant green beetle bodies.

We opened the doors. Other people from the homes and businesses on the library’s street began to trickle outside, then to pour. It was like a party, people wading through the drifts of insects to hug each other.

Amid the happy chaos, I saw Torice bend to pick up a handful of beetles.

I caught her arm before she could slip them into her pocket. “What are you doing?”

“I—I think they’re pretty. I wanted to save some.”

“Torice. What, you want to try what Kirin’s dad did? Be a storm-seer?”

She didn’t look at me. “No. But I think my parents might like to be storm-seers.”

I had seen her quiet, tight-lipped, tapping fingers, afraid to read aloud. I had seen her in the library every day, studying longer than a diligent student needed to. I had heard her whisper, “I like the people in the library.” But I hadn’t put it together, and now the strands in my mind braided tight and I knew why she reminded me of Yalovin: at seventeen he, too, had been unsafe at home. I remembered all too clearly the profound thinness of him when his father had denied him meals, fed him on harsh words instead of care. His nervousness then was like Torice’s now. He had had me to help him get free. Torice, it seemed, had no such friend.

I met Moro’s eyes. She had heard Torice’s words too, and I saw that she’d added the clues together as I had. She came close, asked softly, “You need a place to go?” She didn’t wait for an answer before calling Kirin over, and we stood together under a beetle-free sky, we four mostly-strangers who had weathered a storm together.

Torice had shut her eyes, but she hadn’t opened her fist. Kirin hadn’t heard what she’d said, and he looked confused, but he was patient enough to help without knowing what was wrong. “Come back inside the library,” Kirin said. “We don’t close for another six hours.”

“Let go of the beetles,” I said. “We’ll help you find a place to go when the library closes for the night.”

She hesitated, lip tucked into her teeth, thinking. Then she looked me full in the face and said, “Nobody helped me before the storm. Nobody noticed. How can you expect me to believe anything is different now?”

She was right. People didn’t notice, or if they did too often they looked away. I had looked away myself, and could not forget it, and could find no answer for her.

“Storms don’t change anything, it’s true,” Kirin said. I thought of how many storms he must have seen in his long life. “Except with the people you met during the storm. We can’t un-know each other. We don’t forget what it was like to take care of each other. And then another storm comes.”

He was right, too. Torice was not safe with the people tied to her by blood, but she could be safe with the people tied to her by storm. I held out my hand to her.

Slowly she unclenched her fist and let the beetles fall.

# All That Water

Eris Young



Art © 2025, Barbara Candiotti.

It turned white, the interlocutor. Eyes wide, light-brown in its skin leaching away, allowing only a single meaning, stark.

Sanga tensed. Violence was rare on first contact, but not unheard of. The woven surface of the platform creaked as Sanga, along with the rest of the interpreters, made ready to leap aside into water rutilated with protective reed and root.

But the interlocutor took a step back, and Sanga realized xyr mistake. The threat was not a threat at all, but adrenal vasoconstriction. An autonomic response. One that, by necessity, Sanga's people had long ago discarded. The yellowgreen beating in xyr chest receded.

And it *was* shocking, wasn't it? Since the very earliest of the histories, that bright road painting the night sky had brought them visitors of every stripe imaginable. Each stranger-species came bearing information—news of policy changes, trade agreements, distant wars on the frontiers of Unified Space. News that the benefactors, confined as they were to their own vast domain, could not access without the likes of Sanga. In return, these stranger-species, many and various as the stars in both physiology and language, asked for minerals, dyes, basketry. Gene- and medtech, clean water.

So by what providence, what infinitesimal chance was it that these aliens, these stranger-species, should also be bipeds and walk erect? Should also have hairless bodies, smooth skin in shades of umber and sienna? To Sanga, seeing the interlocutor was like glimpsing xyr own reflection off a still pool: a limpid green surprise, breath-taking.

The interlocutor glanced behind it—behind her, at a safe guess—towards the massive old ruin, twenty lengths away, already teeming with her people and their makeshift dwellings.

No one had lived in that haunted, half-sunk place for a thousand years. But no reed platform was big enough to contain the multitudes streaming each day from the huge patchwork hull of the stranger-ship, faintly visible even now through the daytime atmosphere. They poured downwell like water from a burst levee. It seemed almost fitting, too, that these dwellers-in-metal should make that place their temporary home.

Metal-dwellers clumped, watchful, at the edges of the ruin, clinging to the vine-strewn curve of its side and shy of the dim tangled water all around. The interlocutor's hair swung in a sheet as she turned, draping her skull. It caught the sunlight like falling water, and made Sanga want to touch it.

<?????,> the interlocutor said, pale-voiced. A vocal communicator, then: Sanga's specialty. Protocol dictated that the stranger-species initiate, but Sanga took a breath and stepped forward from the gathered knot of xyr fellow interpreters. Xe heard someone suck their teeth in disapproval.

Sanga knew the sense of trust xe felt was an artefact of evolution, nothing more. The impulse to relax xyr muscles, allow xyr heart rate to slow, dangerous temptation: a muddy, deceptive orange. The interlocutor was still an alien, stranger-species, however familiar her physiology.

But negotiation, trade, must begin one way or another. And trade couldn't occur without communication.

Sanga tried customary greetings in four vocal *linguae francae* common to the system. Nothing.

The interlocutor pointed at her own chest. <?????.>

Xe mirrored her, saying, <Sanga,> and they began.



It took only seven rotations—and one neural-plasticity soak—for Sanga to learn <Pidin>, the language of the metal-dwellers. This was a mellow-gold, wise number of rotations, but it was small reassurance compared to the language itself, which was flat, greyish and sparse. Pidin was atonal, and utterly devoid of gesture, even nonmanual expression. It made Sanga wonder if the aliens even looked at each other while speaking.

<Rajih> called herself a <xenanthropologist>. She was the only one on her entire vessel. Sanga wondered what it would mean to be alone in this way.

Rajih was taller than Sanga and most reed-dwellers, and less melanated. Though Rajih's hair was black and shiny as the surface of a bog pool, some of her people apparently shared Sanga's hair texture. Sanga was startled to notice no webbing between Rajih's fingers and toes. Rajih laughed when xe pointed this out, a greeny-brown sound like water splashing through the roots of a tree:

<Well, we don't need it...>

Then her eyes slid, again, to the water surrounding the platform, her face falling back into the greyish, tired expression it assumed at rest.

Again, again, Sanga felt it: the dense, yellowy jolt, like stepping through a hole in the mat at night, at the metal-dwellers' familiarity and strangeness. They had not come here under the auspices of a Union commission, and that alone was enough to mark them out.

If their physiology was any indicator, then their mode of travel was a distant cousin to what the reed-dwellers'



ancestors had used. But in the histories the ancestors had settled here, in the land of reeds, at the end of a long, desperate flight from a dying planet. So how—and where—had the metal-dwellers survived for so long?

Nevertheless, they had survived, and without guidance from any established species. This explained Rajih's ignorance of protocol and the ugliness of their vessel.

Rajih would stare at the water, mouth slightly open in a pinkish expression, like she didn't quite understand what she was seeing. She'd find an imperfection, a bump in the mat where one reed split into two, and rub a finger absently over it, while she and Sanga conversed in her grey, lifeless language.

Sanga was overcome with a sudden urge to teach her. Not the benefactors' rarefied, ephemeral speech, but the reed-dwellers' everyday tongue, which fit their shared physiology like a well-tied wrap-skirt. Xe wanted to see if Rajih could produce its eight tones, its facial gestures. Xe wanted to shake that grey stillness from her face.

But it would take Rajih far longer to learn Sanga's native tongue than it had taken xem to learn Pidín. And, Sanga thought with a purplegreen flush of guilt, that was not the work of an interpreter. Their shared anatomy, that deceptive sense of kinship it triggered, had already eroded so much of the necessary distance. If Sanga spoke for xemself, negotiations could—would—be compromised: it had happened before, in living memory, once or twice. If Sanga spoke for xemself, xe could not speak for the benefactors.

So xe stilled xyr face, controlled xyr vocal cords, and did not ask to touch Rajih's shining hair.



Finally, Sanga was fluent enough in Pidin for communication to begin in earnest. Wearing xyr beautiful speaking garments, xe hefted the calling stone: a chunk of silver-flecked granite as big as xyr head, strung on a rope tied to the edge of the platform. A historian—Tilang, a third cousin of Sanga’s—knelt on a neighboring platform, with a clear view of both Sanga and the carefully-chosen stretch of water between them: clear of reeds, with clean sand on the bottom and no surface glare. With a nod from the historian, Sanga tossed the stone into the water.

*Splash, splash, splash!* Stones were thrown from neighboring platforms, one after another, away into the distance. Rajih’s face, her wavering question lost under the music of stone and water, was a tender yellowpink interrogative.

And then, too late, Sanga understood.

In a yellowgreen flush, xe realized that Rajih did not yet know about the benefactors. She had lived, after all, with only her own species for company. Did she even suspect that anyone else might live in the land of reeds? But before Sanga could warn her or reassure her, the benefactor arrived, its dark, soft bulk appearing silently beside the platform, just below the surface.

Once again, the color drained from Rajih’s face, her fists clenching in a visible fight-or-flight response. Sanga heard a snort of disdain from Tilang on the other platform, but if the benefactor itself noticed, it took no offense.

Indeed, the first thing it expressed was surprise and delight: a warm rill of excited pulses directed at Sanga.

In the flowing, golden-brown tones of an elder addressing a younger, the benefactor exclaimed at the luck that had brought the new bipeds. These metal-dwellers must at least be the same genus as the reed-dwellers: they might expand each other's gene pools nicely! Perhaps, it suggested—the gold in its tone shading into a canny orange, its patterns delicate and oblique like a matchmaking auntie—Sanga might like, with this shiny-haired emissary...?

Sanga's heart leapt even as xyr ears burned with unexpected, muddy-purple embarrassment. Xe was relieved Rajih couldn't understand the benefactors' language, and doubly relieved when the benefactor signaled its desire to begin speaking.

Xe shook out xyr arms and legs to make sure the speaking garments were draping right, and planted xyr feet, bending at the knees in a neutral position. One deep breath in, one out. In, out.

The benefactor started speaking, and Sanga began to move.

At once, xe felt xyr sense of self start to slip away, as it was edged out by the demands of xyr augmented working memory.

It was always like this, like plunging into an algal pool. Eyes, ears, whole body occupied entirely by a vivid, enveloping medium, and no thought to spare for what might be going on above the surface.

At the end of the exchange, Sanga emerged from xyr interpreter's trance, aching limbs and rasping throat, speaking garments heavy with sweat. Xe could just see a faint ripple to the southwest: the benefactor making its way back out to sea. Tilang had gone home.

Sanga's brain contained only a pale, buzzing residue of the words that had passed through it: *waste water, phytoplankton. Twelve months—two months—six months. Please.*

Xe slumped onto the platform and chewed a cake of seaweed jelly, sighing as xe felt it replace protein, electrolytes, carbohydrates. Reed creaked behind xem, and Sanga jumped. Rajih still stood there. She stared overwater at the ruin where her people were living, teeth worrying her lower lip. Judging by her expression, the first round of negotiations had not gone especially well. A mauvish, sympathetic twinge: Sanga had grown up with the benefactors, and xe still found them intimidating sometimes.

<Is something wrong with your raft?> Sanga croaked.

<No.>

Rajih drew a shaking breath. She spun to face Sanga, eyes suddenly alight. She said, all in a rush, <I want to go back your way.> *You-plural-possessive*: the way of the reed-dwellers. <Can you show me?>

Sanga blinked. Washed-out with fatigue, limbs weighted a dense redbrown, xe wanted to lie down and sleep right on the platform. But, with a little mossy trickle of surprise, Sanga found xe wanted more to swim with Rajih.

A tight-weave basket had to be found for her bracelet, which couldn't touch the water. On close inspection, what Sanga had taken for a knotted piece of fabric was actually a strip of material clasped by a thin, highly-polished stone, black and square. Rajih was anxious of this ornament, but struggled to explain why:

<It's very valuable—um, useful, to my people. Very... hard to make?>

Rajih shrieked—gasped, laughed—as she lowered herself into the water. The floating basket trailed behind them as they swam, tied on a cord to Rajih’s wrist. She ducked and splashed, smoothed her hair back from her shining face, round and alive as a child’s, as if they swam not in a brackish lagoon but in a telomere soak, the water rejuvenating her.

At Rajih’s smile, Sanga felt a mirroring tug on xyr own mouth—evolutionary programming or not, it was irresistible.

Rajih moved frog-style through the water, haltingly. Sanga had to take her shoulders to guide her around obstacles. Her smooth hair brushed xyr hand like fine seagrass. She dawdled, gazing around at floating algae mats, raised grain paddies with their rich, dark loam. And down at their limbs, intertwined under the surface, dappled in shifting patterns of light and shade.

Sanga darted a glance up at Rajih’s face, and startled yellowgreen: Rajih’s eyes were closed, her smile clear-gold, beatific. Her face, upturned, had dried in the sun, save for two tracks of moisture, welling and falling from the corners of her eyes.

Rajih climbed, reluctantly, back up the side of the ruin, gripping the crumbling rungs of an old service ladder half-covered with thick vegetation. Then she turned and held out a hand to Sanga.

Xe hesitated. Protocol, and practicality, demanded that parties keep apart during negotiations, which hinged on each side taking the other at face value, offering only what they were comfortable offering, regardless of what they had.



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But Rajih knew nothing of custom, or the practicalities of contact. It was easy—too easy—for Sanga to simply take her hand.

The noise, crowd, and smell were unbelievable: a pulsing, frantic redyellow. The metal-dwellers must have been packed like salted shrimps into their patchwork vessel, creeping through that boundless void of sky, generation after generation.

People shouted greetings to Rajih and gazed at Sanga, their curiosity a soft, naked russet, like the inside of an ear. There were nearly as many desalination-filtration setups as people: at least one beside every dwelling—flimsy pale things that had popped up quick as mushrooms after a monsoon. Plant life, enclosed in tents made of fabric transparent as water, carpeted every surface, even atop some of the sturdier dwellings.

The metal-dwellers had put up incomprehensible grey spires, too: bristling metal, high enough to pierce the sky and strung together with smooth, black ropes. No stranger-species had stayed here long enough to build before: Sanga's curiosity burned a hot and vivid magenta.

Every effort seemed to be in service of creating the most basic food and shelter, and every built thing was a threatening white or lifeless grey.

Sanga wondered if Rajih's people weren't totally colorblind: had they given it up? Had they spent so long in their cramped metal vessel that they somehow no longer needed color? That thought brought a muted-red wavelet of sadness.

The metal-dwellers were taller than the reed-dwellers. They appeared sexually dimorphic, though Sanga spotted one or two who might be like xemself. Their skintones and eye colors bespoke genetic diversity, yes, but they were skinny, too, lacking muscle. Most had a pallid, uneven cast to their skin that hinted at multiple vitamin deficiencies.

A wash of yellow unease, brush of a sea-snake in the dark, raised the hairs on Sanga's neck.

Maybe Rajih didn't know that she was undermining her people's position, compromising negotiations, by bringing Sanga here. But it was obvious to Sanga, seeing this place and what they had made of it, that negotiations had been unequal from the start.

Rajih's people might be interstellar travelers, but this was no diplomatic or trade delegation: there were too many children and elders, too many unhealthy, and they'd brought no news or knowledge to trade. The metal-dwellers were not explorers or merchants, they were refugees.



Sanga didn't see Rajih for four rotations. Negotiations, if they could still be called that, ground to a halt. Rajih simply stopped coming—or her people had stopped sending her. The benefactors, for their part, kept to their great cities in the deeper water. Sanga imagined them conferencing silently together in their kaleidoscope language.

A net-filter perimeter was set up. The metal-dwellers were allowed to fish, and to occupy three nearby reed-platforms. The magnitude of these concessions seemed lost on the metal-dwellers. Only three percent of the planet's surface was above water: an archipelago of marshy islands used for growing rice, lotus, malanga, water-spinach. Platforms, such as the reed-dwellers lived and worked on, needed a natural bed to anchor them, and most were occupied already.

To house the metal-dwellers for any length of time, to convert their waste, feed or teach them to feed



themselves, to say nothing of the nutritional soaks so many of them clearly needed—? Well.

A handful might indeed strengthen the reed-dwellers' gene pool, and that wasn't nothing. But just those settlers occupying the ruin would soon outnumber the reed-dwellers entirely.

The truth, brittle and pale as bleached bone, was that these people had nothing to trade in return for their lives.



It was raining when Rajih finally reappeared. An awning had to be erected over the platform. Through the dim, wavering air, Sanga could see the metal-dwellers raising great grey cones of tarp between the tall metal spires, like dying flowers, to catch the water as it fell.

Rajih carried smudges under her eyes the color of grief: the sight started a pale tightness in Sanga's chest. Rajih clutched a rigid translucent box, something dark clattering inside. She gazed at the platform surface, avoiding Sanga's eyes. Xe hesitated, then bent to pick up the calling stone.

<Wait—> The words were tired, heavy as stiff orange clay.

They sat, side-by-side, their feet in the water. Sanga's brown, webbed ones beside Rajih's, pale and small.

<It took me a while to figure it out.> She nodded at Sanga's speaking garments, each panel richly dyed with snail, weed, root, and beetle. <How you talk to them. It's like a dance.>

Water whispered down all around them.

<It's joyful. Until I came here, I never knew what joy was. I knew relief, when we found this place, after so long. Satisfaction, that I'd be able to do the job I'd trained

my whole life for, that my mentor, and her mentor before her, never lived to do.>

Rajih was paddling in circles, working her way towards something.

<We could tell this place was habitable, beforehand. But we thought we'd have to fight for it. And then we came down, and your lives here were so beautiful, and easy. You just shared everything with us.>

Sanga waited.

<I know my history. My ancient history. That first day, when I saw you standing on the platform, your people all around watching us come, I think I knew it would come to something like this.> Her words were thin, squeezed out through a tightened larynx.

<Rajih—>

<They're making *me* do it,> she choked out, with a hollow, pale laugh. <That's the worst thing. I'm the anthropologist, I have a rapport with the—with you all. So it has to be me.>

She looked at the box in her arms like she wanted to fling it into the water. Sanga held out a hand, xyr heart tapping out a running, pinkgreen beat.

<Show me.>

<I told them, Sanga. What it would mean for us to interfere like this—to offer you this as a trade. Your whole way of life is going to change.> *You-singular-possessive*: Sanga's life.

Xe thought, *It already has*.

<But I couldn't make them see. Because this is all we have. What does it matter, they said, if it means we get to survive? If it means this doesn't have to be the end for us?>

Rajih's face was wet, her hair plastered down with rain like dark seaweed.

Inside the box: a wide, flat piece of stone, the size of Sanga's hand with the fingers spread. Polished and thin, like Rajih's bracelet. She pressed something on the side. The thing made a chirp, like stone striking stone.

But even before Rajih began to work the object, Sanga knew what it meant. Because it was a deep, fertile black. The color of rich soil, of the sky. The color of potential.

# Turnabout

Ana Wesley



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Dani heaved a sigh, sending a trickle of vapor to join the polluted summer air. The afternoon sun seared the concrete wall under her elbows, glazing her arms with sweat. Three stories below, traffic inched like a line of ants between apartment complexes. Sun-scorched trees reached up from tiny dirt patches, leaves limp in submission to the smog.

They should go to the beach, while it was still warm enough. Why not Sunday?

Dani snuffed out the flicker of hope in her chest. She had too many client projects waiting. It wasn't worth the scrambling to catch up. Or the two-hour drive, walking on eggshells next to Naomi. Maybe when things were calmer, when things were better.

Assuming they ever would be.

Dani pursed her lips against the urge to take another drag. She pocketed her vape pen and peeled her tank top from her back. As she stepped through the balcony door, a rank odor wrinkled her nostrils. The stench thickened when she tugged the glass slider shut.

Even a decade later, she remembered the pungency of dissection day in high school biology: decay barely held at bay. She gagged. No way a busted pipe would hit that hard and fast.

Dani lifted her shirt, breathing in the menthol clinging there. Her eyes coasted across the apartment to the kitchenette. Mounting garbage pried open the trash can's steel jaws. Dirty dishes towered in the sink above a broken disposal.

One more email, one more project, one more page... She couldn't keep letting things go like this.

Maybe a breath of fresh—rather, outside—air was all it took to notice the odors piling up. She couldn't work like this.

Dani's bare feet sank into the shaggy carpet as she made to cross the room. Her step halted in midair as a splash of neon orange and blue caught her eye. She gasped by reflex and filled her mouth with the air's sour taste. Bile shot up into her throat. A dead mandarin fish lie underfoot, carpet threads sticking to its body. The limp remains were a glassy-eyed mockery of the fish that had once undulated like a tiny sea dragon in its aquarium.

Dread thrust Dani's heart against her ribcage, spreading in tendrils through her blood. She crouched down, nose buried in her shirt to little avail. It stunk more than even a fish out of water had any right to. She squinted through a teary film, searching for any sign of

life. It laid motionless, no thrashing or gasping or heaving.

“No, no, no,” Dani groaned. Anxiety and disgust churned her gut into a whirlpool. Fighting the urge to retch, she stepped back and braced her hands on the cool glass of her desk. Her head snapped to where Lucky perched atop his cat tree, pawing compulsively at his nose.

“Damn it!” Dani tapped her computer mouse to banish the bubbling screensaver.

6:21 pm.

Her teeth began to chatter. Naomi would be home from work any time. Some juvenile impulse urged Dani to pluck the fish up, drop it in the 55-gallon aquarium, and feign ignorance about the whole thing. But that only spun the cocoon of guilt around her heart even tighter.

Grabbing a handful of paper towels, Dani wadded the fish up. She stuffed the remains into the trash and yanked the drawstring shut around the bulging pile. She hauled it at arm’s length, down the stairs and across the lot to the dumpster. Dani patted down her sweats only to realize she’d forgotten her key. She paced the concrete under the stifling sun until a stranger opened the building for her.

Dani mumbled her thanks, sensing the man’s eyes creep down her neglected braids and sloppy sweats. When she opened the apartment door, the lingering stench twisted her stomach into knots. She opened the balcony slider and scrubbed at the rug, glancing up only to shoot filthy looks at Lucky. The cat rubbed at his nose, ears revolving with agitation. He was clearly in discomfort, likely from splashing in the aquarium’s saltwater. Dani couldn’t scrounge up a shred of sympathy; a mere week after letting the tagalong stray

into their home, he'd killed Naomi's most beloved fish and hadn't even the decency to eat the damn thing.

Dani was still on her hands and knees when the door lock clicked.

Naomi shuffled in and kicked off her shoes. She let loose her ponytail, shaking it out into a fine black curtain. Her eyes rested on Dani and her brow crinkled. "What are you doing?" Rather than wait for an answer, she crossed the hallway and into the bathroom. Her voice echoed down the corridor, "Oh, thanks for taking out the trash."

It was their latest trick, plucked off a relationship blog: appreciating one another for the little things.

Dani rose to her feet. Self-loathing burned a hole in her throat, rendering her voice as meek as a fearful child. "Naomi?"

"What?" the other called over the sound of running water.

Dani's words tremored as she spoke to the off-white wall. "I'm sorry. Lucky got into your fish tank."

The faucet squealed to a stop. Naomi hastened into the living room, water dripping down her face to pool along the collar of her navy polo.

Dani's eyes reflexively darted to the ground. In her periphery, she watched the other's feet pad across the carpet toward the tank.

Dani strained to listen past the throbbing in her ears as Naomi asked, "Who'd he get?"

"Your new mandarin fish."

"Nessie," Naomi corrected sharply.

Dani winced. Her fingers twisted the charm bracelet on her opposite wrist. "I'm sorry."

Naomi heaved a sigh, raking a hand through her hair. Without turning, she hissed, “Damn it, Dani.”

“I know.” Dani’s voice pitched high into a plea. Desperation flooded her brain, burning at the roots of her hair. “I’m so sorry. I didn’t think he could get past the lid.”

“For fuck’s sake, you’re home all day!” The words burst forth like water from a broken dam, as if they’d been straining to erupt in ten thousand situations up until now.

Dani pressed her fingers to her temple, eyelashes fluttering to abate hot tears. “I stepped outside. I really am—”

“To smoke?” Agitation boiled over in Naomi’s voice, then evaporated into a sigh. “Whatever.” She spun around to face Dani, hand pinching the bridge of her nose. “You need to take him to the vet.”

“What?” Dani squeaked. A fresh wave of panic jumpstarted her heart. “Why?”

“Mandarinfish have toxic spines,” Naomi snapped, in a tone that indicated this wasn’t her first time saying so. “Look at the cat, he’s in pain. Spines probably stuck him.”

“Shit.” Dani spun around and reached up toward Lucky. He hissed, batting at her hand. “Christ, I don’t have a cat carrier. Is it bad?”

“Hell if I know. Most animals are smart enough to leave mandarinfish alone.”

Dani reached again, but Lucky mewed and backed into the corner. “Damn it, stay still!”

Another sigh brimming with frustration sounded over her shoulder. Naomi’s arm brushed Dani’s as she reached



up, ignoring the bloody swipe Lucky tore across her hand. She secured him and jerked her head. "You drive."

Dani led the way downstairs, keys biting into her clenched fingers. Why had she insisted on taking Lucky in? She didn't even like cats all that much. She should have choked down her stupid savior complex and kept feeding him canned tuna in the parking lot.

Dani didn't notice Naomi slip into the Hyundai's backseat until their eyes met in the mirror. The crystalizing tension between them stabbed through Dani's gut. Gritting her teeth, she jerked the key in the ignition. Her hands tightened around the wheel at the sight of traffic lining the block. As she waited for an opening, her fingers traced the four letters dangling from her bracelet.

D-E-A-L.

She fidgeted with it until a gap appeared in the lane. Naomi let out a surprised cry as they lurched over the curb. "Careful! Do you know where you're going?"

Cursing under her breath, Dani reached into her pocket and yanked out her cell phone. Eyes flickering from the screen to the windshield, her thumb tapped out a search for the nearest vet.

"I'm sorry," she murmured. "I know this isn't how you wanted to spend your time after work. I'll get rid of him, if you want."

That familiar sigh blew past Naomi's lips, the one that told Dani she'd gotten it wrong again. "That's not what I want, Dani. I just want you to realize that... As important as dogs and cats are to some people—"

"I know." Desperation graveled Dani's voice as she cut in. "That's how important fish are to you. Trust me, I couldn't feel worse." The silence deepened and Dani bit

into her lower lip. At a red light, she dipped her head to scroll through her phone. “There’s a vet with emergency hours two exits down the freeway.”

A car horn blared, sending a surge of adrenaline through Dani’s blood. She slammed on the gas and the car jerked forward. “Do you think he’ll be okay?”

Lucky’s feral snarl sounded from the backseat. Dani’s gaze settled on the rearview mirror to watch Naomi struggle with the cat. “I can’t see if there’s any puncture wounds past the fur.” Her voice stuck to her throat. “Did he eat the whole fish?”

Dani swallowed hard. “No.”

“He’ll probably be fine. Better safe than sorry.”

Amid the nest of boa constrictors that was Dani’s chest, cool relief pooled. At least Naomi could take a five-second break from being pissed to reassure her. Maybe things between them hadn’t quite tipped over the cliff yet. She drew breath to express her gratitude, but the words died as the green freeway signs glinted overhead. She tore her eyes from the slope of the overpass to her phone, searching for which freeway to take.

“Dani!”

The panic-pitched cry sent Dani’s heart into her throat. She jerked her head up, but her vision blurred as a white four-door car enveloped the driver’s side windows. She slammed on the brakes, their squeal preceding a crunch as the cars collided. The world flipped before her tears blurred it to white. Her teeth knocked together and her fingers gripped the wheel until blood fled from them. Twice she pitched out of her seat, suspended only by the belt biting into her shoulder and waist. The car’s tumbling slowed and wavered, tempting one last languid tip.

Dani squeezed her eyes shut. She sucked in a quavering breath as she bid the car to stop.

It plummeted into freefall.

Shattering glass punctuated the final impact. Unable to sustain the terror-born tension, Dani's body slumped. Gravity sent blood rushing to her head. She blinked and squinted to see the windshield staring into asphalt.

They must have fallen off the overpass.

Thick summer air flooded the car through broken windows. The stifling heat of it slowed Dani's rapid breaths. Trembles wracked her body as pain began to register; blood smeared her left arm where dented metal gashed it.

Around them sounded dying car engines and thrumming footfalls. "Na..." Dani's throat closed up. She swallowed and tried again. "Naomi?"

Her eyes drifted to the askew mirror. It reflected a cracked corner of the rear windshield, each individual line stained with red. A moan tore through Dani's throat. She twisted to look and breath left her. Naomi was a tangle of limbs slumped against the car roof, her face a shiny mess of blood-clumped hair.

"Naomi." Her name escaped Dani's lips in a raspy whisper. She drew breath to try again, but dissolved into a sob.

Footsteps circled. Past the throbbing in Dani's ears, she heard shouting. "Are you okay? Can you hear me?"

Despair crushed Dani's chest, stripping her of words. Her uninjured arm crossed to touch her bracelet with shaking fingers. Three years she'd spent in this skin, in this life. It had taken longer than ever before, but she'd ruined it. Like she ruined everything.

Dani closed her eyes and collapsed into dead weight. She fell away, out of body and brain. The vertigo swarming her head made it easier to let go. Even after years, the sensation was familiar to her. When she was a child, she likened it to that tumultuous moment on the swing set where you reached the peak. That pinpoint center between your eyes tingled and you felt you might slip right out of your skin.

So she did.

Like elastic, she stretched away from her thrumming heartbeat, the burn in her arm, the agony clawing up her chest. Sensation dissolved until gravity itself was a memory.

The stretching stopped, rebounded, and settled.



Dani filled her lungs and opened her eyes to a small, well-lit room. A phantom ache seized her arm and she rubbed it away. Her gaze followed the source of light: a floor lamp with five bulbs. It illuminated the splintered wood of the old desk she sat behind. The laptop's screen was a blur to her watering eyes.

"Naomi?" she called in a ragged voice. She twisted, expecting the chair to revolve with her, but the hard-backed seat scraped the wooden floor. Dani staggered to her feet and surveyed the studio apartment. It wasn't one she recognized. The room was miniscule, the desk sitting a few feet away from the fridge and stove. Peeling yellow paint covered three walls and the third was grey cinderblock. The small, high windows looked out into a burnt orange sky.

Dani stood and paced from wall to wall as nervous energy coiled through her. She dipped her hands into her

stiff slacks, but there was no cell phone in the pockets. She leaned over the computer. 6:43 pm. Still going by Pacific Time. A paper organizer overflowed with envelopes. She grabbed the topmost, an overdue car recall with an address on it.

Los Angeles. She lived in Los Angeles now.

Dani raked a hand over her face, startled by the sense of something missing. After a second, she placed it: her braided locks were gone. She found the bathroom and fumbled with the switches until bulbs lit the dingy mirror. The unfamiliar reflection mimicked her head's tilt as she stared flabbergasted. The tight curls of her hair were shorn close to her scalp. Fresh make-up painted her face and she wore a neat blouse. She couldn't remember the last time she'd looked this put-together.

A kernel of hope seeded in her heart. Maybe things were better here. It didn't matter, of course, unless she found Naomi.

A vaguely familiar chime sounded from the other room. She bolted into the hall, hissing as she banged her shoulder on the doorframe. Her heart twisted when she saw the name flashing on the computer screen.

Her trembling hand missed the keyboard on the first try. She flexed her fingers and tried again.

"Hey, sweetheart!" Naomi's voice carried long-absent joy through the speakers. After a stuttering start, the video came into focus. Her hair was also cut close, tapering along the neck. It wasn't as big of a change as the smile brightening her face.

Naomi wiggled her fingers. "Babe, you there?"

"Y-yeah."

"Did you get the food yet?"

Dani's eyes flickered to the bag on the desk's corner. She touched a hand to it, feeling warmth under the plastic. Past numb lips, she repeated, "Yeah." Relief sent Dani slumping back into the chair. She rubbed her temple, warding off visions of Naomi's lifeless, bloody body.

She'd switched. Naomi was safe here.

In the back of her mind, she wondered if that was true for the other Dani—whether she would cease to exist altogether, or live on as a soulless husk. The idea of leaving behind a string of comatose bodies filled her with nausea. It was impossible to know, so she pushed the thought away and focused on Naomi's voice:

"I shopped around longer than I care to admit on Yelp. Hopefully it's good." Naomi shifted out of view and returned with a foam container. "I got mine from that little vegan place again. I can't order from anywhere else until I get over these peanut butter cookie bars. You have to try them the next time you visit."

Dani unwrapped her container of chicken curry. Although queasiness still churned through her stomach, she forced a forkful past her lips. The flavors passed in a muted jumble, singeing her throat on the way down.

Normal. She had to be normal.

"How's the vegan thing going?" Dani asked. Naomi had always teased the idea in their last life together.

"Still strong. But sometimes I pass that barbeque place and want to die."

The words sent bile surging into Dani's throat. She pressed a hand to her mouth, eyes flickering shut.

"You okay?"

"Yeah," Dani choked out. "Uh... spicy." She struggled to slow the rhythm of her breath and take another bite.

“How was work?”

“Same old.” Testing the waters, Dani added, “Always nice to work from home.”

“They let you work from home today?” Naomi’s voice pitched with surprise.

Dani struggled to focus through her mind’s static. She’d thought it safe to assume she was still a self-employed graphic designer; that had almost always been the case when she switched during adulthood. “Um, just for today. I wasn’t feeling too well.”

“Uh-oh. What’s up?”

Her genuine concern made Dani’s lips twitch into a smile. “Honestly? Cramps.”

Naomi burst into laughter. “Damn, you got away with that? Figures. I’d get ‘cramps’ all the time if I had to give presentations and crap like you do.”

Dread tingled through Dani’s blood at the prospect of working outside the apartment, let alone public speaking. That didn’t sound anything like her; what was it that she did?

“You sure the food’s okay?”

Dani swallowed down the lump in her throat. “It’s good. How was your day?”

“Awesome. I got to use an ultrasound on a manta ray.”

“Really? Cool.” So Naomi still worked at the aquarium; whatever Dani’s job was, it kept them apart. “How are all the fish and whatnot?”

“Well, Pancake’s biopsy came back clean. Neptune’s healing well, should be up for release soon. Remember the guitarfish that wouldn’t eat? Well, he’s back at it now...”

Dani rested her head in her hand and listened, soaking in the happiness ripening her girlfriend’s voice. It had

been too long since she heard it in such purity. Naomi was incredibly devoted to the marine life she cared for; it was so far removed from Dani's self-centric existence. Not for the first time, she wondered what Naomi ever saw in her.

"You sound like you're enjoying the work there," Dani said. "I should find something closer to you."

Naomi shook her head, speaking through a mouthful, "I told you, you don't have to feel guilty. I'll keep applying down there, but the last few rejections were just so discouraging. Making it to the final round of interviews only to get beat is just..." She set down her fork and braced a napkin against her lips. There was a thickness in her words as she murmured, "I miss you."

Dani's eyes snapped shut, repressing the burn of tears. She stuffed the welling emotions down. "I've missed you too. When can I see you again?"

"Oho!" Naomi jabbed a finger at the webcam. "Forgot our anniversary date already?"

Dani huffed out a nervous chuckle. "Shit, let me just put it down on my calendar. Remind me. Are we doing the day of, or what?"

It was always like this, after a switch. Dani had to pry out every detail about her life like an undercover investigator. Rarely did her switching affect anyone else's lives dramatically; she supposed that spoke to how little impact she made on others. This particular switch was drastic, probably the result of a choice made early in her life that had a chain reaction.

When Dani bid Naomi farewell and the video chat ended, her hope began to wilt under anxiety. Before she could feel at ease, she had to know what she did for a living.



Dani got to work trying to open her email account, using a recovery option that sent the password to her phone. Her eyes scoured the list. Spam, spam, spam... Student loan balance? She clicked on it and her jaw dropped. She owed over \$40,000. She'd never been in debt before; then again, she'd never gone to college before.

Unease yanked the knot in Dani's stomach tighter. She accessed her bank account next, the numbers making her squirm. The direct deposits were eaten up by her crummy apartment's rent. Her shoulders tensed when she laid eyes on the payment information: CFA Architects LLP.

She worked for an architecture firm.

Dani's shoulders began to heave with the force of her breath. With trembling fingers, she navigated to the company's website. She hit the staff roster and searched for her name. The page snapped to her profile, a photo of her smiling in a blazer with a tiny email icon underneath her name.

It seemed she didn't just make the coffee.

Dani pushed away from the desk, folding to press her head against her knees. Adrenaline coursed through her blood as she sucked in breath after breath. She'd tossed around the idea of becoming a design architect when she was young, then buried it under a mound of excuses. It was so much easier to live in four walls, to never challenge that horror crawling up her chest every time she put her hand on the doorknob. Apparently, this Dani had overcome it all. Now she was deeply indebted for a degree and possessed none of the skills it boasted.

Stepping into a new life had never seemed so impossible.

Dani threaded her hands behind her head and squeezed. As her sleeves rode up, cold metal brushed her cheek. She lowered her hand to stare at her wrist. D-E-A-L. The same letters dangled from the charm bracelet as in her previous life.

Dani had switched countless times before buying the trinket, fleeing situations and severing bonds with little remorse whenever things turned to shit. She'd lost track of how many times she'd given up, faded out of one existence and into another hoping things would be better. That was before she had met and loved Naomi. She'd sworn off switching. She'd resolved to *deal* with whatever life threw at her.

If she switched, Dani might never find Naomi again.

Dani slumped back in her chair. Her head drifted back to stare at the ceiling. It was too soon to give this life up for a loss.

She had to try.



Dani didn't bother trying to sleep that night. She channeled her anxiety into investigating her phone and computer. For the first time, her contacts list was chock-full. Her parents, on the other hand, she'd blocked. That was always a toss-up; the more Dani had things together, the more likely she'd lost touch with them.

As dawn light bled through the windows, Dani strode stiff-backed into the bedroom. The plain, professional clothes in her closet showed signs of wear and tear. The grey trousers she plucked out were frayed at the hem. There was a hole in her blouse that could only be disguised by tucking it in. She tried putting on the make-up in the bathroom, hoping it might help her feel more

prepared. Instead, her stiff clothes and coated face only exacerbated the feeling that she didn't belong in her own skin.

Dani had to hit the panic button on her key fob to find her car, shattering the twilight silence of the parking lot. She followed the alarm to a sun-faded Pontiac that she could imagine her grandparents driving. Settling behind the driver's seat, her eyes flickered reflexively to the rearview mirror. Memories of bloodstained glass wrenched her gut.

Dani tried to draw a breath, but it fled too quickly. She pried her paling fingers from around the steering wheel and wrapped her arms around herself. Her blood rushed hot and fast under her skin. A parking pass hung on the mirror; she knew where to go, but what would she do once she got there? It was hard enough for her to get a gallon of milk on the average day.

Her eyes squeezed shut.

What was she thinking? She couldn't leave; she'd make a fool of herself. These weren't shoes she could step into. And it wouldn't take the people around her long to realize it. How could she explain not being able to do her job? They'd think her crazy. They'd fire her and she'd end up drowning in debt.

How would she explain any of it to Naomi?

Dani's shoulders heaved with a dry sob. The pressure mounted in her chest until she thought she might burst. She couldn't stay in this place. She'd go mad. It would kill her.

Before she really even made the decision, she switched.

Dani sat tucked into the corner of a café. Panic began to swell, setting her lungs on fire. Her shaking fingers

reached for the purse on the table. She grabbed the phone, scrolling hastily through the contacts. No Naomi.

Switch.

Crammed into a bus, flush against the window. Reaching for the phone in her pocket. No Naomi.

Switch.

Curled up in bed, shades pulled. Fumbling for the phone on the nightstand. No Naomi.

Switch.



The first time Dani switched was an accident, of course. She couldn't have done something so outlandish, so inconceivable on purpose.

Her first switches were by reflex: caught in a lie, scared of her father, a first kiss rejected by her best friend. It was more of an escape route than a power. All she could do was search, with a possibility of making things better or worse each time.

As she grew older and gained agency, switches grew more drastic. Sometimes she woke up in different apartments, next to different people. Amber, Isla, Gabriella... She'd never lived through meeting any of them, only jumped into the body of the Dani who cherished them. It made it easier to sever those bonds when she inevitably broke things again. And after a lifetime of fleeing screw-ups, she had no practice fixing broken things. It was an addiction she had no reason to break.

Until Naomi, the only woman Dani remembered her first date with.



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She knew what it was to meet her, to love and rely on her. She left the apartment more, panicked less. She didn't even think of switching, until her father caught her holding hands with Naomi at her grandmother's deathbed. He had screamed and cursed in the middle of the hospital corridor, made real every horrific premonition that crossed Dani's mind when she struggled to walk through the front door.

In the elevator, she had nearly started to slip when Naomi embraced her. In that moment, insurmountable pain became bearable.

Why should she risk losing Naomi for her parents? They weren't worth it, not by a long shot. Dani bought the bracelet as a reminder to learn how to cope. Because sometimes the bad things that happened weren't mistakes, just consequences.

If Dani could learn to claw her way out of the holes she dug, maybe she could be happy again.



When the switch was over, Dani kept her eyes shut. She was lying under a plush blanket in a stifling room. It was a sensation she knew well: the blankets and bed in the apartment she shared with Naomi.

It took Dani a full minute to gather enough courage to trace her fingers along the cotton sheets. She reached out and touched something soft, smooth, and furry. It shifted under the blanket. Dani jerked her hand away and a puppy emerged from under the sheets. It crawled sleepily toward her, smothering her face in the smell of puppy breath.

Dani tilted her head, joy welling in her chest at the sight of Naomi's sleeping face in the faint dawn light. Tears stung at her eyes, but they dissolved into silent laughter as the puppy licked her face.

"Hi," Dani whispered, reaching out to stroke the dog's floppy ears. A beagle. She'd always wanted one, but stifled the impulse knowing she could hardly take care of herself. The last time the urge hit hard, she'd brought Lucky the cat into the apartment. She must have caved this time around.

A smile curled at Dani's lips as the pup bounced off her stomach and crawled down her leg.

That was when she felt something warm and wet drench the sheets near her feet.

"Oh, no! No, no, puppy!" Dani scrambled up, legs struggling to kick free of the sheets.

"Dani?" Naomi groaned, rolling onto her side. "What's the matter? Oh... Oh, shit."

"I have to take the puppy out," Dani whispered. She scooped the beagle up and stumbled out of bed.

"Too late now," Naomi grumbled, shoving off the blankets. "Damn it, Dani. I told you to crate her if you weren't going to get up in the night to take her out."

"Sorry, I'm sorry. I'll change the sheets when I get back."

Dani shuffled through the apartment by the gentle blue light of the aquarium; Naomi's prized mandarinfish still swam there, its fins whirling like propellers through the water. Anxiety took root in her chest at the sight. Whether they had a puppy or a cat, things between Naomi and her could still be deteriorating. The thought of losing her again fileted Dani's heart into slivers.

The puppy began to squirm and Dani shushed her. Fumbling through the darkness, she found the shimmering ID tag on the harness hanging by the door.

*Shiloh.*

She fitted it around the pup and carried her downstairs tucked under an arm. Thankfully, there was a doggy bag crushed in the pocket of her pajamas. By the time they hiked back upstairs, Naomi had finished draping a new sheet over the bed.

"Thanks," Dani murmured. "I really am sorry."

Naomi grumbled, sitting on the bed's edge with her head propped up on her palm. Dani settled cross-legged onto the mattress beside her. Shiloh wriggled, but Dani held her tight. "Naomi?"

She hummed sleepily.

"Thank you for being so patient with me." Dani rubbed Shiloh's ears, breathing deeply to subdue the fear creeping across her skin. "Did I ever tell you why it was so important to me that it was a beagle?"

"No," Naomi murmured, sounding a little more awake. She turned and their gazes met.

Dani dipped her head to stare at Shiloh instead. "When I was in middle school, I read this book about a boy who rescued a beagle puppy from an abusive owner. That boy and the dog had this... unbelievable companionship. Them against the world. I thought sometimes about asking my parents for a dog. But I never did." A hiccup cinched her throat. Shiloh perched her tiny puppy paws on Dani's shoulders and licked her chin. "I knew if I had gotten that puppy, there was a chance it would have been abused the way I was. Like the dog in the book was. I didn't want to take that risk, as desperately as I wanted that unconditional love."

The sheets rustled as Naomi sat up. Dani's breath caught as arms wrapped around her. Shiloh wiggled between them, still licking at the tears dripping down her jawline.

"Dani," Naomi breathed, lips brushing her cheek. "I'm sorry."

Dani buried her head in the crook of the other's neck. "Don't be. Everything about my life that's wonderful is because of you. I always want to be working toward



giving as much as I get. If you give me a little time, I think I can get there.”

Naomi kissed her forehead. “I love you, Dani. Do you want to talk about it?”

“Not right now.” Dani winced, squeezing Shiloh a little tighter. “I-I might need to make an appointment. I don’t know.”

Naomi’s hand squeezed her shoulder. Caution hung off her words. “I think it’d be good. Things were better when you were going to therapy and taking medication. One day at a time, okay? We need to enjoy the puppy months. They don’t last forever, you know.”

Naomi lay back, opening her arms. Exhaustion of every sort stole over Dani. She collapsed onto the bed and Shiloh curled up between them.



“We don’t have to do this.” Naomi’s hand hovered over the car door handle as she glanced toward the passenger’s side.

“I know.” Dani held Shiloh snug in her arms. The gentle pressure against her chest kept her breathing even. “I want to.”

Naomi slipped out, rounded the car, and held the door open for her. Dani ducked into the street carrying Shiloh close. She kept her eyes trained on the ground. Naomi greeted the hostess, who led them through the outdoor bar. Dani couldn’t help but smile as they passed dogs on the patio. They looked up at her with bright eyes and wagging tails, distracting her from the ever-present tug in her chest.

“You okay?” Naomi whispered as they sat at their bar stools.

Dani nodded, giving Shiloh a little squeeze before letting her down onto the ground. “This was a good idea.” She watched as Shiloh crawled over to greet older, bigger dogs. “Such a sweet girl,” she murmured, giving the leash a little more slack as Shiloh rolled onto her back and exposed her belly to a curious dachshund.

Mustering strength, Dani raised her head. Her gaze coasted up Naomi’s bronzed bare legs to the hem of her orange sundress. When their eyes finally met, a smile crossed Naomi’s face. “Remember when you picked her out? She crawled right up into your lap and wouldn’t budge.”

Dani’s brow wrinkled. She wished she did remember; she didn’t intend on missing another moment like that, if she could help it. She glanced back down to where Shiloh circled underfoot with her nose to the ground. “I’m about to say something completely insane.”

“Anything I can get you, ladies?”

A stranger’s voice jerked Dani’s shoulders like an electric shock. Out of the corner of her eye, she glimpsed the bartender hovering across the counter. She gritted her teeth, face heating up as she blurted out, “Root beer, mojito, and a dog treat.”

“You got it.”

Dani heaved a sigh of relief as he stepped away. Naomi’s hand reached out to squeeze hers. Amusement ran thick in her voice as she prompted, “You were saying?”

“I, uh... might want to go back to school.”

“Oh, wow. For what?”

Dani fixed her eyes on Shiloh. It was easier to say almost anything while staring at a puppy. “Architecture.”

“You’d be amazing at that.”

A trickle of relief cooled the fear burning in Dani's chest. She glanced up, wilting under Naomi's intense stare. She fought to hold her gaze. "I'll do the research into how much the degree would cost. I might have to adjust what I pay into our shared expenses though."

Naomi hummed, cocking an eyebrow at her. "I don't think it's really appropriate for us to take on that sort of expense together." Dani's heart plummeted, only to somersault into her throat as Naomi added, "Unless we were married."

The words squeezed the breath from Dani. She searched Naomi's probing smile. Could it be she really wanted that? With her? It seemed ludicrous.

Every passing second sent a fresh wave of panicked adrenaline through Dani's blood, until she blurted out, "Seems only right." She pointed to Shiloh. "We have a kid together now."

There was some pleasure in watching Naomi's smile dissipate and her eyes pop wide open. "You're serious?"

"I told you, Naomi. You're everything wonderful about my life. I wouldn't mind having a go at improving the rest, but..." Dani steeled herself and forced her wandering gaze to meet Naomi's. "Locking you down is the smartest thing I could do."

Naomi ducked her head, fingers twisting in her lap. A nervous chuckle slipped past her lips. "Alrighty. End of summer? If everything's going well by then..." A hand clasped to her mouth as she gasped. "Oh no, Dani!"

She twisted to follow Naomi's line of sight. Shiloh was squatting over someone's shoe. Dani let loose an embarrassed squeak, tugging the pup away by the leash. Their apologies were met with a dismissive wave.

Dani turned to bury her searing face into Naomi's shoulder, which shook with silent laughter. Like always, her embrace made it easier to bear. There would be mistakes and failures, big and small. But if Dani could resist the urge to run away, she might find herself better for it.

# Cupernicity

B. Morris Allen



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The center of the universe shifts. When you're young, it's all about your principal carer, and food, and bedtime

snuggles. As you age, gravity intervenes, and the center moves further away, to cliques and clans and who's gone furthest into the danglepods. Then you learn about the dark matter carers always try to hide, and the center gets focused, intimate. For me, it was Carsa Ubiye.

I wasn't the center of her universe, of course. The Fifth Law of Thermodynamics is, 'For every cool girl that everyone loves, there are a dozen tech girls no one notices.' Carsa could invent poetry that would rock you like a surface storm. I could fit a new fan in a ventilation duct. She'd never given me a moment's notice, and I could think of no reason she should.

"Get a hobby," Dinu said one day at breakfast. He'd been my principal carer since I was out of diapers. He knew me better than I knew myself. That's what he said.

"I have a hobby," I mumbled around a mouthful of crushed branfruit.

"Hanging around Carsa Ubiye is not a hobby. It's an obsession." I looked down at my branfruit, and shoved another spoonful into my already full mouth. There was no way I could get it all down before he shifted into full lecture mode. But if I skipped it, I'd get a different lecture on waste. And I'd be hungry all day.

"When I was your age," he continued. Why is it that every lecture from a carer starts with those five words? You'd think that when they were our age, they'd have solved all the world's problems already. Actually, they did solve a bunch of them.

"When I was your age," he repeated, probably knowing he'd got off on the wrong foot, but unable to stop himself. "I was climbing up the air vents, risking my life in the surface weather, coming home soaked in seawater and rain." How many carers encourage their

wards to risk their lives? Dinu was pretty cool when he wasn't being tedious. "You need to take some chances, Nushka. And no, shaving the back of your head so Carsa will notice you is not taking a chance."

I washed away branfruit with a healthy swig of citraseep. Everyone says I'm too skinny, but it's not because I don't eat. "I take chances," I protested. "Just yesterday, I swapped out a vent regulator without even turning off the power."

"There's taking chances, and there's being cocky," he said. Sometimes I think Dinu took Plato to heart a little too much and thinks he's required to speak in mysteries and parables. "Both will get you killed, but one is just stupid."

"Sure," I said, and swept the last of the branfruit into my mouth as I stood up. "Got to go." I admit that last was a little garbled due to fullness of the mouth, but carers have special powers of understanding. Dinu just sighed as he gathered up the dishes.



Outside our cells, the duct was empty. I could feel the floor pulse slowly as the dome contracted, but it was well below tolerances. When the intake fans are working properly, the benthodils don't need to respire to get access to oxygen, but the domes still have a subdued rhythm. Some people say that's evidence they're animals rather than plants. But I say they're plants, because living in animals would be wrong. Dinu claims that's rationalization, and that I should pay more attention in biology, that there are fourteen year olds who know more about it than I do. Talk about obsessed.

I wasn't obsessed with Carsa. Not really. That was just Dinu being protective. To prove it, I decided to head down to work. I still had to straighten out that wonky compressor pump for the desalinator. By the time I passed out of the home cells and through the main branch to the tech dome, I'd completely forgotten that it was Carsa's day for tech study.

I actually had forgotten, and when I saw her, with that soft brown skin and rich brown eyes, I was so startled that I spoke to her. "Uh, hey, Carsa. I mean, good morning." And they say Carsa's the poet.

"Hey." Those perfect brown eyes swept up and past me, and back down to the mess of tubing on her work bench. I could see she'd mixed up the organic solvent tubes and the ones for strong acids. Probably to her, it was a mass of tentacles representing humanity's spread into the near galaxy, or something. Any minute now, she'd launch into an impromptu ode that would bring embarrassing tears to my eyes. I turned my gaze back to the floor where it belonged, and shuffled past.

"Hey." For a poet, Carsa had a surprisingly colloquial conversational voice. "I'm supposed to sort out these tubes. Learn about their properties, etc. Only, they all look the same. Do you know anything about it? You're good with tech, aren't you? Nusa?"

There's nothing quite like the glow that comes from sunlight, when the center of your universe reaches out and grabs you by the gravity, and lets you know you're noticed. In a trice, I dumped all my metaphors and scurried over to Carsa and the fact that she knew who I was.

"Sure," I said, as calmly as I could. "It's Nusha." I could feel the warmth flowing from her left arm to my



right where we both leaned on the table. I left that arm exactly where it was, and used the left to pick up a length of kelp-line. It was awkward, because I'm right handed, but it was worth it. "See this one, how it's green, and kind of squishy? That's kelp-line. We harvest it from... some kind of seaweed, where it forms part of the nutrient pathway. It's got a lining of hydrophobic proteins, so—"

"What's hydrophobic? I mean, I know, 'afraid of water'. But what does it mean?"

How can you live inside a giant alien underwater plant (or maybe animal) and not know the basics of how it works? Maybe poets don't need basic science the way the rest of us do. This stuff ten-year-olds learned, but once I got over the surprise, I launched in.

"Exactly: afraid of water. See, water molecules are highly polar. I mean, they've got pretty strong charge gradients between the oxygen and the two hydrogens—"

"Yeah, okay. I'm not actually stupid, you know. H<sub>2</sub>O, hydrogen bonding, got it."

And now I'd insulted her. People are tricky, that way. You never know what will set them off. That's why some people are carers and some stay the hell away from children. I knew which one I'd be. I picked up another tube in my right hand, just to give me something to do.

"Well, see, the hydrophobic coating in *this* tube repels the water, so the two don't interact much. So it's good for polar solvents like acids. But *this* tube—"

"Is like *hydrophilic*, right?"

"Well, no." I winced, and wagged the coralshell tube in my right hand. "It's got an artificial lining that's inert. But it's not *hydrophobic*, so it's good for organic solvents like acetone."

“Got it. So much for logic, then. And they say poetry is an art. It’s got nothing on this science stuff. So how do I tell the two apart?”

“Well.” I was saying that a lot. “There are two ways—memory and feel. Memory is easiest.” *And what I recommend for you.* “There are only a dozen kinds of common tubing—”

“A dozen!”

“—so you just remember what they’re like. See, this green, squishy, bendy stuff is kelp-line. This,” I wagged the other tube, “rigid pink stuff is coralshell—it’s actually another plant that forms calcium deposits in its xylem—you can see how it’s got kind of a plastic shine to it, which is the artificial coating. Now, *this* one,” I put the coralshell down and picked up a length of fine transparent conduit, “is actual plastic. It’s also hydrophobic, and it’s durable, but it’s expensive to make.”

“Yeah, I know. My mother is a plasticizer.”

“You know your mother?” The words were out before I realized quite how rude they were.

“Yeah, she’s like my alternate carer, you know. Weird, huh?”

Weird didn’t begin to cover it. Some people were carers, some weren’t. Being a parent had nothing to do with it. It wasn’t illegal to care for your own children, but most people just... didn’t. People had an affinity for a particular age of child—an age they were best suited to care for, if they wanted to care for children at all. Caring for your own child through its whole life was... I didn’t have a word for it, so I went back to Carsa’s. It was weird.

“I guess,” I said, which is usually safely non-committal. I wasn’t sure what to say next, so I stayed silent.

“Anyway, I’m not going to memorize all this stuff. What’s the other method?”

“What?” I was still wondering what it would be like to have your parents as carers. My mother was a farm tech, and my father had been a sea scout. It made no particular difference to me one way or the other. I’d only met them a couple of times.

“You said there was another way to tell the tubes apart. Feeling. Let’s go with that. I’m pretty good with feelings.” She gave a smile that said she knew exactly what her reputation as a poet was, and undercut it and reinforced it all at the same time. It’s amazing what a smile can tell you when you’re off balance.

“It’s not that kind of feeling,” I said, knowing already that she knew that, and that I was looking like a stiff, humorless tech stereotype, all machine and no heart. She just smiled some more, and I bless her for not kicking me when I was down. “It’s... here.” I shoved the kelp-line into her hand, and I could feel a spark where our fingers touched, despite the damp air of the dome. “Feel that. And feel...” I plucked a glass tube from the pile and dropped it into her other hand, “this one. See how the kelp one is kind of sticky, and the other one is smooth?”

“Well, one is glass. Of course it’s smooth.”

“I don’t mean smooth or rough.” Of course a poet would use language more carefully. “I mean that it doesn’t stick to your hand quite the same. If you get really good at it, you can tell the proper use of the tube just by how it feels in your hand.” Marumo could do it, and he was blind. Or maybe he had to do it that way because he was blind.

“Hmm.” She weighed the two tubes in her hands, then dumped them back on the table. I winced at the clatter of

precious glass, even though these were old tubes well past their service life. “That sounds like even more work. Memorization it is. If I can remember two hundred stanzas of ‘Arrival on Searest’, I can handle a dozen kinds of tubing.”

We spent the rest of her half shift talking about tubing and which kinds were used for what. I completely forgot about the desalinator pump, but I didn’t care. What was clean water, when I had pure joy pumping through my veins? When Carsa took off at the end of her shift, I was still so happy I skipped lunch and sat at my bench just pretending to repack the pump bearings.



“You’re in a good mood.” Those carers, they’re sharp. In fact, I was so buoyant that even a half-shift washing dishes in the refectory hadn’t dampened my spirits.

“I’m so hungry I could eat dinner!” I told Dinu. The older they are, the dryer they like their humor.

“Lucky me.” He gestured to fully loaded table in the middle of our kitchen cell. “I happen to have one ready.”

“What’s the occasion?” There were steamed seagrass stalks, refried beans, crunchy chestnut tubers, gleanberry juice—all my favorites, in fact. I peered up at Dinu suspiciously. He just smiled, and I never let a little paranoia get in the way of a good meal.

I let it go until I was starting to get comfortably full—that point when you could stop eating, but you don’t really have to. We talked about inconsequential—the weather on the surface, whether the last expedition to the sea spire archipelago might have found a location that could withstand winter storms, the status of the cetacid migration, whether pelagomeres were real things, or just

transient concentrations of sweeter water. He knew what I was doing, though. I could see by the glint in his eyes that he enjoyed it. He even let me off with a description of my morning ‘doing tubing inventory’.

Finally, as I was clearing away the main dishes to make room for candied pegflower, I launched my attack.

“Great meal, Din. Really excellent. I loved that seagrass—was that a touch of citraseep?” I dropped the dishes into the soak tub to show nonchalance.

“Just a touch,” he agreed. “Brings out the salt.” That right there was a giveaway. Dinu loves to talk about food as much as I love to eat it. An answer that short was as good as waving a signal flag. I looked down at the back of his balding head, with the one side slightly longer where he never got it quite right with the clippers and wouldn’t let me fix it. I could see where the top of his left ear was a little crumpled from years of wearing that lopsided diving mask with its rigid air hose. ‘Before I found you and realized what life was for,’ he usually said, to make me blush.

Suddenly, I didn’t want to play the game any more, no matter how we both enjoyed it. I just leaned over and hugged him from behind, hard, like a cephalid hugs its babies, but knows it will lose them to the current.

“Hey!” he said after a while. “Those bony elbows of yours are going to stab right through my shoulders.” He sniffed a bit and wiped his face with his napkin.

“No more than you deserve,” I said, and kissed him on his bald spot, where I know it feels funny, but he won’t wipe it off anyway. “Now,” I said, sitting back down across the table from him. “Tell me what’s up.”

He smiled and used his napkin again. “You’re good kid, Nushka. Considering. All in all. I mean, despite the

many flaws. Reasonably good, anyway. Could have been worse. I think.”

I just smiled back. “Better than you deserve, old man. Now, spit it out.” I waved at what was left of the fancy dinner and snagged another pegflower. I let its sweet-sharp flavor dissolve across my tongue.

I could see him toying with the idea of teasing me some more, drawing it out. But then he ran his hand gently over the back of his head, and sentiment won out. Those old ones just don’t have the stamina.

“I got to thinking about this morning,” he said slowly.

“I have a hobby,” I said by reflex, though Dinu wasn’t one to harp on a topic, not really.

“Not that. I got to thinking about the things I did when I was young.” He’d told me plenty of stories. They sounded risky and foolish, mostly. “And I was talking with Juana, down in the laundry.” It was our day for washing privileges. “I guess I’d forgotten how much things have changed. When I was a boy, all this,” he waved a hand at the cell around us, “was new. Newish, anyway. We’d only been living in the benthodils for a generation. I knew people who came in on the colony ship, who’d actually been in orbit, before...” Before the shuttles ran out of fuel, or crashed, or took off in ridiculous, doomed attempts at interstellar travel.

“You did?” He’d never talked about it. The colonists’ arrival seemed distant, part of the ancient history we’d learned in school—a dry story of alien signals and generation ships and disappointment. It had never occurred to me to think of those original settlers as real people—people one could meet and talk to.

“Not well. But my carer knew his father, who’d been an astrogator for the arkship. I got to meet him once or

twice.” He drifted off into silence, and I let him remember, all of a sudden seeing another side to this warm, loving man who’d given up a job as sea scout to take care of a whiny young girl.

“Anyway,” he said at last. “That’s not the point. The point is that in those days, in my day, we still spent a lot more time outside. We’d only just learned about the benthodils, that we could actually live inside them. My carer was already your age when someone first climbed down one of the vent stacks and found a space like this.” He waved at the cell again, with its grey spots of air absorbers where the benth drew in oxygen to be re-emitted at the exhaust stacks as NO<sub>2</sub>.

I wondered what it had been like for that first explorer, with the rush of wind coming down the intake stack, and back up the exhaust stack, and with the dome rising and flattening on the seabed, drawing air past the valves. Would it have been better to be sucked down the intake, or risk being blown out the exhaust, spit out like a seed into the storms of the surface.

“Where did they live?” I asked, though I knew the answer well enough. They hadn’t, mostly. They’d died in droves, drowned in storms, or starved on the arkship, with its ecosystem sabotaged by diehard colonists intent on limiting the options. They’d died hard at the hands of an angry mob.

“In the shuttles, mostly. Floating on the surface at first, until the first big storm. On the seafloor after that. It was hard.” He had tears in his eyes again, and they weren’t the good kind. “It doesn’t matter. It does, but that’s not what I’m talking about. The point is, when I was young, we all knew more about the surface. The outside. We *went* outside—to scout, to harvest from the

shuttles, to look for food. I realized this morning that you don't have that. That you've never actually been outside. I think you should."

"But... But why?" This wasn't at all the happy surprise I'd expected. "What's out there but wind and water?"

"And rock." A sad smile played across his lips. "And a whole lot of ocean. There's a whole world out there, Nushka. Literally."

"But I don't need it! We've got everything we need right here. I mean, there are the farms, and all, but the farmers deal with that. And they don't even go to the surface. There are ports at seabed level. The ocean is right here!" I was starting to panic a little. The thought of being outside the dome was frightening—exposed to the elements, to vicious winds, water everywhere, with no shielding, no protection, with the sun burning holes in the cloud—it was barbaric.

"Look at it this way, Nush. When you're working on a pump, you don't want to know just the tubing, do you? You need to understand the compressor, the valves, the power supply, the... all the other parts." Dinu wouldn't know a compressor from an alternator.

"I could be a specialist." It sounded weak even to me.

"The point is, the domes are only part of the ecosystem. You need to have a look at the larger picture, at least once. For one thing," and here he leaned forward, bait in hand, "you've never seen the stack lids. They're pretty sophisticated machines, you know. Only experts get to work on them."

I knew it. Being a stack tech was top of the heap, and not just in altitude. The stacks had to let air in or out, keep water out, and survive the vicious, changing winds, the



typhoons, the waterspouts. The benthos had natural mechanisms, of course, but they were more leak tolerant than humans were. The stack lids had to be durable, effective, and, most of all, not harm the benthos. Since the benthos kept growing and changing, that meant constant adjustment.

I licked my lips. Dinu really did know me well. He'd known that a chance to see the lids in operation was a treat I couldn't turn down, no matter what it meant in exposure to wild nature. It was so tempting I even excused his attempt at bribery. It had worked.

"I'll do it," I said, though I wasn't quite sure what it was. If it meant seeing the lids, it was worth it.



I hadn't given Dinu enough credit. When he woke me up early the next day, we scarfed down a good breakfast, did our cleanup, and packed a hefty sack of cold lunch. Naturally, I got to carry it.

"Do you good," he said. "Pretend it's spare parts." Which it sort of was, I guess.

We wandered out of the cells and made our way to the main dome. There was a long spiral ramp carved into the outer rim, curling up to outgrowths we used for storage and farming and observation. We climbed past those, well up toward the ceiling, where I'd never been before. The dome's rhythm was more evident here, a claustrophobic flattening and rise of the ceiling above, clear evidence that, plant or animal, the benthos was breathing. I shuddered to think what it must have been like before the fans, when instead of this vestigial pumping, the whole dome rose and fell, with vast surges of air filling and emptying the cells we now lived in.

Now, the fans continuously brought in and circulated fresh air, and flushed the old air out, in a carefully synchronized pattern across all the parts of the dome.

Near the top, a catwalk ran out across the open space below, and the dome dropped low enough at times that Dinu could have reached up and touched it. He didn't, but I could see where others had scraped their initials in smooth lines across the dome's thickly grained inner surface.

"Hello," he said while I was gawking. "How are you, Srinar? Thanks for doing this."

"For an old explorer?" the other man asked. "Any time." He was older than Dinu—maybe seventy five, with tight-curved grey hair and a nose so sharp it could have cut glass. "Is this her?"

"Watch it with that 'old' talk, Srin. Nusha, meet my *old* friend, Srinar. He'll be our guide today."

"It's nice to meet you, Srinar. I appreciate your taking the time."

The old man turned back to Dinu. "I thought you were the one raising her, Din. Where did all this politeness come from?"

Dinu turned and winked at me. "I think they're putting it in the food these days. Doesn't taste quite like it did when we were kids."

"Hey, if politeness is the cost of flavor, bring it on. Remember when all we had to eat was bull kelp?" The oldsters nattered on for a while about how hard the old days had been. Doesn't matter how old or young they are; the old days were always harder, and a whole lot better.

I looked around. The catwalk ended at a rickety looking structure hanging from the vent above. It was an open cage, for the most part, with the bars just close

enough together to provide footing, if you were careful. A slim ladder rose up and into the vent, which was a good five meters across. I could feel the air sweeping past me and up the vent, and I could hear the whirr of an exhaust fan not too far above. A thick bundle of cables ran down one side of the ladder, some thick and insulated, some thinner and gathered in bunches of thinly covered white.

“Power,” said Srinar from beside me, pointing at the insulated black cables. “Guess what the others are?” He pointed at the white.

For a moment, I was flummoxed. But then it came to me. “It must be light.”

He clapped me on the back. “Definitely not yours, Din. You were never that quick. Let’s get on the way before her real carer realizes she’s missing.” He told me, as we climbed the ladder, how the white cables were drawn from kilometers of optic fiber cannibalized from the defunct arkship and brought down in the shuttles, or in droptanks. It had solved the practical and nutritional problems of living in the dark internal spaces of the benthos, and even allowed for limited dry farming.

“We’ll be in trouble when the fiber’s all gone,” he said. He seemed indefatigable as he climbed, while my arms were already burning with the effort. “We’ve already salvaged from all the crashed shuttles we can reach.” He stopped, seemingly to let me rest, since he clearly didn’t need it, and I did. “What do you think we’ll do when the fiber runs out?”

I used the excuse of gasping for air as a chance to think. Below me, Dinu didn’t seem that much better off. I recalled now, vaguely, that light was gathered in condensers and fed into the glass fibers. Without those... “Mirrors?” I guessed.

Srinar looked down at me with what seemed like genuine respect. “Mirrors indeed, young lady. When we can’t mend the fibers any more, we’ll melt them down into curved mirrors and aim them back and forth down the vent. We’ve already got some models running in Ridgecrest’s #12 vent.” His casual mention of another dome was another reminder of just how insular my thinking had been. I knew about other domes, of course. Humanity was spread across a half-dozen domes on the sea plain between the sub-surface mountains and the nearby abyss. “Still a couple of problems to work out, of course. Stabilizing the mirrors, for one. Maybe you’ll have some ideas on that.”

The amazing thing was that he didn’t sound patronizing at all, though clearly he meant to be. What could a teenager have to offer that these techs hadn’t already thought of?

We stopped after about a hundred meters, on a little platform on the side of the vent. The roof of it was all wire mesh, above which was the roar of the first exhaust fan. It didn’t feel like I was being sucked up into the rotors, and I was a little disappointed.

Srinar smiled as we waited for Dinu to clamber up on the platform. “Not quite as scary as anticipated, eh?” he yelled in my ear.

I shrugged, and he turned away to climb up the ladder a little further. Just below the fan housing, it dipped slightly into the wall of the vent. The housing was a little thinner here as well, offering a narrow space we could climb through. It was wider than it looked. Even with my pack on, I had no trouble getting through. At the top, there was another platform, so that even though the ladder slanted back, there was no risk of falling into the fan. On

this side, too, I could feel the pressure of the air a bit more—a comforting gentle hand on my back.

We climbed endlessly, it seemed, past fan after fan, and the occasional rest platform midway between.

“It’s quietest here,” Srinar said as the three of us shared a sip of water from my pack. “Easier to talk.”

I had little to say and left the oldsters to their reminiscing. The vent was nowhere near as frightening as I’d imagined but just as fascinating. There wasn’t actually that much to it—just the ladders and platforms, the bundles of cable running up and down, and the fans and their housing. But it all worked, and I realized as never before just how reliant we all were on these fragile strands connecting us to the light and power I’d taken so much for granted.

I left the cables well alone, but I longed to peek into the housing of the fans, or to climb out on the narrow, rail-less struts that held the blades in place and provided maintenance ways. At the third fan, there had been a faint squeak, like a bearing beginning to stick. I had pointed it out to Srinar at the next waypoint, more as a question than anything else. He’d surprised me by immediately climbing back down, his wiry arms still not tired.

“Didn’t hear it,” he said when he returned. But he’d gone over to a broad conduit I’d assumed was electric. He’d opened a little box beside it, taken out a wax pencil and a bit of paper, sealed his note into a little ball that looked like the fat end of a strand of bull kelp, and dropped it into the tube. “They’ll take a look this afternoon, sort it out by tomorrow. Best to catch these things early.” He’d said no more, but I’d caught Dinu smiling broadly at me, like he was proud, and I realized I was proud too. Maybe it was nothing. Maybe I’d been

helpful. I burned to tell someone about it, but the only person likely to be interested was Dinu, and he was already here. I knew he'd let me tell him about it anyway.

Finally, after what seemed like hours of climbing, but was still only mid-morning, we neared the top. Here, the stack had narrowed to only three meters, and I felt I could almost reach all the way across it. The pressure of the exhaust was stronger now, not enough to float on, but enough to think about, to throw my balance off just enough. Dinu was in the lead now, with Srinar below, ready to grab an ankle if one of us fell, perhaps, or just to watch as we vanished into the fan blades below.

There was a change in the quality of the sound at the next midstation. I listened as we waited for Srinar to vault up onto the platform.

"It's the sea, isn't it?" It was exciting to think about the waves crashing against the vent wall behind us, with just a meter or so of stack to keep away the ocean and all its fury.

"It is indeed," the old man said.

Dinu tilted his head to the side. "Sounds like a calm day."

Srinar slapped him on the back. "Still a little explorer in you yet. Dead calm today. Supposed to be that way for a few days, then a big blow. May have to batten down a bit, in fact." I remembered now that they closed the vents entirely sometimes and just let the air go stale. It all seemed much more real here, inside the vent itself, with the top not far above. I wondered now, at how ignorant I'd been about the things that sustained us all. I'd have to admit it to Dinu, and he'd be insufferable about it. It was worth it, though, and the best was yet to come.

There were little bunks set around the edge of the vent, stacked three high in places, with thin railings to keep sleepers from rolling out.

“Staging point for explorers,” Dinu explained. “I spent many a night here, waiting for the wind to die down.” It brought home to me again just how different his life had been, how he’d traded daily risk for a calm life as a carer in the dome far below. It seemed almost stifling to me, in a way it never had before. “Ready?”

I nodded, though internally I was unsure.



The top was magical. Frightening, terrifying even, but magical nonetheless. The stack lid was a marvel of precision engineering, with baffles and catches and solenoids and slatted vents and spillways. It fit the stack tightly, thanks to a compressible rubber seal that Srinar said would have to be replaced in just twenty years’ time, if all went well.

The ladder ended in a circular catwalk just below the cap, and I could see no good way up through it, barring the vents that connected to actuators and pistons. What I could see was the sky—a mass of fuzzy grey that Dinu called ‘cloud’, giving shape to a word that had never been more than a syllable in the history books before. It was oddly enervating, looking up into what seemed like infinity; no comforting dome above, no sense of benthodilic respiration reassuring me that all was well with the world.

“This way,” said Srinar from behind me, as he swung open a door I’d barely noticed. It was a massive thing, with flexible seals all around the edge, but tiny and

simple compared to the lid above. Beyond it was... nothing.

I found myself on my knees, fingers white against the wire floor of the platform, chest tight and heaving.

"It's alright," came Dinu's voice, his hands gentle against my back. "You're fine."

"I was falling," I gasped, "into emptiness."

"You're alright now," he said. "I've got you." I've never been more comforted by such simple words. Dinu was here, and he had me, and I was safe. I burst out crying, my face firmly buried against his legs, while he rubbed my back and stroked my hair. And then I remembered that Srinar was there, and I cried again from sheer embarrassment.

Eventually, I quieted.

"Recall the first time I came up here," Srinar said, matter of factly. "Cried like a baby and had to go all the way back down. Took me three tries 'fore I looked out the door."

"Me too," said Dinu. "Two tries. But then I was always tougher than you." I listened to their lying banter, and my heart filled with love for them both, until I was afraid I might cry again. At last, I sat up, eyes carefully averted from the ghastly void beyond the door and looked out on the comforting darkness of the vent shaft.

"How many times did it really take?" I asked Srinar when I could speak again.

"Twice," he admitted.

"Uh huh."

"No really. I really did have to go back down the first time. Scared the jeebers out of me. Not Din here, of course. He bounced right out the door as soon as it opened. Always had more guts than brains, our Din."



“I was scared out of my mind,” Din insisted. “But there was this older boy I wanted to impress.” Another piece of the puzzle fell into place then—the way they looked at each other, the way they acted. Not old friends at all, or not just that, but old lovers as well.

“Damned if you didn’t do it, too,” said Srinar. “Of course, it would have worked better if you hadn’t puked over the side.”

“Almost went over, too, if you hadn’t caught me,” said Dinu. “Well worth it.” The two men smiled at each other, and I could almost feel the history between them, the unspoken years of love and anger, disillusionment and reconciliation. Was Srinar why Dinu had turned away from the outside, or was I the reason they’d split? I wasn’t sure I wanted to know more, and I turned my face back toward the door.

It wasn’t as frightening this time, with Srinar between me and the emptiness, and Dinu beside me, one hand on my leg, holding me in place should gravity suddenly fail. We sat and looked at it for a long time, and gradually, with casual shifts and turns, I found that Srinar had moved out of the way, and the path was clear before me. He’d done it so subtly that I hadn’t even realized it was happening. Dinu as well had moved away from me, and it underlined how in tune these two were now and had been.

I didn’t worry about that. Before me was infinity—an endless plain of grey cloud and a dark, ruffled surface that must be ocean.

It wasn’t really infinite, of course. Even in my stunned state, I knew that, knew that that boundary must be the horizon, that the world was round, and big, but not unlimited. I crept my slow way to the door, and I could

hear the two men muttering behind me, keeping up a pretense of normality, though I knew with every grateful nerve that Dinu must be poised to grab me, to pull me into the safety of his embrace if there should be a need.

The air was different up here, I realized after the initial shock had worn off. It was more... lifeful. Fresh. I'd never realized before just how stale the air below must be, how many times it had been rebreathed, no matter how well we circulated the air. This was what air should be.

It took me an hour to get out the door, and even then I went no further. There was a narrow balcony, and a thin railing with occasional gaps. From one of them, I could see the top rungs of a ladder leading down.

"Down there are the solar cells," Srinar said. "They're plastered all around the north side of the stack. Keeps the sun on them during the day."

"Not at night?" asked Dinu.

"Smart ass."

"There are no other stacks," I pointed out.

"Not that you can see," said Srinar. "This is the westernmost stack of our dome, looking out over the trench. If you went out around the balcony, you'd see our three other stacks to the east, and Ridgecrest's in the distance. Seamount to the south, Holiday to the north. Can't see the rest. Might catch Holiday if you lean forward and look right."

I swallowed. "I might leave that for another day."

He laughed and slapped me on the back, sending me sliding as much as a centimeter toward the edge. Dinu's hand on my shoulder kept me safe, and I reached up to give it a squeeze.

"Ready to go?" he asked.

"I think so." I scooted back inside and waited until Srinar had closed the door before I stood up. The tower had a slight sway to it, and I shuddered to think what it might be like in a storm, though likely the door wouldn't be open then. "Is it always so quiet up here?"

Srinar shook his head. "Depends. Crew of explorers left yesterday, back tomorrow. Routine inspection of the lid last week. They'll have been checking out your squeaky fan while we were up here. Otherwise, not much call to come up here, and not much interest."

"Thanks," I said, and offered my hand. "I hadn't expected..." I gestured vaguely. "This."

He shook my hand. "No one does. Some hate it. Some can't get enough." He nodded toward Dinu. "Some can."

We headed back down. At the surface point, Srinar pointed out another massive exit on the far side of the stack.

"Keep the submersibles out there," he noted. "Lashed to the side, under the surface. Easier than the old days."

"Remember trying to get aboard?" Dinu asked. "Let alone enter?" They laughed and shook their heads and headed down.

The trip back was uneventful. We said our goodbyes, and I thanked Srinar whole-heartedly. I couldn't help but notice how long the men hugged, and I felt confident we'd be seeing him again.



The universe had shifted again. It took a couple of days to get back into the swing of my habits, and I was less than attentive on my duty shifts in the farms and the hospital the refectory. It was on the second complaint about overflowing servings of mashed potatoes and not

enough seagrass that the line steward told me to shape up or go home. Going home meant a double shift tomorrow, so I tried to focus.

It was hard. Everything was different now, as if that brief glimpse of the surface had changed my vision. And perhaps it had. My perception was deeper now, it felt, like I had hold of a secret others didn't share. I could feel now the weight of the water above, above the dome. It didn't feel oppressive; it felt like a comforting, protective blanket, keeping us safe from the storms, keeping us anchored.

I wondered again, but more urgently, about the path we'd taken, the tacit deal we'd struck with the benthodils. The fans, the lid, the cables—it was all so intrusive, so presumptuous, that I wondered whether it was wise, was right.

"It's symbiotic," Dinu assured me that night. "Commensal at worst. We're not..."

*Parasites*, I thought. The word we never said.

"We make sure the benthos get the oxygen they need, because we need it too. We exhaust the NO<sub>2</sub>, because we can't breathe it either. We do a fair amount of damage to the cilia on the floor surfaces, but in our waste rooms, we feed it, and the benthos benefit. Our waste even provides the trace metals and minerals they need, that they'd have trouble getting elsewhere. In fact, we're not sure where they got them before. Most of the benthos have sub-pods over the edge of the trench, and we suspect the waters are richer in minerals down there."

"The danglepods."

"That's right. We don't know a lot about them, really. Our submersibles can't go that deep, and we've never had a reason to explore."

I smirked.

“Oh, we know the kids go down there,” he smiled. “We’ve all done it. That’s in the risky but not stupid category. There are human gates down there to keep you going too far. And below that, it’s complicated—the benth have all sorts of valves and channels to keep the pressure back. But the fluid that comes back up is rich in metals.” He frowned, but refused to say more, and we moved on to the latest news from other domes.

Little did either of us know how closely linked those topics were, nor that the shifts in the universe were picking up their fearsome pace.



“They’re all dead.” Srinar shook in Dinu’s arms, while I stood by helpless, a jug of gleanberry juice futile in my hands, as if the flavor of fruit could stave off the loss of an entire dome.

“What happened?” I asked, unable to stop myself. All we knew was that Holiday had collapsed and that debris and bodies were strewn across the surface.

Dinu frowned at me above Srinar’s head and jerked his head for me to leave, but the older man answered, and I stayed.

“They’re not sure yet. Pressure void at the base of the dome, they think. Something like that. Water coming in, forced everything up through the vents.” He shuddered. “Through the fans.”

It would have ruined the rotor blades. I tried to focus on that, on the machinery, rather than the bodies they’d ruined, the flesh that I hoped had no longer been alive.

“I’m sorry, Sri,” said Dinu. “You had a kid there, didn’t you?” It seemed all sorts of parents knew their

children. It made me wonder a little bit what was wrong with me and mine. Anything was better to think about than Holiday.

“Daughter.” Srinar leaned back, away from comfort. “Never really knew her, but I know she was there. So that’s my contribution to the gene pool gone.” He gave a grimace that stretched his tired face into a grim caricature of mirth.

Dinu took Srinar’s hands, squeezed them. “It’s not your genes we care about,” he said, and stopped, trying to find the fine line between comforting and callous.

“We’re going to have to salvage the fiber,” Srinar said. “Someone’s going to have to go in there, pull it all out.” His hands shook above the table. “And the cable. The lid; we’ll need that. Whatever’s left of it.”

“I’ll go,” I said, surprising all of us.

“Yeah, good,” said Srinar. “Thanks.” Dinu only smiled. It was a ludicrous idea to begin with, and we all knew it. But I wanted to do something, to respond, to help.

“I will.” When Dinu spoke, it wasn’t with the tentative, tremulous determination of a teen, but with the quiet confidence of an expert.

This, Srinar took seriously. “Hey, no. I didn’t mean that, Din. That’s not why I came. I just...”

“I know.” Dinu squeezed his hands again. “I know. But they’ll need people. You know that. A diver who understands machinery. There aren’t as many these days. It’s been... Things have been good.” Until now.

“We’ll see,” said Srinar. But we all knew it would happen. Divers and techs didn’t mix that much. Another thing I hadn’t realized I knew, hadn’t realized might be a problem. Another shift in my center of gravity and worry.



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They held a memorial service, of course. Something to acknowledge disaster, to pretend it was over. There

were speeches, music, poems. Carsa read something new and everybody cried. It covered everything from the bravery of our ancestors' gamble on a seeming alien communication, to the computers' inability to decipher it while the humans slept, and the shock of finding a 'habitable' world with no land at all, their excitement at finding the domes, and the homes we'd made of them since. She made it all seem logical—brave rather than frantic, proud rather than desperate. She talked about how Holiday had been named after Survival Day—the day when the hapless colonists had finally been sure they would live, would go on even without land, or aliens of any kind. She seemed subdued, from my place in the crowd, her eyes shiny in the bright light of the main dome, but her movements slow and uncertain. It made me want to reach out and hold her, help her cry, but I didn't.

I thought once that she saw me, sought me out in the crowd. Noticed me at least, held my gaze. It made my heart leap, and I looked away, ashamed to feel such joy amid such pain. I left before the ceremony ended, hid myself in the farms until my nerves had calmed.

The salvage mission fell in place faster than I had thought. "Got to get it all before it corrodes," Srinar said. He'd moved into our cells, to keep me company in theory, but in practice so that he wouldn't be alone. He'd been hit hard by the collapse, not because of his daughter so much as because his faith in technology had been shattered. He couldn't stand to see the fans, he'd told me. "Every time I climb by one, I think of her, the water surging up, pushing her through the blades."

"The rotor would have been fouled by then," I said. It was a discussion we'd had before. It seemed to comfort him to hear it.



“Yeah. Of course. Foul.”

I knew what he meant.

Dinu was two days gone. Submersibles and divers from Ridgecrest and Seamount and other domes were working night and day, towing flotsam north and south. The air in the dome was getting foul, with the fans not working half the time to allow material to be lowered down the stack. The benth had noticed, and the dome was starting to flex. The huge breaths made valves open and close in the stacks, complicating things further. There was even talk of opening a vast door into the main dome, with all the nightmares of sealing and pressure and airlocks that that would entail. I’d talked about the problems with my tech supervisor, and they seemed insurmountable and risky. Tolerance for risk was low in all the domes.

“I’m going to go down to the workshop,” I told Srinar. “Help clean the salvage.” It was hard, simple, tedious work, but I wasn’t quite qualified to do more. “You be alright here?”

I was headed out the door when he said, “Wait.”

I turned back, surprised. I didn’t like to leave him alone, but I couldn’t stand to sit in the cells, idle while even the benth breathed around us.

“I might have something for you,” he said. He glanced back to the room he shared with Dinu, but he didn’t rise, didn’t go get some piece of tech or flotsam he thought I’d like

“I don’t know if Dinu would like it,” he said. “But... things are what they are. And you’re old enough.”

I was sitting down by now, looking nervously across the table, trying to search out Srinar’s eyes. Dinu

wouldn't like it. Was that exciting? Frightening? I wasn't sure.

"He told me to take risks," I said, and found I'd decided. Exciting and frightening all at once, but more of the former.

"Well, this is the mother of all risks."

I waited.

"Here's the thing," he said at last. "They're worried about the downstacks. They're shriveling."

I hadn't heard that. It seemed impossible. I'd been down in them myself, no more than a year ago. "But..."

"They can't use the submersibles. They're pretty makeshift. Even down at this level, on the shelf, it's a risk. And they're all busy."

"But—"

He kept on going. "They sent one out over the edge anyway, down to the first danglepod." He looked like he wanted to spit at the risk to good machinery. "It's all fine down to there, but they said that down below, there's something off. The stack is thinner, maybe. Discolored."

I'd been down a downstack, the narrow chutes the bents used to anchor themselves in place along the seawall where they liked to cluster. Not to the danglepod. Nobody really went down there; no one I knew anyway, but we all said we did. The downstacks weren't anything like the vent stacks, really. They were long columns, but where the vent stacks were huge and solid, the downstacks were no more than a couple of meters wide, with squishy, spongy, scary sides, and stiff, blocky ribs that sometimes merged in complex central structures that were hard to squeeze by. The sides were lined with tubes full of slow moving liquid, and I recalled something about waste, or maybe deep sea nutrients.

“Maybe it’s the copper,” I said. “Verdigris,” though it made no sense. The benthodils had a copper-based venal fluid, but there was copper at all levels of the sea. There was no need to seek it out below, nor any reason it would suddenly escape and oxidize.

“No.” He’d become less tolerant, angrier with the world and all its failures.

“Okay.” I didn’t know what else to say, or why he was telling me.

“They need someone to go down there.”

“Uh huh.” Sure. They’d want to go check it out, make sure whatever had happened to Holiday didn’t happen to us.

Srinar looked up at me, looked me in the eye. “They need someone small. Someone who knows machines.”

Sometimes the universe shifts and you roll with it. Other times, you fight it with every fiber of your being. I wanted Dinu. I knew what Srinar was saying now, much as I tried not to admit it, and I wanted Dinu to protect me from it, wanted to hide my face in my carer’s chest like a little girl and wait until it went away. I wanted him to make the decision for me, to say ‘No, she can’t. She’s just a child.’

But Dinu wasn’t there, and I wasn’t a child, and for all he was angry, Srinar wouldn’t ask unless he thought he had to. So I said yes. And cried myself to sleep that night, telling myself this was what it meant to be an adult. I was wrong.



It wasn’t just me, of course. There were others—Marcu, two years older than me, already legally an adult, tall, but skinnier even than I was; Varna, two years

younger than me, short but a little chubby, and working hard to convince her carer that she'd be fine, that she could suck in her gut for hours if need be. Marcu was in training as a scout, though I wondered what good all his orienteering and underwater skills would be in the tight, directed, confines of a downstack. Varna was a bio-phys student, and ready at a moment's notice to tell all and sundry how smart she was. She kept going on about how it was the opportunity of a lifetime, how nobody'd ever gone down a downstack before, and how much we'd learn. I could see that Marcu, preselected as the leader of our little expedition, had already tuned her out.

They had packed a pack for me, and I'd delayed us for an hour by insisting on unpacking and repacking it myself. I didn't change anything. The pack had been put together by Simonian, my techspace supervisor, and she'd thought of everything. She stood up for me against the Council rep, though, a man named Velasquez, who was visibly frightened, and fretted that any moment our dome might collapse.

Finally, Marcu turned to him, and with surprising firmness, said "Mr. Velasquez. If the dome collapses we'll all die. The three of us," he motioned to Varna and me, "will die first. And worst. We want to live. We want you to live. And the best way to do that is to be prepared. If Nusha thinks she needs to check that pack, she needs to. I repacked my own twice last night." My respect for him went up several notches. I couldn't think of another teen who'd have been so self-possessed. Even Carsa and her cool crew sometimes folded under pressure. I tried not to think about Carsa, her brown eyes, her sparkling words.

I needn't have worried. When we got to the danglepod, she was there, waiting. "Marcu," she said, from her comfortable position in one of the pod's oval chambers.

"Cars," he said, with a tone of long suffering.

It had never occurred to me, somehow, that Carsa had friends beyond her clique and sad hangers-on like me. The unlikeliness of it made me forget the sheer wonder of the danglepod and Varna's incessant natter behind me as she went on about pressure adaptation and the cleverness of the valves we'd just forced our way through, and how the slime that coated them, and now us, was probably a sealant. Irritatingly, very little of it had gotten on Marcu, and apparently none at all on Carsa. She looked as beautiful as ever and even more confident.

She and Marcu stared at each other, while all the time Varna kept talking. Finally, Carsa relented.

"Thought you might need company," she said. The seduction in her tone nearly broke my heart.

"I've got company," he said. "Both smarter and more attractive than you. Go home." I was as startled by his comments as by his ability to resist Carsa's beauty. We'd established within the first few minutes of the team that I liked girls, Marcu liked boys, and Varna liked science.

"Too late for that," Carsa said, though I couldn't see why. "Besides, this is historic, right?" By then even Varna had caught up, and she launched right into an explanation of just why it was historic that we explore the mysteries of the downstack, and why she was the right person for it. "So you need someone to tell the story. The *real* story. Not..." she tilted her head at Varna, who went on about pressure differentials and atmospheric gradients. "Besides, I'm not going back." She took on a

look of intense stubbornness that I recognized from long hours watching her across the refectory.

Apparently Marcu had seen it as well. He shrugged, and said, "Up to you. But you follow instructions, or I tie you up and leave you in the stack somewhere? Got it?" He was so skinny that the threat seemed barely credible, but apparently Carsa knew his looks as well, because she only nodded.

"Now that the formalities are out of the way, how about a snack? You look like you've earned it." I wiped slime from my hair self-consciously as she opened a bag and handed out sandwiches and a gourd of gleanberry juice. "And while you're eating, you can tell me all about yourselves. If you're going to be immortalized, you'll want me to get it right."

Marcu didn't say a thing, but we heard a lot about Varna. To give her credit, it was impressive, and she didn't seem subtle enough to lie. If only half of it was accurate, it was a lot, and I wondered why I hadn't heard her name before. Until I realized I had.

"...Initially discovered by Dinu Efanic, of course," with a nod at me. "Though he didn't realize the importance of the growth rings around the distal ramae, and I had to..."

Of course. Fourteen year olds who knew more about biology than I did. I had to laugh at how badly he'd understated his case. In another fourteen years, I still wouldn't know as much as Varna did now.

"And what about you?" asked Carsa turning to me. "Nusha, right?" I blushed, and then, since I couldn't sink right through the pod and vanish, would have blushed about blushing if it were possible. "What's your job? Marcu's here to deal with surprises and make decisions.

Varna's here because apparently no one knows more about benthodils than she does."

"Five people do," interjected Varna, "but two of them are too old, and the others are all too big." Even Varna had had to do her gut-sucking once or twice, but I was confident her indomitable curiosity would see her through.

"So what do you do?" Carsa continued. "What's a tech doing down here where there's no tech."

I waited for Marcu to tell her, but he stayed silent, focused on the remains of his sandwich, which involved shreds of red kelp.

"I... In case. I mean..." I looked to Marcu again, but he just nodded, showing no interest in rescuing me.

"What she means," said the precocious and accurate Varna, "is that if we find there's a biological problem we can't solve," she made it sound unlikely, "Nusha's here to think about whether we could use tech instead." Which, she made clear, would certainly be a second or third-rate solution.

Carsa didn't press me further, but happily, Marcu had finished his sandwich and moved us on. I was so busy mentally kicking myself for my stupid awkwardness that I missed the first part of Marcu's warnings.

"...so from here it's all conjecture, okay? We think the downstack gets tighter, and we think there are more danglepods. We'll spend an hour or so in each, on the theory that they are pressure valves or something like it. It will give us time to acclimate, but it's all unknown. If you have *any* problems—breathing difficulties, hallucinations, dizziness,—anything at all, you tell me. Understood?" He looked around the circle until we'd each nodded. "Obviously, there's risk. If the downstack

is deteriorating, there may be leakage, and if there's water, it'll be under pressure. We could drown, the stack could split, we don't know."

Even Varna kept quiet. I guessed we really didn't know.

"If any of that happens, keep calm. The worst thing you can do is panic. I know, it doesn't sound useful. But it is. You don't *have* to panic. And if you do, you can stop. You'll still be frightened, your heart will race, you'll want to breathe heavily. But you can still think. Do that, and the panic will take care of itself. It works."

I wanted to ask how he could be so sure, but I was worried the answer might be even more frightening than my fears. In an odd way, it was reassuring. Dinu might be out doing salvage, but I had his replacement right here with me. And I had myself. Both Dinu and now Marcu seemed to think that was enough.

Marcu turned, and with a soft-edged prybar, pushed open the rim of the greyish plate of flexible mat beneath his feet. Air rushed through the gap, and he stepped closer to the rim, working his prybar to the side, widening the gap until, suddenly, the valve gave way, and he slid through to the stack below.

We'd done this once before and had a sense of the drill. Marcu kept his arms out as he found his footing below, and as soon as he started moving, Varna had scooted into his place, so that between them, they kept the valve open. The air from below smelled moist and incongruously spicy.

"Clear," came Marcu's voice, and his arms slid out of sight. As he climbed down the stack, Varna slid through the gap, and I scooted into place.



“History in the making,” said Carsa from where she squatted beside me. “And they say you can’t get anywhere sitting on your ass.” She winked.

Below me, I could now see Varna squeezing her way past a tangle of stiff, cord-like membranes. It was a tight fit, and I winced as the cords fetched up under her small breasts, but she shoved past without complaint. She glanced up as I slid my feet down to brace against the wall of the stack. “It’s the hips that are the problem,” she said, and indeed I could see that her hips were wedged in the narrow tube. But the fat over them was forgiving, and she squeezed them past. I looked up in my turn, and wondered how Carsa, with her older, more womanly figure would fare.

She saw me looking, and just shrugged. “Art,” was all she said, which I took to mean that whatever price she paid for her poetry was worth it.

As she passed through the valve, Carsa let it slap closed behind her, and the cool wind from below stopped. Without even the dim light that had come through the danglepod’s transparent vesicles, the stack was an even more mysterious place, with dark shadows thrown by headlights making monsters out of the complex profusion of ribs and struts and tubules that surrounded us.

“This is why no one’s gone further,” Marcu said below me. “It’s dense, and gets denser.”

“It’s the pressure,” said Varna, and even Marcu listened. “The stack is under increasing pressure so it gets narrower and needs more internal bracing. It’s bound to the trench on one side, but exposed on the other. We’re not actually sure why it’s here at all, but analysis of the xylem flows suggests that the trench is the source of rare

metals and minerals the benthodils thrive on. No one knows why they're there."

We absorbed that as we acclimated to the tight space.

"The geologists say there's no good reason there should be any greater concentration of metals in the trench than up on the seashelf," said Carsa above me.

I hadn't exactly forgotten about her; I was acutely aware of the way her calf pressed against my arm. But I hadn't expected her to contribute. It felt like I was the only one who didn't have something useful to say. I opened my mouth, but nothing came to mind, and I let it shut again.

"Don't worry," came a whisper and a squeeze on the shoulder. "You'll have your chance." I hoped I would, but it made me feel better.

The next hours were a clammy, awkward series of squeezes, drops, and climbs. I dreaded the return even more than the continued descent, but Marcu assured us that going up would be easier and hardly more tiring. When we stopped to rest, our sweat cooled quickly, and I realized that the temperature of the water in the trench outside must be much cooler than up on the broad, relatively shallow seashelf.

Thinking of all that water was a mistake, but no matter how I tried to ignore it, it was too late.

"Um, Marcu?"

"Yes?" came the muffled voice from below me.

"I, um.... You remember we talked about how... um..." I could feel myself blushing and thanked fate for the harsh lighting.

"Yes?" He seemed distracted, and I wondered how to broach the topic without actually saying the words.

"I..."

“She needs to urinate or defecate,” said Varna helpfully, and I tried to pretend no one had heard her. Above me, I could hear Carsa giggling. We’d talked about it, of course, planned for it. We’d know the stack would be tight, and that the trip would be long. We had a plan. It just wasn’t a good one.

“Ah. Right.” He’d seemed confident when he broached the topic, antiseptically, in the clean space of the main dome. Now, he seemed as embarrassed as I was. “Hang on. If you can, I mean.” I closed my eyes. Bad to worse. “I think there’s some sort of side chamber here, with a floor. You can use that.” The floor was key, so that we wouldn’t have to climb with pee dripping down all over us. My pee.

It was just as awful as I’d thought it would be. They all waited, below and above me, while I crammed myself into what Varna had deemed a ‘burgeoning vesicle’, maybe a danglepod in the forming. I peeled my pants and underwear down my legs, and squatted. I could hear the breathing around me, and knew this would never work. I’d have to give it up, and then climb for another hour in torment, until it was really unbearable, and then suffer the humiliation of asking for *another* stop, and then—

And then the irrepressible Varna launched into a loud lecture about how danglepods might form, and why there would be a benefit to the downstack from multiple air pressure locks, but how the pods might in fact be safety locks in case of water intrusion. And Carsa interrupted to say there was a song about how something similar had happened on the arkship, and sang it right off, and Varna kept talking, and at last, with blessed release, I could pee. It didn’t disperse into waiting cilia like it did in the normal waste cells, but I managed to dress again without

getting much on me, and we all kept going. When we stopped half an hour later for Carsa to do the same (and more, from the smell), I interrupted my whistling to lean down toward Varna and whisper “I owe you one.” She kept talking about how the valves in the xylem weren’t the same as those in the danglepods, but she winked at me, and I went back to my whistling, content that beneath all that obsessive science, there was an actual person, and a nice one at that.



The stack kept getting tighter as we went, with more bracing and less spacing, as Carsa put it, mocking her own status as ‘official bard’. She had the most trouble. The rest of us had been chosen in part for our small size. Carsa wasn’t big, but she was bigger than we were. It was surprisingly dry. I had somehow expected that this far down water would seep in. Varna pointed out that if water were seeping in, it would likely be through a hole in the stack and we’d all be dead. She went on about it at some length, punctuated by grunts as we worked our way down. I tried to hold on to that warm feeling I’d had earlier.

It was cold, though. Unaccustomed exercise kept us warm, for the most part, but when we stopped to rest, the sweat would begin to dry, and I began to get chilly. Eventually, Marcu told us we could break out the thin jackets we’d brought along for the purpose. None of them fit very well, and they reeked of must and disuse.

“Shipwear,” Marcu said. “Not much call for them in the domes, and they’re useless outside.” In the water, he meant, but it was warm enough on the surface that they weren’t needed there either. My jacket still had a stick-

on label that read “Rodriguez”, and I wondered who she’d been.

“Comp tech,” said Carsa.

“What?” Had I wondered aloud?

“Nala Rodriguez. Comp-tech third class. Died in the food riots, Year 5 After Landing.” She saw my look of astonishment and shrugged. “Bards have to know this stuff.”

I felt a little dejected as we renewed our climb down. Marcu was a confident scout, evidently skilled despite his age. Varna knew all there was to know about benthodil biology. And now even Carsa, dilettante extraordinaire, had not only talent, but a store of knowledge to go with it. Whereas I hadn’t found anything I could apply my mechanical skills to.

I looked again at the space we were climbing through. The internal struts and supports consisted mainly of thick, slightly spongy webs of dull white fiber. They’d be easy to cut through, except that Varna had opined that they were essential to the downstack structure. Every now and then, there were valves of the same fiber, but sheathed in a hard, stiff material that Varna called ‘woody’. We worked our way down by wriggling around curves and angles, sometimes dropping straight down, but mostly worming our way down in shapes a contortionist would envy.

There was no way we were getting machines down here. Nothing of a practical size, anyway. And even if we could, I didn’t have the faintest idea what we’d need. A pump? A fan? Some sort of bracing or a water lock? Even the parts wouldn’t fit where we’d gone. Although, if we cut up the pieces cleverly enough, and then reassembled...

I was well into design of a pretty clever segmented rotor blade when Varna grabbed my foot from below.

“Hey!” she said. “That’s a head full of facts you’re stepping on.”

“Sorry,” I mumbled. Past Varna, I could see Marcu, mostly obscured by webs of white fiber. He was poised above what I thought might be another danglepod. About time, too. We’d been climbing all day, and my arms and legs ached from constant motion.

“What’s up below?” Carsa called from above me. I looked up at her, and she winked. She was fonder of wordplay than I’d realized, though perhaps that was to be expected in a poet.

“I’m not sure,” said Marcu after a pause. “Might be a leak.”

The walls of the narrow downstack seemed to press in on me. What had been a comforting support suddenly felt constricting, tight, and I tried not to calculate what the pressure outside must be.

“Not possible,” said Varna confidently. “A leak at this pressure would collapse the tube all the way to the next set of valves, or even the next danglepod up.”

“Well, it’s wet down here,” said Marcu. “It’s coming from somewhere.”

“Let me see!” Varna’s excitement was tangible, and she writhed from side to side trying to find a way down past Marcu.

“Half an hour,” I blurted.

“What?” asked Carsa as bodies rearranged themselves below me.

“Half an hour since we passed the last valve,” I said reluctantly. “Just FYI.” I tried to sound casual. It would

probably take us twice that to climb back up. My arms complained preemptively.

There was room below me, though, and I slithered my way down to the danglepod. There was a sheen of water along the base of the vesicles, almost a small pool at the lowest points. I felt a chill that had nothing to do with temperature.

“Condensation,” said Varna as Carsa slipped down beside me. “Probably just condensation, due to the cold. I’ve noticed that the outer wall of the stack occasionally has a slight dew on it. Most of it is probably reabsorbed, but some must make its way down here and collect. Because of the woody surface of the valve covers, the uptake efficiency is low. Above, there must be enough evaporation to take care of it. At these depths, the low temperature limits the absorption capacity of the air, so it collects in these pools. Nothing to worry about.”

“Maybe,” said Marcu, but it was clear he was sceptical. I was on his side. “We’ll stop here for the night, in any case.”

The prospect seemed less appealing as I considered the possibility of death by compression just past what now seemed like flimsy valve plates. My muscles looked forward to it, though.

“We’ll sweep the water out of this vesicle,” he pointed at one toward the outer, sea-ward side of the pod, “and see whether it collects again by morning. We’ll sleep in the others.” There were five good-sized vesicles, counting the one he’d selected, and half a dozen smaller ones.

There was enough room in the vesicles to lie down away from the water, if you were small and curled up

right. I chose one of the wall-ward vesicles and arranged myself with my feet toward the wall.

Carsa, with her greater height, took some time arranging herself, and ended up with her head and shoulders out in the central stack, almost peering into mine.

“Sorry,” she said. “Best I can do if I don’t want to sleep with wet legs. And I don’t.”

We lay there for a while, quietly. In the vesicle two to my right, I could hear Marcu’s easy breathing. He was probably already asleep. Across the way, Varna was twitching and mumbling in her sleep. “But Sa-ara-a,” it might have been. It was comforting that even a child genius sounded like just a child when she whined.

“So what’s your story?” Carsa’s whisper interrupted my musing.

“What?” I was apparently doomed to respond to her every comment with monosyllabic surprise.

“Who are you? What do you do for fun? Who are your carers? Where do you hang out? All I know is that you’re a techie. As official bard, I need to know more.”

I heard the sneer in her voice as she said ‘techie’. *I* heard a sneer, anyway, whether she intended it or not. All day I’d been flattering myself that she liked me, that she’d noticed me before, just as I’d noticed her. And now she was classing me as just another tech nerd. Not special, not worthy of notice, let alone regard.

“I’m tired,” I said and realized I was, that disappointment had drained me of energy, and I really did prefer to sleep than talk to Carsa. Just this morning, I’d have called that impossible.

“Okay,” she said.



I was just falling asleep when she said “I’m sorry. I didn’t mean it like that.” I was too drowsy to respond, but I wrapped a feeling of self-righteous satisfaction around me, and slipped over the border into sleep.



I knew it was morning from the noise Marcu made rousing us and from the painful cramp in my legs. The good news was that I hadn’t rolled into the water in the night. Apparently Varna hadn’t been so lucky.

“Good thing I took a sample last night,” she said, patting a pocket of her vest. “Before any contamination from my pants.” Bless her heart; she was more worried about science than discomfort.

“It’s dark,” was my contribution. Carsa was already surging up the stack to find some private spot to pee.

“We must be near the aphotic zone,” said Varna. “Possibly near the bottom of the dysphotic.”

“The what?” Condemned forever to be the expedition’s straight guy. Maybe that was why I was along.

“It’s dark,” said Marcu. “That’s what she means. Aphotic means no light penetrates. Dysphotic means not much light, though it varies. The domes are in the euphotic zone, so we get pretty good sunlight. Over the edge of the shelf, and you’re in the dysphotic. We don’t go far into that; pressure’s too high.”

“Thanks for reminding me.” I looked out. The seaward walls of the vesicle were clear, almost like the new plastic they were making from kelp. “It’s like a window.”

“No contaminants,” said Varna. “No sediment. The water’s clearer and cleaner down here, where it’s not

swirled around so much by wind. And maybe the pressure has something to do with it. Stiffer structure, maybe.” She made a motion as if to poke the outer wall, but Marcu stopped her.

“Let’s just take it slow, shall we? I’m still worried about seepage.” In the vesicle we’d tried to mop out, a centimeter or so of water had gathered overnight. “I know,” he said, placating Varna. “Impossible. Still. We’ll all take care of our necessities, then turn the lights out for a while. Let our eyes adjust.” He winced. “Should have done that first. I want to get a look down the outside of the stack, if we can.”

It took a while for all of us to get our business done. I was the last, and I had to climb a fair ways up to find a clean vesicle to use. All the others had their lights out when I got back, and they covered their eyes until I turned mine off.

“See anything?” I asked.

“No,” said Marcu. He and the others were crouched at the outer edges of the seaward vesicles doing their best to look down.

“There was a very nice specimen of *melucigaferus spinex*,” said Varna. “It’s an anglerfish, though really it’s more of a cephalopod with jointed legs. It’s got a light that it dangles from below its body to attract prey. Then it pulls the light back in and grabs them.”

“It’s like midnight on the surface,” said Carsa, “with constellations dancing across the sky.”

I tried to think of something tech-oriented to say, just to fit my role, but nothing came to me.

All the good spots were taken, so there was no point trying to help the rest look down. I slid into a small vesicle to the left and squatted there, feet on either side

of the little pool. The vesicle was apparently just forming, and it afforded only a look down at about a 30° angle from the horizontal, but the outer wall was exceptionally clear.

“Hey, Varna, I see your mucilagorous!” It was a faint but steady light in the darkness off to the left, faintly greenish in color, though that could have been the water. It cut off suddenly, and I wondered whether it had caught something. What an unpleasant surprise that would be—to go investigating a yummy looking light, and then find yourself in a cage of arms and mouth. I shuddered.

The light came back. As pessimists will, I suddenly saw the other side. How disappointing, to be sure of a nice meal and have it slip through your hands. On the whole, though, I decided, I was on the side of the prey. Eating another creature. Metalicigus could just eat kelp like the rest of us.

The light went off again. Either this prey fish was particularly stupid, or there was a school of them down there taking turns being foolish.

The light came on again. This was one unlucky angler, and a persistent one at that. An unpleasant thought came to me. “Hey Varna! How much does the mustaglivizer eat?”

“Can’t see enough,” said Marcu. “After a half hour, our eyes should be fully adjusted. There’s just not enough light down here.” He checked his watch, a rare piece of oldtech that I ached to get hold of. “And it’s late morning. It won’t get better.”

There was a sudden glow, and my distance vision disappeared, replaced by a dim-lit view of nothing in particular. There were a couple of quick swishes as

smaller fish disappeared from the sudden cone of light shining from Marcu's vesicle.

"Lights on, everyone," he called. "Shine them down the stalk as best you can."

My light was useless in here. I crawled out of my vesicle, feeling the ache as my calves uncramped after squatting for so long. I went into the larger vesicle next door, and leaned above Marcu to shine my light down as best I could. From the vesicle next door, I could see the glow of Carsa and Varna's lights.

"See anything?" I asked. He was silent for a long time. "Anything?" I prompted.

"I'm not sure," he said slowly, voice grave.

"It looks to me like the downstack has withered," said Varna. "From a point about ten meters down, though the initial point of atrophy may be considerably further down."

"Maybe it's still growing," suggested Carsa. "Maybe you've got it backward." She didn't sound like she believed it herself.

"We've seen sidestalks growing," Varna replied. "The benthodils use them as stabilizers and attachments, growing radially outward from the domes. They look quite different from this. Also, we've seen sidestalks damaged by careless use of machinery, in the early days. Reports suggested that they withered in a similar fashion, losing their smooth outer surface as internal pressure is relaxed. They become rugose and ridged as the surface collapses, and they begin to suffer structural weaknesses and flaws. Since the advent of humans, we've also seen a shrinkage of a different type of side root that we think seeks out nutrients. It's theorized that the human presence

supplies the missing nutrients in our waste. That shrinkage looks similar to what we seem to see here.”

“Enough,” said Marcu. There was a tone in his voice I hadn’t heard before, something that felt almost angry. Or, I realized, afraid. “Are you sure?”

“No,” she said calmly, as if she hadn’t just described the sum of our fears. “There is insufficient light. The pattern of shadows suggests withering, but perhaps the stalk is simply tapering normally. If this is the last danglepod in the chain, perhaps there’s a difference in development that we haven’t predicted.”

“More light,” said Marcu. “We need more light.” He checked the watch again, a compact device with a dim face and a black strap that held it on his wrist. “It’s almost noon. We’ll wait another half hour to get as much sunlight as we can.” He lowered his voice and muttered, “I doubt it will be enough.”

I was frightened now for sure. For all we knew, the valves below the danglepod were about to cave in, and all that water was about to squeeze us up the tangle of the downstalk, to emerge in the down as flesh puree. But how much worse was it to be unsure? Probably, we and the entire dome were close to death. But maybe, just maybe, we were all fine, and life would go as always.

“Plan for the worst,” I mumbled. If the valves were going to give in, we’d have to brace them. What could we bring down that would help? For that matter, what did I have in my pack that we could use as an emergency measure, before we even reported back? Calipers, measuring tape, some expansion struts, extra bulbs, ohmmeter, batteries...

“I can make light!” I almost yelled it in Marcu’s ear. I would have danced with excitement but for my fear of disturbing the valves.

“What?” Finally, it was someone else’s turn to be incoherent.

“I can make it brighter. Temporarily. If I hook all the lights together and tie in the recorder, I can make the light much brighter. For a moment. It will burn out the bulb and deplete all the batteries we’ve got, but it will be...” I calculated quickly, “about five times as bright. We should see...” another calculation. “Maybe twice as far.”

“Do it.”

There was no uncertainty in his voice. Nor had there been in mine, while I was thinking. But had I calculated correctly? Maybe there was a decimal out of place? Was it twice as far, or 1.2 times?

“Don’t worry,” Marcu said, laying a hand on my arm is if my doubts were spelled out clearly on my face. “I trust you.”

I worked as quickly as I could. I wanted to make the most of whatever sunlight we had. While I picked through my pack, Marcu organized the others to mop out our ‘dry’ vesicle again, to give me as good a place as we had to work in.

The result looked ugly at best, an ungainly contraption of wires and bulbs and connections and an awkward master ‘switch’ that was just two wires capped with plastic. I wired in the last headlight by touch, my hands moving more surely than I’d expected, once the others couldn’t see me. Not one of them had voiced a doubt or suggested it might not be wise to risk all our lights in one shot. I’d set aside a pair of bulbs for the return climb, but it was possible the wiring of the headlights would be fried

by my ugly creation, and we'd have to make our way back by feel.

"Okay," I said at last, stretching my back without letting go my wires. "It's done. If you're still sure."

"I'm sure," said Marcu.

"Tech genius to the rescue," said Carsa. "Saves dome single-handed."

It felt good, even from her. I didn't point out that even if it worked, we weren't saved at all. We might just be getting a closer look at death.

"Okay, folks. To your places," said Marcu.

While I worked, they'd planned out how to best use the light—where they would sit, where each would look, who would close their eyes to guard against any flash, who would keep their eyes open. My task was simple; touch two wires together, and be right.

I stood over Marcu, his head pressed as close to the clear vesicle wall as he could get it. Down to my left, I could see the light of that patient, elusive anglerfish, just winking out.

"Ready?"

"Ready." "Ready," came two voices from the next vesicle.

"Ready," said Marcu below me. "Do it."

I did it. There was a bright light, lasting for about a second, and then a pop and the light went out. In the darkness it left behind, I could feel the blood still draining from my face.

"Tell me..." I whispered. "Tell me you saw that." I let my shaking legs lower me to the floor, put down my bastard flashlight, heedless of the wires.

"I did," said Marcu. He sounded worried. "It does look like withering. Pretty clear. You did a good job with that

light, Nusha. Now we know for sure the downstalk's in trouble." A practical problem, he seemed to say. Solvable.

"Fuck the light," I said viciously. "Fuck the stalk, for that matter. Did you see that?" I could hear the others moving out of their vesicle. "Any of you? Tell me you saw it. *Tell me!*"

"Saw what?" asked Marcu. I could almost see his worried expression, superimposed on the complex purple flashes indelibly marked on my eyes in the darkness.

"Saw that!" I said, pointing out and down, to where a light was probably even now slowly winking on and off, a light that was definitely not an anglerfish. "Saw a huge fucking starship!" A thing of spires and circles and beautiful, impractical curves that no human hand had ever touched.



"I saw it," said Varna stoutly. "Sort of." She looked at me shamefaced, and I shriveled in my chair. She was doing her best, but it wasn't good enough. The Council was interested in critical, existential matters, not the inventions of teenage girls.

"I was looking down," Marcu had told them, and gone on to describe the withering of the downstalk in careful, clinical detail.

"Me too," Carsa had said, and done the same with bigger, fancier words. "But it could have been," she'd added. "I was looking more to the right."

They all had been. Only Varna, who'd had her eyes covered at first, had caught a glimpse of what might have been a starship, or might have been an unusual coral formation. "Though corals don't usually form at such



depth, we know relatively little about the biology of this world. It might have been a coral-like formation. I was focused on the downstalk.” And she’d told them scientifically how we were all going to die. “But it could have been a starship too.”

Nobody believed me. And why should they? The most useless member of the expedition, the most tech-oriented, a certified nerd and loner. Backed up by the maybe of the youngest member. Even Dinu wasn’t sure of me.

“It’s the pressure,” he had said. “Nitrogen dissolved in the blood, low oxygen, poor ventilation down in the stack. It happens to explorers too, when they go too deep for too long. Sometimes they see things, hear things. Happened to me, once.”

“You think I was hallucinating.” Et tu, Dinu. “Or just making things up?” I couldn’t keep the bitter tinge from my voice. “Seeing what I wanted to see? Because when I risked my life going down the stack for you all, what I was really thinking was, ‘Hey, what if there’s an alien spaceship down here?’”

He’d tried to backtrack, but I hadn’t bought it. And now here we were in front of the Council, and out of respect for Dinu, they’d listened to my story again. I’d seen from the start that they didn’t believe it.

Finally, they brought the session to a close. I was glad of it. I’d had all the humiliation I could take for the day.

“It doesn’t matter,” said Councilor Lewis. “Let’s say there is a giant alien starship down there, as Ms. Aratyan suggests. It’s exciting. It’s *fascinating*, even. But it doesn’t help. We can’t get to it. It can’t help us. We need to focus on the dome, on why the downstalk is withering, and how, and what it means. After the loss of Holiday, we could be next. Once the withering reaches the

dangledpod you all found, those valves could fail, and the next, and the next, and that's the end. That's the problem we need to deal with. Not... whatever else might be down there." Nothing at all, he meant. I could see it in his eyes, no matter how he tried to cushion the blow.

The worst of it all was they were right. What good was a starship? Even one that still worked? Even an alien starship with a winking light wouldn't save us if it was at a greater depth than we could master—the very depth that seemed to be systematically crushing our downstalk and our lives along with it.

If only they had believed me, I could have turned away, given more to my report on engineering than bare facts and dry figures. Instead, I turned inward and left the hard work of salvation to others.



"I found a reason for you to be right," said Varna. She'd come pestering me almost every day since we'd come back. I was meant to think she had latched onto me as a big sister, but I was certain Carsa and Marcu were behind it. I wanted to sneer at the idea that they cared, but it was too much trouble.

We were sitting on the catwalk to the upstack, high above the dome. It was a long way down. *I'll be among the first out the stack when downstack ruptures.* It was too much trouble to care.

"See, most of the benthodils we know of are in shallow water, along the continental shelf. They call it that, even though it's underwater."

"You're an endless spring of useless information."

"I know. But just along here, where we settled, the benthodils also send downstalks crawling down the edge of the trench. *They don't do that elsewhere!*"

"Whoopee. Lucky us. Chose just the wrong place to live." And it was true the Council had sent out explorers to check other domes, to search out others without the same flaws.

"Yes, but don't you see? Why are these different? The others send out a fan of sidestalks. Only here, only these benthodils have very sparse fans and long downstalks. Why?"

"You tell me." I knew it was rude, but if there were ever a girl who wouldn't notice, it was Varna.

"Because they use those fans to sift nutrients out of the sea," she said, excited. "Rare elements. And ours don't do that! Why?" She could barely contain her excitement, almost bouncing on the catwalk, and I wondered whether it would be better to hold her in or push her off. "Because they're getting those elements elsewhere!"

"Genius," I said coldly. "Pure genius."

"It is," she insisted. "Because where do you think they might get those rare elements?"

"I don't know." I didn't care. As long as they weren't... Light finally dawned. "Wait. Are you saying..."

"Yes! From your spaceship!" She did get up now, to dance around the catwalk. "Don't you see?" She came back to sit right next to me and grab my arm. "This explains it all. Why downstalks look like regular stalks. They are. They're just repurposed. I'm not sure why they're not more like sidestalks, but I'll figure it out. See, the benthodils are taking advantage of the ship, and the

water leaching elements out of it. But then humans came, see, and our waste provides all the elements they need. So the downstalks aren't needed anymore, and they're withering away. It all fits!"

It did. There was a moment of beauty where a sense of peace and satisfaction settled over me. I was right! I'd always been right, even when I began to doubt myself. I was right, and they were wrong. There was a ship down there! And...

"And we're all still going to die," I said.

"That's right," Varna agreed placidly. "But it's all explained." She seemed quite happy about it. And suddenly I was too. Because if it could be explained, it could be solved. And I could solve it.

"Varna," I said, grabbing her by the head and kissing it soundly. "You are the genius to end all geniuses. I love you!" I hugged her close. "But now I have to go to work." There was so much to do—planning, designing, building. "Come on!"

"Do you?" she asked as we got up.

"Do I what?" Bulkheads and struts and pressure locks and waste treatment systems filled my mind. What to do first? How could I help?

"You know. Feel..."

I looked down at her, saw for perhaps the first time what she really was—a brilliant, lonely girl, isolated by her genius. She talked because she could, and because she didn't know what else to do. And she was far more alone than I'd ever been.

"Varna," I said, gathering her close. "You talk more than anyone I've ever met, and I only understand a quarter of it. But I love you, little one, like a sister." I pushed her back so that I could look into her glistening

eyes. “You and me, Varna. We’re friends. Best friends.” I kissed her on the head.

“And when I someday build that submersible and go find my spaceship, you’re coming with me. You and a pair of earplugs.” I hugged her again, and then we went off to the workshops to grab the universe by the ears and re-center it right around us.

# Unformed

Veda Villiers



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I was a man.  
A man in his mid-thirties,  
hair dark,  
hands rough from years of toil,  
the sharp edge  
of a wedding ring.

Yesterday I was a woman—  
short hair,  
arms too thin,  
lips too full.  
I was someone's lover  
until the morning's dawn.

This morning,  
I was a grandmother  
with silver hair,  
wrinkled hands that trembled  
when I picked up the mug.  
And now—

I am someone who might have been you.  
I can feel the shape of me,  
as if I am wearing you,  
like an old coat, too tight.  
But the seams,  
they pull apart,  
stitch by stitch.

What is my name?  
What am I supposed to be?  
A body without identity,  
no photograph to keep,  
no past to hold.  
The doctors said  
it's genetic,  
something in my cells—  
but what does that mean?

They want to study me,  
break me down to data,  
quantify this sickness  
that moves through me like fire.

I am a disease  
that cannot be cured.

    Last week,  
I was a child,  
barefoot on the grass,  
too small  
to know that  
people would stare.

    Now I am a man again.  
This time,  
without the strength I had before,  
skin soft as a baby's,  
a voice too high.  
And a stranger's name on my tongue.

    I don't belong to myself.  
Each day  
I try to hold the shape I am given—  
a brief moment of clarity,  
a glimpse of something familiar,  
something I can say is mine.

    But I wake up,  
and my face is not my face anymore.  
And I wear someone else's history,  
their hurts,  
their loves,  
their failures.  
I wonder—  
if I stand still,  
will the world change around me?  
Will I finally,  
finally,  
become the person I was meant to be?



I am  
    slipping  
        between forms,  
            slipping away  
            from what you think I am.  
    But it doesn't matter.  
It never did.  
I am no one.  
And yet,  
I am everyone.  
At the end.

# Raised

Deborah Harford



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I wish you had known to stop and take a breath  
turn towards yourself  
enter the aching inner hall  
and sit

I wish you could have seen with eyes  
cleared of the visions of others

I wish that you had been raised in a cave  
in a forest  
with only animals for company

because then  
you would have felt  
your own beauty  
    been comforted by the fire of the sun  
in your veins  
    then you might have understood that your sadness  
could not be helped  
by the crowds around you  
    worse...  
that as long as you struggled among them  
on your knees  
    they would assume  
    that was your place

# Guidelines for submissions

*The Future Fire* welcomes submissions of speculative fiction and poetry with progressive, inclusive and socially aware disposition. We are particularly interested in feminist, queer, postcolonial and ecological themes, and writing by under-represented voices.



- Fiction (up to 1000 words): pay \$10 per story
- Fiction (up to 17500 words): pay \$20 per story
- Poetry: pay \$10 per poem
- Art: pay \$10 per story illustrated (+\$10 for the image we use as cover art).



Submissions by email. Responses within 6 weeks. No multiple or simultaneous submissions, please.



All guidelines at <http://futurefire.net/guidelines/>