

A young girl with short brown hair and blue eyes is the central focus. She is holding a glowing yellow orb in her hands, which is emitting a bright light. The background is a dark, post-apocalyptic cityscape with tall, skeletal buildings and a cloudy sky. The overall tone is dramatic and hopeful.

INCLUDING STORIES BY:
ALASTAIR REYNOLDS // KAY KENYON
JASON STODDARD // HOLLY PHILLIPS

*"The energy
and enterprise
of Jetse de Vries
deserves a lot of
attention."*

Ian Whates,
Matrix Online

AN ANTHOLOGY OF NEAR-FUTURE OPTIMISTIC SCIENCE-FICTION

SHINE

EDITED BY JETSE DE VRIES

A woman with long brown hair and blue eyes is the central focus. Her hands are held out, palms facing forward, and they are glowing with a bright yellow light. The background is a dark, industrial cityscape with tall buildings and smokestacks emitting white smoke. The overall tone is dramatic and futuristic.

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An Anthology of Near-future, Optimistic Science Fiction

Edited by Jetse de Vries

Including stories by

Jason Andrew

Madeline Ashby

Jacques Barcia

Eva Maria Chapman

Ken Edgett

Silvia Moreno-Garcia

Eric Gregory

Kay Kenyon

Mari Ness

Holly Phillips

Gareth L. Powell & Aliette de Bodard

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First published 2010 by Solaris an imprint of Rebellion Publishing Ltd,
Riverside House, Osney Mead,
Oxford, OX1 0ES, UK

www.solarisbooks.com

EPUB ISBN: 978-1-84997-166-9

MOBI ISBN: 978-1-84997-167-6

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Designed & typeset by Rebellion Publishing
eBook production by Oxford-eBooks

REBELLION

Introduction

Jetse de Vries

There's a thing like weed: it grows everywhere, despite the common wisdom that it *can't* grow there. In the most barren, destitute and desperate places, it springs up. It flowers, against the grain. It raises its head at the most unexpected of times, even when--often *especially* when--most people think it's dead and gone.

It's hope. Hope fed by optimism.

Now, optimism and an upbeat attitude have been given short thrift in written SF over the last few decades, and especially the last one. Yes, there are novels and short stories with a positive outlook, but these are far and few in between. As an exercise, list five downbeat novels per year from 2000 to 2009. Then make a similar list for five upbeat novels per year (upbeat defined as a story where the future is a *better* place than today, not a story where over 90% of humanity is killed and where the survivors eventually make do): I know which list will be the hardest to make (or even *complete*).

Tor editor Patrick Nielsen Hayden has been trying to get an anthology of upbeat SF called *Up!* going since 2002, but it has never got off the ground. Word at the *Anticipation* WorldCon had it that he simply didn't get enough stories (I can empathise: I had to extend the *Shine* deadline). It's become so bad that Gardner Dozois remarked, in the July 2009 *Locus*:

...although I like a well-crafted dystopian story as well as anyone else, the balance has swung *too* far in that direction, and nihilism, gloom, and black despair about the future have become so standard in the genre that it's almost become stylized, and almost the default setting, with few writers bothering to try to imagine viable human futures that somebody might actually want to *live* in.

Yet, in the real world, 'study indicates people by nature are universally optimistic.'¹ This concurs with what I see in my day job: I train people who come literally from around the world in my company's equipment, and the vast majority of them are very optimistic. So in this matter, written SF is greatly out of step with the real world. Which raises some doubt when SF claims that it is 'a mirror of today's world.'

Now I am not against dystopias, apocalyptic and downbeat SF per se: I have certainly enjoyed many such novels and short stories. However, right now, the balance is gone: in I estimate at least 90% of written SF today is downbeat. *Shine* is an attempt to redress that balance somewhat.

Shine is also my attempt to show the world that SF can do more than merely say: if this (horrible trend) goes on, we all go down the drain. Yes, it's good to show people the consequences of their behaviour. However, written SF almost exclusively shows the consequences of *bad* behaviour, and almost never the consequences of *good* behaviour. Dire warnings and doomsayings, being told over and over again *ad nauseam*, lose their effectiveness. With *Shine* I hope to show the other side of the coin: SF that actively thinks about *solutions* to the problems plaguing humanity today. To show readers that written SF does something more than either provide escapism (which can be nice, once in a while) or wield the whip: that written SF can actively think in a constructive manner.

So, an anthology of near-future, optimistic SF. An anthology where the future is a better place than today (even if that progress is hard fought, as you will see in most of the stories). This was not an easy task, as Jason Stoddard had it: 'There's nothing like taking on two kinds of impossible.'

Impossible part 1 is getting SF authors to write an optimistic story. Impossible part 2 is getting them to write about the *near future*, which is immensely hard to do right, as well. Hence I've been constantly shelling out examples on the *Shine* blog (real world and imagined), posted--or tried to post

-controversial articles and even a guest-blog series of 'Optimism in Literature around the World, and SF in particular' just to inspire, provoke or even shame writers into writing such stories for this anthology. Which they eventually did.

Then I needed to clarify which kind of stories I was *not* looking for, and even had to extend the *Shine* deadline in the hope of finally getting enough of the type of stories I *was* looking for (as I mentioned above, I can surely empathise with Patrick Nielsen Hayden's problems with *Up!*).

And if that wasn't enough already, I got it into my head that *Shine* should also be a representation of the world at large: in settings, characters and hopefully also authors.

Why make my editorial life even harder? We might as well get Freudian on my arse. For most of my adult life, I have travelled the world extensively. I've been to a wide variety of places, experienced a great diversity of cultures and seen awe-inspiring places. What it comes down to is that *Shine* may very well represent my belief that this world is a place that is both beautiful and scary, inspiring and frightening, full of wonder and full of danger; and that *we can make it work*. Correct that: it is already working in many places, but we can make it work *better*. We can do better, we can make it a better place to live in, even given the huge problems we're facing.

That is what *Shine* is about. So fasten your mental seatbelts as *Shine* takes you on a trip across the world and beyond. Stops on the way to a better future include:

- A West Africa where boys' toys become girls' gadgets...
- A world so over-focussed on recycling that it fails to see that innovation often means embracing the-new, exploring-the-unknown, even--or especially--when it's shining just above them...
- A Paris where an expat programmer has to grease a semi-scientific cult's virtual prayer wheels just to get by until she's confronted by activists whose agenda is more widespread than she could ever surmise...
- A pacific island nation that transforms from being the *Lazarus* of the world into becoming its *Maecenas*...
- A Tanzania where a prodigal son returns, in a way, with plans for the future. However, it's the vision of his past that *truly* paves the way...
- A Recife where a retired eco-fighter must advise the teenager board of a huge wikindustry about a new company that's about as dodgy as it is hot, and he needs to get that advice out *fast*, and risk wrecking *the* (and his personal) future if he gets it wrong...
- A look behind the scenes of tomorrow's music industry, where bigger often indeed *is* better...
- An Iran where a spirit of stories past merges with the technologies of today to create an Islamic society of the future...
- A China where the ground swell of change almost literally comes from the ground, and goes all the way from the ground up...
- A place in the heart of the Caucasus where spoiled American nerds clash with seemingly naive Russian naturalists, until they find they have a common enemy...
- Adrift on the North Pacific gyre on an artificial island meant to combat pollution while the world around it seems to care less and less, until things seem to get a mind of their own...
- A trip to the asteroid belt to mine a rare metal finds something else, as well, with highly unintended consequences...
- A visit to the corridors of political/ecological power in The Hague--which are not exactly in parliament--by a group of activists who are not only out of their depths and out of their league, but out of their minds, as well...
- A Mexico where the seeds of change spread faster and quite different from what their GM masters intended...

- An artist taking a tentative step forward by moving to an unnamed West Coast town where the ~~memory of winter is melting from the collective mind like an ice sculpture in summer...~~
- An Afghanistan where the next generation of surveillance is tested, and where the unlikely friendship between two very different men uses the tools of intrusion for something completely different...

It's been a hell of a ride getting this anthology together, yet I wouldn't have it any other way. Another great help was Twitter: through my @outshine Twitterzine I discovered several new and exciting writers. In that spirit, there will be both intro and/or outro tweets before and/or after every story that will provide new angles or fresh insights. So join me in this kaleidoscope of visions where problems huge and small are tackled, immense difficulties are overcome, and where our futures become somewhat more bright!

¹Kansas University and Gallup world poll (<http://www.news.ku.edu/2009/may/26/optimism.shtml>)

The Earth of Yunhe

Eric Gregory

While Kay Kenyon--see "Castoff World"--was the very first to send me a story for Shine, Eric Gregory was one of the first to send me a tweet for @outshine.

The moment I signed the contract for Shine with Solaris Books, I immediately tried to figure out ways to promote it ('regeren is vooruitzien' is the Dutch saying, or 'to govern is to look ahead'). One of the things I did for that is set up a Facebook fan site and a Twitter site for the Shine anthology.

Then I got the crazy idea--inspired by @thaumatrope, who were the very first genre Twitterzine AFAIK--to start @outshine, a Twitterzine for near-future, optimistic tweets (or 'prose poems,' as I call them).

Eric Gregory's tweet was about Ecclesia, an imaginary near-future society, which I liked enough to publish. Then, months later, he sends me a story based on the tweet (or maybe it was vice-versa: I'm not sure), and "The Earth of Yunhe" eventually--it starts deceptively slow--blew me away.

He's not the only person that I published on @outshine first and here in Shine later on (Jacques Barcia, Eva Maria Chapman, Gareth L. Powell, Ken Edgett, Paula R. Stiles, Mari Ness [who basically didn't stop tweeting] and Jason Stoddard--although I accepted Jason's tweet after I accepted "Overhead"--are the others), and he's not even the first who turned his tweet into a story (or vice-versa, although I had to turn down that person's story for Shine purely for lack of space: I had a lot of hard choices to make), but he is the single person whose tweet on @outshine preceded and was based on his story here in the Shine anthology.

Typically, though, his tweet functions much better as an epilogue rather than as a prologue, so I'm putting it up after the story.

Now prepare for a look at a China as the garden of the world...

**Silent, drafted blind worms burrow /
Decomposing, circles closing /
Garbage eating, circles meeting /
Biocrafted Ouroboros.**

--Rajan Khanna--

I raised my my arms for inspection, but Old Zhu laughed and waved me past. He was a flushed, avuncular man who had spent his entire life with a book of dirty jokes in his pocket; as far as anyone knew, he'd never once touched a woman, and he didn't upset the tradition for me.

Little Yunhe rarely had need for a jailer, so Zhu was perfect for the job. He sat in his rusted fold-out chair on the deck of the *Patient Whale* and shouted friendly curses to the fishermen who docked nearby. He was thrilled to have a prisoner now--it gave him an excuse to load his pistol--but he treated the entire affair as an excellent joke.

"Boy's crazy," the old man called behind me. "You watch him."

"Oh, I'll watch him, Zhu."

"I tell you. One of these days he'll break down the door."

My brother was crazy--no question about that--but I'd known three-legged cats who were more dangerous. Xiaohao was only a hazard to himself. I made my slow way down the *Whale's* steep stairwell, clutched the rails in case a step fell out beneath me. Most of these old boats were mere breaths from death, and the *Whale* wasn't exactly rigorously maintained.

The jail was lit by a single yellow bulb. I strode down the hall of open doors to the lone locked cell.

at the end, and my shadow pitched across the walls like a drunk. There was a tripod stool outside Xiaohao's door; I rapped twice on the thick metal and sat down. After an uncertain moment of silence I heard my brother stir on the other side. He shuffled around for another minute, grunting quietly, then peered at last through his small barred window. He wasn't fat, but his face had filled out during his years with the Ecclesia. His left eye was red, encircled by an ugly bruise that had only gotten uglier since the last time I visited him.

Xiaohao sighed. "Father still won't see me."

"No. Not unless you're twitching on the end of a pike."

Exaggeration, of course, but not so very far from the truth. His face fell, and I regretted the words instantly. Idiot that he was, Xiaohao hadn't expected Papa's anger--or hadn't expected it to be so prodigious, anyway. He'd supposed that Yunhe would welcome him back as a savior, that Papa would forgive him in light of his bright, shining genius. My brother had always been a master fantasist.

He gripped the bars, stared at his feet. "Any word from the Administrators?" The question was quiet, hopeless. He didn't sound like he wanted to know the answer.

"No. But they're going to let you out."

"Are they really, Yuen?" He smiled bitterly. "Are you sure? I think they might put me on a pike. Call it an early birthday gift for our father."

I leaned forward on the stool. "Xiao, I'm sorry, I shouldn't have said--"

"Forget about it."

"No, listen. I'm sorry. I'm not the one stuck in here, and I shouldn't joke. But I swear to you, Xiao, no one's going to kill you. You're still a Yunhe boy. They're not going to execute one of their own just because he makes an ass of himself in the square."

His eyes narrowed. "You may not have noticed, but this isn't Yunhe."

"It is now." I tapped my foot on the steel floor. "This is what's left."

"No," he said, "it's not."

He hadn't been in Yunhe when the ash-flood came, but the wound was fresher in Xiaohao's heart than anyone else's. Perhaps *because* he hadn't been there. The rest of us had saved what we could, fished out our dead, and slowly, painfully moved on. Made new lives in this make-do city. But Xiao had congenital difficulties with the concept of *moving on*.

Neither of us spoke. I cracked my fingers. It had been a mistake to come here. I'd only wanted to see that he was still okay. Well-fed. Xiao looked back into the darkness of his cell and raked his fingers through thin, short hair. "You have to get me out of here," he said at last.

"You know I can't do that."

"The fuck you can't. Pull the key off the codger upstairs. He won't even notice."

"Zhu?" I couldn't stop myself: I laughed. "You think they give him a key? Zhu might as well be your *manservant*. He's just here to bring you lunch."

Realization worked across Xiao's face. He hadn't known. He'd honestly believed that Zhu could give him his freedom. I wondered how long he'd spent begging the old man. Xiaohao turned away from the window, rubbed his eyes with his thumb and forefinger. "Shit," he said. "*Shit*." He kicked something he couldn't see, something large and metallic. It crashed to the floor.

"Xiao--" I started.

"*Sedition*, Yuen." He turned back toward the window. His eyes were wet. "I'm glad you think the Administrators won't carry out the sentence. That's really heartening. But are you going to stake my life on it? These people are savages. This whole shithole city. Jumping at the ghost of the hard fuckin' state. When was the last time you heard a syllable from Beijing? When was the last time you got a truck full of vaccines? *There's no such thing as sedition anymore.*"

I sat very still. "This is why you're here," I said quietly.

"Because I tell the truth?"

~~"Because you don't understand your own people. Because you didn't bother to learn about this place. You didn't care enough to ask about our new lives. Just stuck your head in the door and told us to drop everything because what we'd built was worthless. You expect people to trust you, to follow you? You disappeared, Xiao. And you waited too long to come back."~~

I held his gaze for a long moment, then stood and walked back toward the stairs. The *Whale* shifted on the water, and my shadow shuddered across the wall. I reached the first of the dark, creaky steps before Xiaohao called out to me.

"The password," he said, his voice tight. "It's *garden*."

I spent most of the morning in Little Wuxie. Their accumulator was down, and their Administrators were frantic. All five of the gray, yammering men wanted to peer over my shoulder as I checked out the battery, the tanks, the pipes. Their anxiety was as exhausting as it was unnecessary. One accumulator wouldn't make or break the city's weather control. Finally I asked them to leave, told them that their "ambient body heat" might damage the components.

They left me alone.

Slowly, carefully, I extracted the tower's guts. The morning was hot, and I was thankful for the sea breeze that played around me. Many of the central wires had started to rust. Not so badly that the whole accumulator should break down, but it would become more of a problem as time wore on. I'd seen the same thing in some of the other towers; these were old machines.

I wiped the sweat from my face with my forearm, watched the gulls wheel above. The birds were probably waiting for me to leave. They liked to perch on the seaside accumulators and watch the water. The upper halves of the machines' black metal hulls were always spattered with white.

Maybe, I thought. *Just maybe*.

I hauled out the battery cradle, inspected it from every side. Nothing out of the ordinary. Then, with the steadiest hands I could summon, I pulled the battery *out* of the cradle, and there was the culprit. A layer of birdshit covered the receptor prongs. Either one gull had eaten a catastrophically disagreeable meal, or the entire flock regularly squirted their lunches with vicious precision. I cleaned up the receptor, tucked the various wires back into their racks, and shoved the cradle back into the tower. The accumulator's black skin began to thrum at once.

The Wuxie Administrators were overjoyed. Embarrassingly so. They thrust iced jackfish and rice wine into my hands: overwrought thanks that Little Wuxie could hardly afford. As much as they plainly appreciated my help, I doubted this was the standard engineer's honorarium; these men knew my father's name. I thanked each in turn, accepted the gifts graciously, and made to leave at the earliest opportunity. But the Senior Administrator, a fox-faced man named Hu, raised his hand to stop me.

"One more token of our thanks," he said, and produced a small, foldable wi-mo from his pocket. Not more than two or three years old by the look of it; the surface was only gently scratched, and the solar cells seemed to work. Hu powered up the device as tenderly as one might wake a baby. "We've recently had a trader from Chengdu," he said. "I give you this on behalf of all Wuxie."

I unconsciously tongued the month-old unit in the roof of my mouth. It broadcasted at terabytes-per-second to the contacts in my eyes, responded to minute tongue gestures and subvocalized commands. Yunhe had also had the trader from Chengdu. Papa commanded reverence even from outsiders.

"Thank you," I said, and accepted the wi-mo.

The walk back to Little Yunhe was long and hot and awkward. Foolishly, I took the boardwalk, which bustled with fishermen and hungry dockside homeless. Most either knew my name or felt no

compulsion to harass me, but more than one boathand trailed his leer with a whistle, or reached out to smack my ass. Jokes and arguments played out around me in a dozen tongues: Korean, Filipino, Mongolian, Thai. Some of the jokes were opaque to me. Others were all too understandable.

The eyes of the homeless flicked up from their decade-old, gray market wi-mos to follow the bundle of treasures in my arms. My cheeks flushed, and the sun bore down, and finally I couldn't bear the stares; I put down the jackfish and walked swiftly away. Papa would be angry if he learned that I'd given away honoraria, but I kept the rice wine and the wi-mo, so he would likely never know--unless the Little Wuxie Administrators asked whether he enjoyed the fish.

I pulled the wi-mo out of my pocket, unfolded it. The translucent sheet overlaid the walk before me with a few simple icons and live feeds: clock, calendar, local temperature. My roof-of-the-mouth uni noticed the new machine and prompted me to link the devices for file transfer and load-share. I declined. I'd gotten the same prompt at home every morning for the past week. There was a new computer somewhere in the flat, one my father didn't want to talk about.

The password, I thought. It's garden.

He came to us with promises of dirt. I was outside of the city that day, checking up on the outermost ring of accumulators, but I saw the whole mess on the network once it was over. I saw it from every angle, through the beady eyes of two dozen different wi-mo cameras. On some impulse that I didn't quite understand, I brought up the most popular video now.

Xiaohao strode into Little Yunhe Square, right up to the Administrators' Quonset hut offices. He wore the black skinweave favored by the Ecclesia--likely the first of his many mistakes--and waved his arms like an attention-starved child. "*It's time to return to our ancestral home!*" he shouted. Xiao had never been a very good public speaker; he compensated for anxiety with breathtaking pompousness. "The day is today! The hour is this hour! Follow me, and we'll raise Yunhe from new soil!"

With each word, more and more of the square's homeless raised their wi-mos to record the madman's performance. Two security officers outside of the Quonset hut exchanged uncertain glances and advanced cautiously, hands on the butts of their pistols.

"New soil!" Xiaohao cried again. "Smart soil from the Ecclesia, soil to reclaim Yunhe--the *real* Yunhe--from the ash. I'm giving this to you. We will built it together. Look! Explore!" That last bit made no sense; did he carry some of the magic dirt in his hand? Xiao went silent as something approached from offscreen. The camera jerked to one side, zoomed in on the Little Yunhe Administrators as they emerged from their offices. Papa, dressed in his trademark gray suit, took the lead.

"Father," said Xiao, barely audible now, "I've brought--"

Papa moved faster than the wi-mo filmmaker could follow. When the camera found him again, the old man stood over his son, who was crumpled on the ground clutching his face. "*I'm giving this to you,*" screamed Xiao, and Papa reared back to kick him in the gut.

I couldn't watch any further.

My fingers shook as I folded up the wi-mo. Could I really say that Papa wouldn't kill him? I'd winced when I saw the video for the first time, but assumed the worst was over. After all, Xiaohao hadn't been the first criminal beaten by our father, and Little Yunhe had never executed anyone before. My brother had come here practically wrapped in the flag of Ecclesia; of *course* Papa would show him hard justice, give him a week or two in the *Whale*. But he wouldn't kill his own son.

Would he?

I tried to call Papa, got no response. Then I began to jog. Xiao's words played over and over again in my head: *are you sure? I think they might put me on a pike*. I cut through the Little Jingjiang Tent

Quarter, which was quiet except for a handful of eateries. The smell of fried onion wafted from solar woks--I should have been hungry, but the thought of food made me nauseous.

The route through the Tent Quarter was shorter, but Jingjiang had suffered a milder disaster than Yunhe, and its detritus was stacked outside of every tent. Bookshelves, defunct televisions, stainless steel cages. Coffee makers, lamps, the stems of wineglasses. Leftovers of another dead town, clogging the veins of the refugee city. Twice I had to leap over fallen stacks of boxes, and once I nearly toppled an old woman selling reusable cigarettes.

Finally, the ways widened and the tents thinned. A squad of security officers in old, weathered hardsuits stood along the border of Yunhe Tent Quarter; they tensed as I approached and then relaxed when they saw my face. The squad leader nodded his respect.

Papa might have been in the Administrators' offices or he might have been in bed. Both huts were inland, but home was closer. I glanced across the water at the *Whale* and picked up my pace, drawing a dozen confused gazes in my wake as I jogged toward our house on the hill.

The door was locked. I groped for my keys, shoved the door open, and stumbled inside, where a dozen rattling fans twisted around to cool me. The lights were off, and the doors between each partition were open. In the study, Papa's favorite dishes lay dirty on his desk, and a yellowed novel sat half-open on his seat. I was certain now that he wasn't home, but I called out his name nonetheless: an impropriety that would have earned me a lecture in the best of times.

There was no response.

I hissed a curse and made to leave, then stopped short. The smart-fans squeaked, surprised by my sudden stillness. On my eyelid, the prompt flashed: *Link to device "XiXi" for data transfer?* The same prompt I'd gotten every day for the past week. I wasn't sure where Papa had hidden Xiaohao's wi-mo, but that didn't matter, did it? I was in range. I agreed to link, and Xiao's unit asked me for a password.

"Garden," I said. The world changed.

I had only fleeting memories of my grandfather's garden, but those scraps were vivid. Sunflowers like bright, tremendous trees, the space beneath their canopy a secret yellow sanctuary. I squatted in the soil with my worn, creaky kitty until Xiao, a few years older, fell onto me in a spray of dirt and battle cries. He whipped the stalks of the great golden flowers with some uprooted weed, sent me wailing out of the garden to the farm proper. I got lost in endless rows of sorghum, and when I found Papa at last, he nearly beat me for running out of sight.

Now I stood in the garden again. Sunflowers towered over my head, five or six meters tall, brighter than ever, brighter even than the flowers of memory. Birds chirped somewhere just out of sight. Up the hill, between the stalks, I could see my grandfather's house, intact and even renovated.

Yunhe. The real Yunhe, back from the dead.

This can't be fake, I thought. Sims always left me with this jarring sense of absolute credulity. The wi-mo fed me my home through the roof of my mouth, and I couldn't help but believe it. *This can't be fake*, I thought, though I knew that it was. *I can smell the dirt*.

I made my way out of the canopy of monster flowers and gasped. "Oh, Xiao," I murmured, and struggled to remind myself that nothing here was real or meaningful, that my home was still buried beneath the black flood. Grandfather's house was beautiful, and larger than it had ever been in real life: a multi-wing, three-story complex with something like an observation deck on the roof. I followed a stone path--flanked by more traditionally proportioned blue roses--from the garden to the house. The front door was unlocked, and I stepped inside.

It wasn't the home I remembered. Somehow it was more than home, the *idea* of grandfather's place writ large. There was space for dozens in the dining room, seats arrayed around three beautiful wooden tables. On the ground floor alone there were two kitchens, a full bar, and a game room. Xiao

had connected a library to grandfather's study; Papa's favorite painting of the War Above held a position of honor over the reading couch. The house's additional stories were given over to bedrooms enough to sleep our entire extended family and several more families besides.

It's a dormitory, I realized. Grandfather's house transformed into a dormitory. Was this how citizens of Ecclesia lived? Like wealthy college students?

I took the elevator--*the elevator*--to the roof. Lawn chairs encircled a small herb garden, and at each edge of the roof, telescopes gazed off into the distance. The day was preternaturally clear: no smog, no fog, and not a single cloud in the sky. I could make out individual trees on the blue mountains that towered around Yunhe. If I'd wanted, I probably could have found the mountaintop waste lake that had laid my town to waste.

Instead, I looked out across the Yunhe that Xiaohao had made. His model world. As far as I could tell, there were no traditional homes here; in their place were half a dozen more dormitory houses, each surrounded by vast tracts of vibrant farmland. Here and there in the fields stood enormous, gleaming towers: new model accumulators hybridized with wind turbines. To the south, at a point roughly equidistant from each of the dormitories, I saw Xiao's vision of a town square. Open air market, playground and pool, small restaurants, even an amphitheater. Everything was linked by a web of red brick paths. It was lovely. The gardens, the farms--everything was lovely.

I shut down the sim.

Yunhe disappeared, and I smelled the ocean again. Smartfans surrounded me in an eager semicircle, cooled me with a kind of mad mechanical enthusiasm. Ships' horns sounded in the distance. I took three swift, deep breaths--a trick I'd learned in college for exiting sims as quickly as possible--and ran out the door. Somehow it was easier to believe in the real world with a full pair of lungs.

The security officers outside of the Administrators' offices were less genial than the ones on the border. They surely knew my face, but still they held their position in front of the door, and they neither smiled nor nodded. There was even a little smirking twist in the corner of the squad leader's mouth--my panic must have leaked out of my eyes, visible to everyone.

"State your business," said the squad leader, plaintive and automatic. He was short, broad-shouldered, and wore a few days' stubble. I briefly wondered if I could force my way past him, gave up on the idea as quickly as I'd conjured it. Dozens of people decided that they had business with the Administrators every day: accusations of chicken theft or wi-mo hacking, petitions for divorce or consolidation of tent-space. This man's entire job was to stand in the way of desperate people's grievances.

"I need to see my father," I said.

"Do you have an appointment?"

"He called me. Asked me to come as quickly as possible."

"You won't mind if I confirm that," he said.

I smiled sweetly and said that I wouldn't mind at all. I had an understanding with Jung, my father's secretary. The squad leader unfolded his wi-mo, carried on an extremely short subvocalized conversation with an invisible party, and then frowned.

"Go on, then," he muttered.

I stepped inside the Quonset hut. The place was sweltering. Two parallel rows of secretaries glanced up from paper-plastered desks, every sweaty face transparently terrified that I had come to make more work. I found Papa in the back of the hut, softly berating Jung over something to do with ledgers. Jung looked relieved to see me.

"Papa," I said, "may I speak to you in private?"

He raised an eyebrow but nodded, beckoned me to his office and closed the door. We sat on either side of his desk, and my eye flicked to the painting behind his head: a battle scene from the War

Above. Murmured arguments about fishing zones floated from the office next door; the partitions between offices were more of an affectation than a proof against sound. I spoke quietly.

"When will Xiao go free? He looks awful."

Papa sat back and sighed. "Yuen. It's not clear that he will ever go free."

He didn't blink as he said it. His eyes were always wide and wary and unblinking, as if he'd never stopped looking down on the entire world at once, never given up the divine-eye view from space. He ran one hand across his gray-black beard, which had only recently started to fill in. "You know we can't look the other way on this, sweet. We'd countenance sedition and burn every scrap of our credibility all in one clean sweep. Xiao made his choices, and he's left us with none."

Goosebumps raised across my neck. "So," I said, barely a whisper, "you're going to kill him?"

Papa was silent. His face was utterly still, and he didn't blink.

"I want to show you something," I said, newly careful with every syllable. I didn't know how precarious a line I was walking anymore, and I couldn't be sure that Papa wouldn't throw me in the *Whale* for collaboration. But I also couldn't let my brother die. I queued up the sim, prepared to send.

"If it's Xiaohao's new Yunhe," said Papa, "I've seen it and don't want to see it again."

I froze. "You've seen--"

"He sent it to all of the Administrators the day he came back."

"And you saw," I said. I felt clenched and cold.

"I saw enough."

"You saw the garden. You saw the painting in the library."

Again, Papa was hard-eyed and silent and absolutely still. And I finally understood. I'd thought that he was furious with Xiao, disappointed and sore with wounded pride. But incredibly, terrifyingly, this wasn't a matter of emotion. It wasn't personal at all.

Papa was *unwilling* to make it personal.

He'd never been particularly traditional. He might have forgiven Xiao for simply running away with a professor. Even if the professor in question was male and Filipino and given to lectures on crowdsourcing microprotest. Xiao's romances were a family matter. But he had fled to a metanation, and that made his choices the business of the state. That was *defection*. Dereliction, sedition.

Papa couldn't forgive sedition.

"His world means nothing," he said softly. "It's fantasy. That's all."

"I think Xiao believes he can make it real."

"Your brother believes a lot of stupid things." He stood with a grunt, finally turned his wide eyes away from me. "You have a gentle heart, and I admire that, but today we can't be gentle. I trust you're smart enough not to be moved by other people's stupidities."

I struggled to make my face as opaque as his own. "Yes, Papa," I said. My intentions must have leaked out of my eyes. I stood and opened the partition door, but Papa stopped me.

"One more thing, sweet." He gripped my shoulder. "You mustn't give away your honoraria. Word travels, and it makes us appear ungrateful. Arrogant. We can't afford that kind of reputation at the moment. Do you understand?" He smiled his disarming smile.

"Yes," I said. I understood.

I flipped on my arc knife. The blade hissed and lit up the creaking, deathtrap stairway of the *Whale*, cast my skin in electric blue. I jumped past the the last two steps, and my landing echoed in rattling metal. There was no time for caution. It was time for knives.

I'd stashed the tools in the soles of my shoes, but that proved unnecessary: Zhu didn't give me trouble, didn't even ask me to pull out my pockets. I hoped he would be just as accommodating on our way out. We could cut through the hull if it came to that, but I didn't exactly relish the thought of

sinking a ship while Xiaohao and I were still inside.

I hurried down the hall of open doors, swinging blue light at my side. Xiao's eyes appeared in the grate, bright first with panic and then confusion. "Yuen? What do you--"

"Step back," I said. "As far back as you can go."

He obeyed. I cleaved the thick padlock with one swipe, turned off the knife, and hauled open the heavy door. Inside, Xiao pressed himself flat against the far wall. He was dressed in a dirty undershirt and too-small black pants. He looked stricken.

"Yuen--" he started.

"You were right, Xiao. I was wrong. We have to go."

He blanched. "They're going to kill me?"

"I don't know. I have no idea what they'll do anymore." I pulled off my left shoe, peeled open the sole, and drew out a second arc knife. "Take this."

Xiao frowned at the knife for a moment. Then he took it.

"What's your plan?"

"We leave the city. Make for--I don't know. A *real* city. I have some money. Maybe we go to your Ecclesia. If it comes to that. Maybe..."

Xiao's frown deepened. "Your money's worthless," he said quietly.

"We'll get by."

He bit his lip and fiddled with the arc knife. Flicked it on and sat down on the wireframe monstrosity that must have been his bed. He watched the blade burn and hiss. "Your money's worthless," he said, "and there's no going to Ecclesia. I pissed them off in order to come here."

"You pissed them off."

He shook his head, sighed. Cursed under his breath. The knife-light cast long shadows under his eyes. "Yuen. I hate it, and I thank you, but I think I need to stay here."

I opened my mouth, but no sound came.

"I know it's stupid," he said. His jaw was tight, and his hand shook slightly. "I know. Listen. I thought about what you said. How I came here without understanding the place or the people. You were right. Absolutely, awfully, irrefutably right. But now I know the mistakes I made, and I think I can make this work. If I run away--that's an admission of guilt. I lose every single scrap of credibility I ever had. Two years of preparation, one furious metnat, and all for nothing. I have to try again, Yuen."

If Papa's eyes seemed to see everything at once, Xiao's were perpetually fixed on the very heart and core of whatever he regarded. Father and son shared in their intensity; the difference between them was a question of focus. He stared at me now, and he didn't blink.

I exhaled slowly. "You should know," I said, "that I am thinking very seriously about knocking you out and dragging you away."

He snorted. "Good luck. I have a thick skull."

I sat down beside my brother, turned on my own knife once more. We'd always been the kind of kids who used dangerous industrial tools for candles. "You'll never persuade Papa," I said. My mind raced to find the words that would persuade *Xiao*, but part of me already knew that those words didn't exist.

"First and worst mistake I made," he said. "Took my message to the top. I thought I needed Father's permission, and I thought his permission would be enough. Stupid. I acted like this was some fucking hard state from the Profligate Times, some top-down institution. But that's backward, isn't it? I've got to start from the *bottom*. The people of Little Yunhe. I need your help, Yuen."

I could see where this was going, and I felt what Papa must have felt as he blasted into the sky. The awful exhilaration of a *physical law*, a lifelong gravity falling out from underneath you. I'd come to

free Xiao on a high of instinct and adrenaline. But could I really join him in active sedition? Could I make that choice and stand behind it?

"First," I said, my voice shaking only a little, "you're going to have to explain some things. I saw your sim, and it was--it was beautiful. Really, truly beautiful. But I still don't understand your big plan. I don't understand how you could bring Yunhe back."

Again, he frowned. "Seriously? You don't understand?"

I shook my head. He explained the mad thing he meant to do.

We'd never known where Xiaohao went. How could we, unless he chose to tell us? Ecclesia was borderless, global, a network-nation that lived in the interstices. He was at graduate school (and living with his professor) in Chengdu when he ran; any trails he might have left behind were lost in the city's thick skein of lives. I imagined him in Mumbai, London, São Paulo. Anywhere, everywhere.

He did travel. From the Antarctic Settlements to the Ivory Coast. But in the years since Yunhe drowned in ash, he'd spent most of his time in one place: an Ecclesia installation in the remote heights of the Appalachian mountains. The facility had been established on the force of Xiaohao's research proposal: he wanted to invent a nanite soil that could reclaim regions flooded by coal waste. Ecclesia threw their full weight behind him, even secured secondary support from the United Nations.

The project was called Wise Earth.

His team experimented in coal-drowned towns with names like *Prosperity* and *Dante*. Places like Yunhe, where waste lakes had overflowed or old mines had spilled out their guts. The first phase of the research was--at least according to Xiao--relatively straightforward, a matter of making each nanite convert the arsenic, lead, and thallium of an ash flood into yet another nanite.

The second phase was more complicated. His machines could eat lakes of poison, but all they left behind was gray mechanical goop. The nanites needed to be both efficient self-replicators and *functional molecules of soil*, true earth on which communities could rebuild. The problem was that soil isn't homogeneous. It's a messy, semi-random body of minerals and organics, solids and liquids and even gases; Xiao couldn't just map each nanite to some generalized recipe for soil.

Over the course of a long year, the Wise Earth team developed a replication algorithm wherein each nanite dynamically scanned existing mineral and carbon concentrations, compared it to a fixed ideal, and *transported* the element that was most lacking from a place where it was overabundant, all while negotiating the task with a million other nanites. It was a programmer's nightmare, and Xiao still wasn't satisfied. He wanted his earth to do more than reclaim; he wanted it to *enrich*. He altered the topsoil layer so that it could absorb, store, and route solar power. A portion of that energy would power the nanites' network functions once the initial rush of consumption was finished. The soil would be true soil, yes, but it would also serve as a massive solar power plant, communications hub, and computational substrate.

"It's a community seed," he said. "All you have to do is plant it."

I was silent for a long time. My heart pounded. I'd had no idea. No conception. This was even bigger than Yunhe. Did he understand that? How could he risk his life on just one town?

"Xiao," I said, "this is huge."

"Yes." He shrugged.

"We have to tell people. We--we have to tell them everything. Now."

His nod was absurdly casual. *Sure, why not?* "Do you have some kind of town forum or feed?" he asked. "Some way to talk to everyone in Little Yunhe at once?"

"No." I stood up. "No, Xiaohao, no. You're thinking too small. This--" I waved the knife and struggled for words. "This is huge. If we get you out of here, can you do the thing? Plant the seed?"

"The replicator key is in my wi-mo."

"And your wi-mo is somewhere in Papa's house. Okay." The gears fell into place and began to turn. I paced a tight circuit around the cell, called up a notepad on my eyelid. "We can do this. I think we can do this. But it can't just be a Little Yunhe thing. Do you understand? There aren't that many people here, and many of them don't like or trust you."

Xiao scowled. "Good to hear."

"No, listen. It doesn't matter. There's an entire city of refugees out there. Not all of them have tents to sleep in, and even those of us with flats are worried. The accumulators are rusting. Boats need repair, fish are thin in the water. We need to invite *everyone*, Xiao, and make the place a colony of the city. A place where anyone can work and build a home. We send crops and power back here, sell any surplus to the cities nearby. And once Yunhe's built, we take your replicator key and start again somewhere else. Maybe fill in some waste lakes with land, stop another flood before it happens."

My brother's smile was wry. "That's what Ecclesia was afraid I'd do."

"What do you mean?"

"Give away the soil. They wanted to monetize it. Or use it for leverage."

"And you'll oppose them?"

"Fuck, I might as well." He grinned. "They're already pissed off."

We drew up our declaration with a kind of intense mechanical efficiency, quibbling only once or twice over phrasings. We did not make promises. We were not grandiloquent. We told the people of the make-do city--*my people*---that an opportunity had arisen, and we explained it as thoroughly and accurately as we could. We said that we didn't mean to abandon the city, but to bolster it. We said that our huts and boats and accumulators needed repair, and that a revived Yunhe would give us the resources we needed.

The soil wouldn't solve all of our problems. There would only be so much energy, so much food, so much space. There would still be hard labor, and hardship, and sickness. But the earth of Yunhe could check the entropy, afford us new ways and means.

The earth of Yunhe could hold us back from the edge.

Finally, we asked people to join us, to save us, to assemble outside of the *Patient Whale*. That plea was the hardest thing to write, and the most crucial, and we agonized over the wording. It didn't matter how many people we intrigued with our soil-seed; if no one showed up, our plan was worthless. We tried to acknowledge the dangers of assembly without making the act seem revolutionary, and asked those unwilling or unable to show their faces to leave anonymous comments of support on our post.

Comments, of course, were unlikely to save us.

Xiao used the wi-mo I'd received from Little Wuxie to record a video of me reading the declaration. I had enough credibility throughout the city that my image could lend weight to the message; besides, vids always got more attention than text. When we were finished, Xiaohao and I shared a wary, weary glance. My hands were clammy, and part of me wanted to collapse on the cell floor. The other part was so hyperactive that I doubted I'd sleep for days, no matter how our little sedition ended.

Xiao nodded, and I uploaded both the transcript and the video, tagged so that they would appear on every feed in the city of broken places.

And then we waited.

We sat in silence, refreshing our feeds. We'd turned off our knives, and the bulb in the corridor had given out, so the cell was lit only by the moon-white light of the Wuxie wi-mo. We watched the video's viewership slowly, slowly rise. Every minute that passed without a comment felt like a punch to the gut. The cell was sweltering, but I felt cold.

This was it. The endgame. Either our plan worked, or I went down with Xiaohao. Would Papa really execute both of his children? Could he really keep so cool, so consistent? I worried the question until

it was raw, tried to imagine what answer Papa would give if I asked him point blank.

Finally, Xiao broke the silence. "What would Mother think?" he murmured.

When was the last time I'd thought about our mother? Papa never talked about her, and Xiao had been gone for so long. "I don't know," I said. "Sometimes, for a fleeting moment, I think I remember her. And then I realize that I'm thinking of some old vid or picture."

He smiled sadly. "Yeah. I know. Wasn't really a question." He bit his lip and turned his attention back to the wi-mo. "She'd be just as pissed off as Father. Maybe moreso. They were two of a kind." He was only a few years older than me, but he claimed to remember so much more. Sometimes I suspected that Xiao had invented our mother. Sometimes I resented his stories.

"Grandfather," I said. "I think he'd be proud."

"Yeah? Seriously?"

I rested my hand on Xiao's. His skin was clammy. "He'd be proud and he'd be pleased. He always cared more about *his land* and *his family* than--you know. Whatever the rules are this week. You're bringing back the land, and you're doing it for the family. He'd be proud."

Xiao fixed his gaze pointedly on the wi-mo. For a fleeting moment, I thought I saw a warbling of moisture in his eye. "Thank you," he said. And then: "Oh shit."

"Oh shit?"

He showed me. Comments were pouring in now, ten at a time. Some were cynical, others supportive. Only a few were outright angry. Several of the supportive comments linked to another video, which showed indistinct figures gathering on a dock not far from the *Whale*.

Some of the figures were security officers.

"It's starting," said Xiao.

The new video was a not-so-subtle message: *we want a new Yunhe, we have muscle, and you can find us at this location*. The sight of the security officers was both heartening and sick-making. We had muscle, yes, but now guns were in play. In all my fervor, I hadn't quite realized that things might get very bloody very quickly. Or maybe I understood--it in a detached, academic sense--but it hadn't really occurred to me that our side might have guns too.

More videos followed. Similar declarations of support, and instructions for assembly. The vids rarely showed faces--just quick, shaky shots of gathered bodies and some semi-distinctive landmark. My stomach roiled. My shirt was soaked. We waited.

Finally, with no warning from the feeds, we heard footsteps on the stairs. More than one person, but not more than a handful. Xiao and I shared a glance. Neither of us turned on our knives. Three sets of boots cast echoes from the far end of the corridor.

And all at once, the knotty storm of anxiety in my chest resolved into a liquid cool. This was it. The waiting was over. Whatever was going to happen would happen. An idiot grin spread over my face; I squeezed Xiao's hand, and he looked at me as if I'd gone mad.

The three newcomers emerged into the light. Old Zhu walked with a slight limp, smiling a crooked smile. On either side of him was a security officer with an automatic rifle. I recognized one of the men from the Little Yunhe border guard. The squad leader. I gave him a small nod, which he returned. Zhu arched an eyebrow, smiled even wider, and then opened his mouth.

"There are some folks here to see you," he said.

Outside, an impossible thing stood on the dock: the largest gathering I'd ever seen. The city was always a sweaty press of bodies, of course, but this was a press with a purpose. People from every quarter--Administrators, elderly tentsquats, fishermen, gangly tattooed hoods--strained to see us as we emerged from the *Patient Whale*. Someone gave up a cheer as we appeared, and the cheer carried through the crowd. Again, Xiao and I shared a glance. I was still grinning. Xiao looked like someone had punched him in the gut.

We walked down the long ramp from the ship to the shore, and into the midst of our saviors. The crowd was eager but polite, standing back to make room, asking questions but not shouting or insisting. When it became clear that Xiao was too dumbfounded to speak, I raised my arms. The people around us hushed.

"Thank you," I said. "Thank you, so much. I will always remember this. I will never be able to thank you enough for what you've done.

"But I have to ask you to do one more brave thing."

There was, I told the crowd, one last person we needed to persuade. I gave them his name, and asked them to walk behind me. Then, with Xiao at my side, I started down the winding way between the tenement quarter and the open market, up the hill and toward my father's house.

The people of the city followed.

We may have lost folks as we walked. We may have gained some, too. I didn't look back. Xiao leaned in and whispered, "Sweet shit, Yuen." After that, we were both silent.

I guessed that Papa would come to meet us, and I was right. As we rounded into the final approach toward the hut, we sighted Papa and a squad of hardsuits marching down the gravel path. I took a deep breath, bit my lip until I drew blood, and pulled the arc knife from my pocket. The security officers behind me rushed to my side, held their rifles at the ready. Pained expressions passed across their faces, but they raised their weapons and walked with me and did not waver.

We had greater numbers, and more guns. But there could still be blood.

As we came closer, I saw the pistol in Papa's hand. The emptiness in his eyes. His gray suit was stained with sweat, and there was uncertainty on the faces of his officers. I slowed, then stopped, and the crowd followed suit. Feet shifted on gravel.

"Papa," I called. "Papa, please stand down."

"You know I can't do that, Yuen."

"We only want what's best for the city. It isn't sedition. It's renewal."

"It's not sedition?" His voice was dead, monotone. "You want to activate Ecclesia technology--brought here by an traitor and illegal agent--within our borders. How is that not sedition?" There was no force, no anger behind the words. He looked pale and deflated. The crowd at my back murmured.

"Xiaohao broke ties with the Ecclesia to bring us his soil. Don't you see--" I looked for the words, smiled when I found them. "Don't you see that he followed your example? You traveled into space to protect us, and we honor you for that. Everyone honors you. But Xiao went further. He left the *country*. And just like you, he came back triumphant."

More murmurs rose behind me, and a few cheers.

Papa was silent.

"Listen," I said. "We outnumber you. These people are from all over the city; you don't even have jurisdiction over most of them. If you ask those officers to fire on us, you break the law of the city and call chaos down on everyone's heads. All for nothing. You don't want that."

He opened his mouth. Closed it. Tears filled his eyes, and his entire body slumped. The hardsuits beside him began to lower their weapons.

"Mere anarchy," Papa said, barely audible. "Mere anarchy is loosed..."

And then he raised the pistol to his head.

"No!" shouted Xiaohao. The officer at Papa's side whipped around with incredible, suit-augmented speed, slapped the gun from Papa's hand. No shot sounded, but Papa collapsed as if he'd pulled the trigger, and the officers around him struggled to hold him up. Xiao and I ran forward.

"He's alive," said the officer who bore most of his weight. "He fainted." Xiao, stricken, reached out to touch his father's face. I doubted he would have reacted differently if Papa *were* dead--tears ran down his flushed cheeks, and he squinted with the effort of holding tears back. Papa, for his part,

looked peaceful. You might have mistaken the curl of his lips for a smile.

"Xiao," I said. "Come on."

"*We almost killed him,*" said Xiaohao. "We almost. I never meant..."

He trailed off. I touched his shoulder.

"I know," I said softly. "But we stopped him from having to kill *us.*"

The sun bore down. The city watched us. Finally, I turned and began to march up the gravel road. After a moment, Xiao jogged to catch up. As we approached the hut, my wi-mo asked if I wished to link to device "XiXi." I declined. The door was locked, but Quonset hut doors were only so strong.

"I think he wanted you to succeed," I said, activating the arc knife.

Xiao wiped his eyes with his wrist. "Are you kidding?"

"No. I think he followed every protocol, but secretly hoped that you would succeed."

"What could possibly make you think that?"

"He kept your wi-mo."

Xiao's eyes moistened again. I slashed off the lock and kicked open the door. Cool air spilled out, and half a dozen smartfans twisted around to regard us. Behind us, hundreds of feet scratched the gravel path. Eager to join us, eager to walk on the earth of Yunhe.

The new town wouldn't look like Xiao's sim--I knew that already. Parts of his fantasy would persist into the real world, maybe, but every single person who had saved us would have an idea about what the new Yunhe should look like, how it should work. I couldn't wait to hear what they had to say. I couldn't wait for the arguments, the compromises, the beautiful reality.

We fell into our father's house and found the key.

Ecclesia is social, networked. Borderless, we've currency. Weaponless, we've teeth. Metanation creed: union in the interstices. All welcome.

--Eric Gregory--

The Greenman Watches the Black Bar Go Up, Up, Up

Jacques Barcia

The moment Shine was announced, I received enthusiastic messages from around the world. Not just from the western world--although, make no mistake, these were very welcome, as well--but quite a lot from the world at large. For some unfathomable reason there were a lot of encouragements from the Philippines and Brazil.

Unfortunately, while I did get quite a few good submissions from the Philippines, none of them made the final cut for Shine--although some came close. Blame your editor. Similarly, I did get quite a few from Brazil, as well, and while I had to turn several down, I'm quite happy to publish this one from Jacques Barcia.

"The Greenman Watches the Black Bar Go Up, Up, Up" is very close to what I would consider an 'ideal' (if such a thing exists) story for Shine: it is complex yet recognisable, it is exotic yet familiar, exhumes mystery while shedding new light on old tropes, and its progress is very hard fought, at every level.

Yes, the world is--or may be--a better place, but not before we have worked and thought very hard to get there. And we need to keep thinking and working very hard to stay there, or take the next step.

Yet we can, even in the gritty, dark and strange streets and cyber-alleys of Jacques Barcia's future Recife that's as intriguing as any Brasyl depicted in SF.

He loved the wall barring the sea. It was his best kept secret, or else he believed it was. Inácio never told it to anyone. Not to his father, neither to his old comrades from the days and nights of war, and most certainly he would never tell it now to his clients. Though he knew Lúcio was aware of it, his partner never used that little contradiction to break his spirit and deliberately hurt him, as lovers do when a fight erupts on late Saturday nights fueled by jealousy, overdue bills and the fear of death.

No, nobody knew, despite the fact that he had to stop by a cart on the top of the dam, about four stories above street level, and have some fresh coconut water before going home. Every night he'd stand an hour or so leaning over the parapet watching the waves pass the tidal farm and break against the outer side of the colossal shield. He'd feel the wind, moist and salty, wash his face and carry his breath into the air of Recife.

And every night he'd think people had took action too late and he'd ask why it took so long to make people care. It certainly helped stop the guns and the bombs and made people pay some respect to the air and the sea, but it was almost as big a crime to raise the barrage. But he loved the wall. Especially because it had an awesome view of the green farms sprawled over the terraces and rooftops. It gave him some peace and good memories.

Inácio was way past the normal time of his nightly ritual, waiting for some last-minute contractor call him. He felt drowsy, but the feed from the blabbers he followed and the data flooding from the passersby wouldn't let him doze. Meet me, share with me and the outdated, but inevitable, buy from me danced on his contacts like animated billboards and fought with his own eydgets for the faintest attention. You should be home by now, his carbon tracker also insisted. You should be home to reset your footprint or else I'll shut down your systems. But the contractor had convinced Inácio to moIP him--communicate with him via an internet protocol while he was on the move--for a conference in the after-hours of the emissions market. So he waited, nervously watching the tracker's black bar go up, up, up with every breath and every gigabyte generated flying to the datacenter in his living room.

He and Lúcio used to live on the northern side of the city, just five minutes away by train. Now he counted the ninth or tenth metro slide amidst the old concrete buildings and into the much newer

modular habitations, their reusable materials in constant flux, easily transferrable as the whims of the urban pulse saw fit. It would normally be a zen-like experience, to cross the city sliding at high speed seeing the deep green crown of the trees dot the asphalt and the silver lakes and rivers, natural and artificial, free to run their courses but also tightly controlled not to rebel against their margins. But now, he knew, there'd be only the humming of the solar batteries pushing forward the monorail, causing that corrosive, maddening itch in his eardrums which reminded him of forests, bugs and bullets. And, what's worse, at the end of the line there'd be no one to talk to.

It took less than a minute after the market's close down for the would-be client signal asking for a voice call. It was a local number for sure, but held no digital signature or embedded business card. Inácio let the messenger blink twice before he threw his second empty coconut into the public recycler. The thing chewed and swallowed and made mechanical noises while sending the biomass down into the city's entrails. After the third blink he eye-commanded the app open to see what this mystery was all about. What Inácio didn't expect was the voice of a kid on the other side of the line.

"Mr. Lima?" said the voice, childish but confident.

"Is this some kind of joke, boy? Don't you have anything more productive to do than play tricks on me?" Inácio felt anger rush in his veins and was about to close the connection when, after a second, the kid replied.

"This is no trick. We'd like to know if you'd be interested in doing a little research for us. We pay well." The voice couldn't belong to anyone past fourteen. But the young man was very determined and eloquent.

"What the hell are you doing, kid? I tell you I'm going to track that number and..."

"I represent a group of investors interested in hiring you," the voice interrupted. The voice wasn't confident. It was rehearsed and foreign. Inácio was staring at the disconnect button, pressed by his gaze but not yet released. He couldn't believe he was giving the prankster this much time to perform. "We're curious about a certain wikindustry," the brat continued, "and we'd like your professional opinion about it."

"You got it wrong. I'm not a business consultant."

"We know. You're a self-employed sustainability analyst. A greenman, formerly working for CrediCarb and also a war veteran. You're exactly the man we want."

Shock and shivers ran over his skin. Long seconds may have passed before Inácio noticed he was scratching under his collarbone, right where the logo of the GreenWar militia was tattooed. It was a primitive reaction, an echo of his time being hunted in the countryside when people like him, who broke with peaceful protests and took arms to fight for the environment, had to come back home after peace was reestablished. Then, he thought, everybody had them as the good guys. He soon learned that not only industrialists, landowners and cattle farmers hated him. For many of those caught in the crossfire, especially those dependent on the rich employers, he was a terrorist and an assassin. And for many years after the wall was built, right here in the city, he felt like he needed to hide the mark. Who'd have guessed that almost two decades later it'd become a fashionable design, its history blurred by trends and blended with the new times?

The button-down straightened automatically as Inácio withdrew his shaking hand. The tattoo, just a bit darker than his own skin, had turned the color of diluted wine, hot and prickly. The train was nowhere to be seen.

"Besides," the client continued, "we knew Lúcio. And he told us to look for you if we needed that kind of job."

The prickling under his shirt had stopped. They talked in a dedicated moIP connection for no more than ten minutes, with only one of those spent on discussing the many zeroes being offered to Inácio

as a reward and how they'd known his lover. Lúcio met them at the Shigeru Awards and apparently gave them Inácio's contact details.

The three clients wore encrypted avatars that masked their features, appearing as nothing but dark cloaks with plasma globes for heads. But out of recklessness or sheer confidence their voices weren't jumbled. They were all teens.

"And that's it, Inácio. We want you to find everything you can about Gear5's policies." The taller avatar had an older but more casual tone. Advanced physics algorithms made the illusion dodge waiters, tourists and other rich media floating in the augmented reality.

In the real world, Inácio sat at a round stone table close to the escalator leading to the avenue down below. Rush hour had passed, but the traffic systems were still operating. The street drove the cars so close to each other they looked like a single line of black bars and yellow spots. "You understand that what you're asking is extremely unusual, don't you?" The analyst already had three search engines running in his field of vision, along with dozens of other eydgets, including some custom market research apps, blabber feeds and text clients, sending private messages to trustworthy contacts and opening anonymous topics in professional social networks' forums. "And your deadline is impossible to meet. I just can't provide you a full report about this Gear5 in less than eight hours."

"I told you," said the third plasma globe. It had the sweet voice of a girl, but naturally distorted like a bad death metal guitar plug-in. "We should have contacted him much earlier."

The youngest avatar seemed to turn to the angry girl and back to face Inácio. "Unfortunately, Mr. Lima, it's a very tight window of opportunity. But we know you're probably asking questions to your acquaintances by now and they'll certainly ask their own in the following minutes. We couldn't let an avalanche of gossip be spread before the markets were closed. Besides, we decided to make our move just a few hours ago when word has reached us that the company will open part of their codes tomorrow morning." The globe's innards were filled with a storm of pink lightning. The avatar leaned closer to Inácio. "But I don't think you really find the task all that unusual, do you?"

He didn't. There was this indigent startup wikindustry operating for eleven months now with an ever rising stock of carbon credits and these kids, whoever they were, wanted to know whether the thing Gear5 had under development, besides the occasional crowdvertising for rising mobbands they claimed to do, was sustainable or not. That all meant he had to find out everything about the company and their product using, he'd say, unconventional methods. "Like I said, the deadline is impossible," he said.

"Just give it a try. We trust you."

Rich teenage wallets were not uncommon, especially in the tech business. But this group was different. They were too young and seemed to have a different focus, too new for him to clearly identify. So his only option was to treat them as a common group of aggressive investors, the kind of people he had a history of hating. "Look, I know you know exactly what that company has been developing. You won't tell me for competitive reasons, of course, but if you are considering the investment then you've already measured how much money you can get from that. So why bother with carbon market regulations they're certainly meeting? Just go there and put your cash on it."

The young foreigner put his cloak-and-globe body back straight and raised, for the first time, a pair of ghostly hands. "You're not getting it, Mr. Lima." He looked like he was giving a lecture. "Money has meaning only to those old enough to remember it. No, Mr. Lima, we don't want to put a single penny on it. We want to find out if this project conforms to our working ethics. We want to invest our brains and bandwidth on it."

"They've been buying lots of carbon," yelled the fat man, his suit flashing back the lights of the cabaret, "and not just from companies. They paid a great number of civilians too. Some kind of

sponsorship. You know, they pay you an advance so you minimize your footprint and pay again to get whatever credits you have left. Not very cost-effective, but some companies do it to raise their public images. Publicity."

The guy was called Josué Bispo, an old friend. Inácio got his reply still in the pier, disembarking from a late boat in the Sol Street. The stock broker was not the only one--not even the first--to answer Inácio's queries about Gear5, but the man told him he was around, in a brothel on the uppermost floor of the Sete de Setembro building, just a couple of blocks away. The place had a vintage feel, with loud technobrega music and hapticless soft porn playing on every table. Behind him, penciled on the remnants of a sheet of paper on the wall, the next inspection remained scheduled and three years late. "But what are they developing?" asked Inácio. "And how many people are involved?" Shouting over the music made his throat tired and sore.

Bispo nodded and balanced his weight with an elbow on the table. He finally took advantage of a gap between songs and spoke in a more normal tone. "Nobody knows for sure. What I've heard is that it's some really disruptive shit. But whatever it is, it's something that leaves lots of residues and raises too much controversy. So much they couldn't possibly be competitive. Otherwise they wouldn't be stocking." Bispo took his last shrimp tempura from a bowl full of soy sauce, and ate it whole. "Do you remember those shrimp farms up north? I must confess I miss the big, big shrimps they had there. Much bigger, and much cheaper."

Inácio grinned and raised a cup of iced tea. *He remembers the long-gone farms, the first to be raided years ago.* Hundreds of square miles of *mangue*, a whole ecosystem, turned into tanks for shrimps and oysters and then to fields of blood. *He remembers the battle.* "That's the price to be paid, old friend. Come on! Eat your expensive shrimp and be thankful that water isn't overpriced. We made our choice pal, and I do believe it was the best option available." *Though I feel sorry for turning myself into a killer.*

"Yeah. I guess so." Bispo stared at his beer glass. The data input was blank except for its temperature. A sign it had been smuggled. "So, are you fine?"

"About what?" The sudden change of subject took him by surprise.

"Lúcio. He'd have turned forty yesterday. But you know that."

He did, but it hadn't occurred to him. Until now. He completely missed his lover's birthday. Maybe he had put too much effort into forgetting Lúcio's death. He'd spent the whole year running from detailed memories, especially those which would take him by surprise and, for the briefest of times, make him believe Lúcio was alive somehow. Instead he concentrated on general, safe memories like the place they first met, their wedding, the sex. But their secret names, their songs and birthdays, caused him too much pain. He couldn't let that happen. He had to protect himself from suffering in the waking hours. And an empty house, an empty bed and an empty heart from dusk till dawn was pain enough. But yeah, he forgot Lúcio's birthday. And no, he wasn't fine.

"I'll live," Inácio said and sipped some tea, now barely cold. "Have to." He met Bispo's gaze, ready to offer a friendly shoulder, but Inácio refused, slightly shaking his head. "Gotta pee. And then go." It was his turn to change subjects. "They want the whole story by morning, you know." But he didn't move. Bispo nodded once more and was gone before Inácio could stand and shake his hand. As real good friends usually do, he let Inácio pay the bill, so he eye-commanded the payment and asked for a copy of his footprint. It took the bar's AI systems some time to arrange things, as their usual costumers rarely asked for a carbon sync. Meanwhile, he summoned his tracker and was partly relieved to see it was still under the established mark, but uncomfortably close. *Could be worse*, he thought.

As he turned his contacts on, the stream of incoming replies filled his inner screen. Silver discs linked

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