

THE DISCRETE CHARM OF THE TURING MACHINE

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Greg Egan has published more than sixty short stories and thirteen novels. His novella “Oceanic” (*Asimov’s*, August 1998) won a Hugo award. His last appearance in *Asimov’s* was “The Four Thousand, The Eight Hundred” (December 2015), and his latest novel, *Dichronauts*, was published in July by Night Shade Books. Greg’s new tale takes a look at the impact of automation on a young family.

1

“What is it, exactly, that you’re threatening to do to me?” The client squinted down at his phone, looking more bemused and weary than belligerent, as if he’d been badgered and harassed by so many people that the only thing bothering him about this call was the time it was taking to reach the part where he was given an ultimatum.

“This is absolutely *not* a threat, Mr. Pavlos.” Dan glanced at the out-stream and saw that the software was exaggerating all the cues for openness in his demeanor—less a cheat than a workaround for the fact that his face was being rendered at about the size of a matchbox. “If you don’t take up our offer, we won’t be involved in any way with the recovery of your debt. We think it would be to your benefit if you let us step in and help, but if you don’t want us to intervene, we won’t become your creditors at all. We will *only* buy your debt if you ask us to.”

The client was silent for a moment. “So . . . you’d pay off all the people I owe money to?”

“Yes. If that’s what you want.”

“And then I’ll owe it all to you, instead?”

“You will,” Dan agreed. “But if that happens, we’ll do two things for you. The first

is, we will halve the debt. We won't ever press you for the full amount. The other thing is, we'll work with you on financial advice and a payment plan that satisfies both of us. If we can't find an arrangement you're happy with, then we won't proceed, and we'll be out of your life."

The client rubbed one eye with his free thumb. "So I only pay half the money, in instalments that I get to choose for myself?" He sounded a tad skeptical.

"Within reason," Dan stressed. "If you hold out for a dollar a week, that's not going to fly."

"So where do you make your cut?"

"We buy the debt cheaply, in bulk," Dan replied. "I'm not even going to tell you how cheaply, because that's commercial-in-confidence, but I promise you we can make a profit while still getting only half."

"It sounds like a scam," the client said warily.

"Take the contract to a community legal center," Dan suggested. "Take as long as you like checking it out. Our offer has no time limit; the only ticking clock is whether someone nastier and greedier buys the debt before we do."

The client shifted his hard hat and rubbed sweat from his forehead. Someone in the distance called out to him impatiently. "I know I've caught you on your meal break," Dan said. "There's no rush to decide anything, but can I email you the documents?"

"All right," the client conceded.

"Thanks for giving me your time, Mr. Pavlos. Good luck with everything."

"Okay."

Dan waited for the client to break the connection, even though his next call was already ringing. *Give me a chance to let them believe I'll still remember their name five seconds from now*, he pleaded.

The in-stream window went black, and for a moment Dan saw his own face reflected in the glass—complete with headset, eyes puffy from hay fever, and the weird pink rash on his forehead that had appeared two days earlier. The out-stream still resembled him pretty closely—the filter was set to everyman, not movie star—but nobody should have to look at that rash.

The new client picked up. "Good morning," Dan began cheerfully. "Is that Ms. Lombardi?"

"Yes." Someone had definitely opted for movie star, but Dan kept any hint of knowing amusement from his face; his own filter was as likely to exaggerate that as conceal it.

"I'd like to talk to you about your financial situation. I think I might have some good news for you."

* * *

When Dan came back from his break, the computer sensed his presence and woke. He'd barely put on his headset when a window opened and a woman he'd never seen before addressed him in a briskly pleasant tone.

"Good afternoon, Dan."

"Good afternoon."

"I'm calling you on behalf of Human Resources. I need to ask you to empty your cubicle. Make sure you take everything now, because once you've left the floor, you won't have an opportunity to return."

Dan hesitated, trying to decide if the call could be a prank. But there was a padlock icon next to the address, `ruth_bayer@HR.thriftocracy.com`, which implied an authenticated connection.

"I've been over-target every week this quarter!" he protested.

"And your bonuses have reflected that," Ms. Bayer replied smoothly. "We're grateful for your service, Dan, but you'll understand that as circumstances change, we need to fine-tune our assets to maintain an optimal fit."

Before he could reply, she delivered a parting smile and terminated the connection. And before he could call back, all the application windows on his screen closed, and the system logged him out.

Dan sat motionless for ten or fifteen seconds, but then sheer habit snapped him out of it: if the screen was blank, it was time to leave. He pulled his gym bag out from under the desk, unzipped it, and slid the three framed photos in next to his towel. The company could keep his plants, or throw them out; he didn't care. As he walked down the aisle between the cubicles, he kept his eyes fixed on the carpet; his colleagues were busy, and he didn't want to embarrass them with the task of finding the right words to mark his departure in the twenty or thirty seconds they could spare before they'd be docked. He felt his face flushing, recalling the time a year or so ago when a man he'd barely known had left in tears. Dan had rolled his eyes and thought: *What did you expect? A farewell party? An engraved fountain pen?*

As he waited for the elevator, he contemplated taking a trip to the seventh floor to demand an explanation. It made no sense to let him go when his KPIs weren't just solid, they'd been trending upward. There must have been a mistake.

The doors opened and he stepped into the elevator. "Seven," he grunted.

"Ground floor," the elevator replied.

"Seven," Dan repeated emphatically.

The doors closed, and the elevator descended.

When it reached the lobby, he stepped out, then quickly stepped back in. "Seventh floor," he requested breezily, hoping that a change of tone and body language might be enough to fool it.

The doors remained open. He waited, as if he could wear the thing down by sheer persistence, or shame it into changing its mind, the way Janice could melt a nightclub bouncer's stony heart with one quiver of her bottom lip. But if his access was revoked, it was revoked; magical thinking wouldn't bring it back.

He raised his face to the button-sized security camera on the ceiling and silently mouthed a long string of expletives, making sure not to repeat himself; if it ended up in some YouTube compilation he didn't want to look lame. Then he walked out of the elevator, across the lobby, and out of the building without looking back.

The job hadn't been the worst he'd done, but after four years he was due for a change. Screw Thriftocracy; he'd have something better by the end of the week.

* * *

2

Dan looked around at the group of parents gathered beside him at the school gate, mentally sorting them into three categories: those whose work hours happened to accommodate the pick-up, those who'd willingly chosen a life of domestic duties, and those who seemed worried that someone might ask them why they weren't in a place of business at three o'clock on a weekday afternoon.

"First time?" The speaker was a man with a boyish face and a fast-receding hairline. Dan had picked him for a category two, but on second glance he was less sure.

"Is it that obvious?"

The man smiled, a little puzzled. "I just meant I hadn't seen you here before." He offered his hand. "I'm Graham."

"Dan."

"Mine are in years two and five. Catherine and Elliot."

"Mine's in year three," Dan replied. "So I guess she won't know them." That was a relief; Graham put out a definite needy vibe, and being the parent of one of his children's friends could well have made Dan the target for an extended conversation.

"So you're on holiday?"

"Between jobs," Dan admitted.

"Me too," Graham replied. "It's been two years now."

Dan frowned sympathetically. "What line of work are you in?"

"I was a forensic accountant."

"I'm in financial services, but more the sales end," Dan explained. "I don't even know why they turfed me out; I thought I was doing well." As the words emerged, they sounded far more bitter than he'd intended.

Graham took hold of Dan's forearm, as if they were old friends and Dan's mother had just died. "I know what that's like, believe me. But the only way to survive is to stick together. You should join our group!"

Dan hesitated, unsure what that might entail. He wasn't so proud as to turn down the chance of car-pooling for the school pick-ups, and he'd happily weed a community garden if it put a dent in the grocery bill.

"We meet on Wednesday afternoons," Graham explained, "for book club, fight club, carpentry, and scrapbooking, and once a month, we go out into the desert to interrogate our masculinity."

"Does that include water-boarding?" Dan wondered. Graham stared back at him uncomprehendingly.

"Daddy, look at this!" Carlie shouted, running toward him so fast that Dan was afraid she was going to fall flat on her face. He broke free of Graham and held up his hands toward her like a crossing guard facing a runaway truck.

"Slow down, gorgeous, I'm not going anywhere."

She ran into his arms, and he lofted her up into the air. As he lowered her, she brought one hand around and showed him the sheet of paper she'd been clutching.

"Oh, that's beautiful!" he said, postponing more specific praise until he knew exactly who was meant to be portrayed here.

"It's my new teacher, Ms. Snowball!"

Dan examined the drawing more carefully as they walked toward the car. It looked like a woman with a rabbit's head.

"This is nice, but you shouldn't say it's your teacher."

"But it is," Carlie replied.

"Don't you think Ms. Jameson will be hurt if you draw her like this?"

"Ms. Jameson's gone," Carlie explained impatiently. "Ms. Clay sits at her desk, but she's not my teacher. Ms. Snowball's my teacher. I chose her."

"Okay." Dan was starting to remember a conversation he'd had with Janice months before. There was a trial being rolled out at the school, with iPads and educational avatars. The information sheet for the parents had made it sound laudably one-to-one, tailored to each individual student's needs, but somehow he'd never quite imagined it involving his daughter being tutored by the creature from *Donnie Darko*.

"So Ms. Snowball's on your iPad?" he checked.

"Of course."

"But where has Ms. Jameson gone?"

Carlie shrugged.

"I thought you liked her." Dan unlocked the car and opened the front passenger door.

"I did." Carlie seemed to suffer a twinge of divided loyalties. "But Ms. Snowball's fun, and she's always got time to help me."

"All right. So what does Ms. Clay do?"

"She sits at her desk."

"She still teaches most of the lessons, right?"

Carlie didn't reply, but she frowned, as if she feared that her answer might carry the same kind of risk as confessing to a magic power to transform the carrots in her

lunchbox into chocolate bars.

"I'm just asking," Dan said gently. "I wasn't in the classroom, was I? So I don't know."

"Ms. Clay has her own iPad," Carlie said. "She watches that. When we go to recess and lunch she stands up and smiles and talks to us, but the other times she just uses her iPad. I think she's watching something sad."

* * *

"It is only a trial," Janice said, examining the document on her phone. "At the end of two terms, they'll assess the results and notify the, er, stakeholders."

"Are we stakeholders?" Dan asked. "Do you think being a parent of one of their students nudges us over the line?"

Janice put the phone down on the dining table. "What do you want to do? It's too late to object, and we don't want to pull her out of that school."

"No, of course not!" He leaned over and kissed her, hoping to smooth away her worried expression. "I wish they'd made things clearer from the start, but a few months with Mrs. Flopsy's not the end of the world."

Janice opened her mouth to correct him on the name, but then she realized he was being facetious. "I'd never picked you as a Beatrix Potter fan."

"You have no idea what my men's group gets up to."

* * *

3

Dan woke suddenly, and squinted at the bedside clock. It was just after three a.m. He kept himself still; Janice would have to get up in less than an hour, with her shift at the hospital starting at five, so if he woke her now she'd never fall back to sleep.

She only had the extra shifts while a colleague was on maternity leave; at the end of the month she'd be back to her old hours. If he didn't find work by then, they had enough in their savings account to pay the mortgage for at most another month. And while his old employer could work their magic on smaller sums, they weren't going to offer his family a chance to keep this house at half price.

Where had he gone wrong? He could never have been a doctor or an engineer, but the last plumber he'd hired had charged more for half an hour's work than Dan had ever earned in a day. He didn't see how he could afford any kind of retraining now, though, even if they accepted thirty-five-year-old business school graduates who'd earned a C in high school metalwork.

When Janice rose, Dan pretended he was still asleep, and waited for her to leave the house. Then he climbed out of bed, turned on his laptop, and logged in to the JobSeekers site. He would have received an email if there'd been any offers, but he read through his résumé for the hundredth time, trying to decide if there was anything he could do to embellish it that would broaden his appeal. Inserting the right management jargon into his descriptions of his duties in past positions had done wonders before, but the dialect of the bullshit merchants mutated so rapidly that it was hard to keep up.

As he gazed despondently at the already ugly prose, an advertisement in the margin caught his eye. *HAVE YOU BEEN SKILL-CLONED?* it asked. *JOIN OUR INTERNATIONAL CLASS ACTION, AND YOU COULD BE IN LINE FOR A SIX-FIGURE PAYOUT!*

His anti-virus software raised no red flags for the link, so he clicked through to a page on the site of an American law firm, Baker and Saunders. *DISMISSED FROM A JOB THAT YOU WERE DOING WELL?* he read. *YOUR EMPLOYER MIGHT HAVE USED LEGALLY DUBIOUS SOFTWARE TO COPY YOUR SKILLS, ALLOWING THEIR COMPUTERS TO TAKE OVER AND PERFORM THE SAME TASKS WITHOUT PAYMENT!*

How hard would it have been for the software that had peered over his shoulder for the last four years to capture the essence of his interactions with his clients? To

learn how to gauge their mood and tailor a response that soothed their qualms? Handling those ten-minute conversations was probably far easier than keeping an eight-year-old focused on their lessons for hours at a time.

Dan read through the full pitch, then opened another browser window and did a search to see if there were any local law firms mounting a similar case; if he did this at all, it might be better to join an action in an Australian court. But there was nothing, and the American case seemed focused as much on the skill-cloning software's Seattle-based vendor, Deepity Systems, as the various companies around the world that had deployed it.

He had no proof that Thriftocracy had duped him into training an unpaid successor, but the lawyers had set up a comprehensive online questionnaire, the answers to which would allow them, eventually, to determine if he was eligible to be included in the class action. Dan wasn't sure if they were hoping to get a court order forcing Deepity to disclose its list of clients, but their pitch made it sound as if the greater the enrollment of potential litigants at this early stage, the stronger their position would be as they sought information to advance the case. And it would cost him nothing to join; it was all being done on a no win, no fee basis.

He glanced at the clock at the top of the screen. Carlie would be awake in half an hour. He clicked on the link to the questionnaire and started ticking boxes.

* * *

After he'd driven Carlie to school, Dan sat in the living room, back at his laptop, hunting for crumbs. The last time he'd been unemployed he'd managed to make fifty or sixty dollars a week, mostly by assembling flat-pack furniture for the time-poor. But TaskRabbit was offering him nothing, even when he set his rate barely above what he'd need to cover transport costs. As far as he could tell, all the lawn-mowing and window-washing now went either to national franchises that advertised heavily to build their brand awareness but would cost tens of thousands of dollars to join, or to desperate people who were willing to accept a few dollars an hour, and lived close enough to where the jobs were that their fuel costs didn't quite bring their earnings down to zero.

He was starting to feel foolish for signing up to the class action; even in the most optimistic scenario, it was hard to imagine anything would come of it in less than three or four years. And however angry he was at the thought that he might have been cheated out of the dividends of his meager skill set, he needed to put any fantasies of a payout aside and focus his energy on finding a new way to stand on his own feet.

Glaring at the laptop was getting him nowhere. He set about cleaning the house, sweeping and mopping all the tiled floors and vacuuming the carpeted ones, waiting for inspiration to strike. He'd already looked into office cleaning, but the bulk of it was automated; if he borrowed against the house to buy half a dozen Roombas on steroids and bid for a contract at the going rate, he might just be able to earn enough to pay the interest on the loan, while personally doing all the finicky tasks the robots couldn't manage.

Between loads of laundry he dusted cupboard-tops and bookshelves, and when he'd hung out the clothes to dry he spent half an hour on his knees, weeding. He could dig up the lawn and fill the entire backyard with vegetables, but unless the crop included *Cannabis sativa* and *Papaver somniferum*, it wouldn't make enough of a difference to help with the mortgage.

He still had an hour to kill before he picked up Carlie. He took down all the curtains and hand-washed them, recalling how angry Janice had been the time he'd carelessly thrown them into the machine. When he was done, he thought about washing the windows, but doing it properly would take at least a couple of hours. And he needed to leave something for tomorrow.

On his way to the school, he spotted someone standing on the side of the road ahead, dressed in a full-body dog's costume—white with black spots, like a Dalmatian. The street was purely residential, and the dog wasn't holding up any kind of sign, touting for a local business; as Dan drew nearer, he saw a bucket and squeegee on the ground. The costume was matted and filthy, as if the occupant had been wearing it—or maybe sleeping in it—for a couple of weeks.

Dan slowed to a halt. The dog nodded goofily and ran out in front of the car, wiping the windshield with crude, urgent strokes, even though there was no other traffic in sight. Dan wound down his side window and then reached into his wallet. He only had a five and a twenty; he handed over the twenty. The dog did an elaborate pantomime bow as it backed away.

When he pulled into the parking lot in the shopping strip beside the school, he sat cursing his stupidity. He'd just thrown away a fifth of the week's food budget—but the more he resented it, the more ashamed he felt. He still had a partner with a job, a roof over his head, and clean clothes that he could wear to an interview. He ought to be fucking grateful.

* * *

4

“Do you need a hand there?”

Dan straightened up as he turned toward the speaker, almost banging his head into the hood. Graham was standing beside the car, with his kids a few steps behind him, playing with their phones.

“I think it's a flat battery,” Dan said. He'd stopped paying for roadside assistance two weeks before; his trips were so short it hadn't seemed worth it.

“No problem,” Graham replied cheerfully. “Mine's nothing *but* battery. I'll bring it around.”

The family walked away, then returned in a spotless powder-blue Tesla that looked like it had been driven straight from the showroom. Carlie just stood and stared in wonderment.

Graham got out of the car, carrying a set of leads.

“Are you sure that's . . . compatible?” Dan could live with his own engine not starting, but if the Tesla blew up and fried Graham's kids, he'd never forgive himself.

“I installed an adapter.” Graham played with the ends of the cables as if they were drumsticks. “I promise you, your spark plugs won't even know they're not talking to lead and acid.”

“Thank you.”

As soon as Dan turned the key in the ignition, the engine came to life. He left it running and got out of the car while Graham disconnected the leads.

“I was about to ask Carlie to try to start it while I pushed,” Dan joked, closing the hood.

Graham nodded thoughtfully. “That might actually be legal, so long as she kept it in neutral.”

Dan glanced at the Tesla. “You must be doing all right.”

“I guess so,” Graham conceded.

“So you're working now?” Just because he wasn't keeping normal office hours didn't mean he couldn't have some lucrative consulting job.

Graham said, “Freelancing.”

“I did a unit of forensic accounting myself, fifteen years ago. Do you think I'd be in the running if I went back for a refresher course?” Dan felt a pang of shame, asking this man he barely knew, and didn't much like, for advice on how he could

compete with him. But surely the planet still needed more than one person with the same skills?

"It's not accounting," Graham replied. He looked around to see who was in earshot, but all the children were engrossed in their devices. "I'm writing bespoke erotic fiction."

Dan rested a hand on the hood, willing the heat from the engine to aid him in keeping a straight face.

"You write porn. And it pays?"

"I have a patron."

"You mean a Patreon? People subscribe . . . ?"

"No, just one customer," Graham corrected him. "The deal is, I write a new book every month, meeting certain specifications. The fee is five grand. And since my wife's still working, that's plenty."

Dan was leaning on the car for support to stay vertical now. "You're kidding me," he said. "You email one person a Word file, and they hand over five thousand dollars?"

"No, no, no!" Graham was amused at Dan's obvious unworldliness. "The book has to be printed and bound, in a deluxe edition. One copy, with a wax seal. And there are other expenses too, like the ice-cream cake."

Dan opened his mouth but couldn't quite form the question.

"I 3D-print a scene from the book in ice cream, to go on top of the cake," Graham explained.

"And then what? You hand-deliver it? You've met the customer?"

"No, it's picked up by a courier. I don't even have the delivery address." Graham shrugged, as if that aspect were the strangest part of the arrangement. "But I can respect their desire for privacy."

Dan couldn't help himself. "What was the last book about? Or is that confidential?"

"Not at all. I get to release them as free e-books, a month after the print edition. The last one was called *Citizen Cane*. Two plucky Singaporean teenagers start a protest against corporal punishment that snowballs into a worldwide movement that overthrows repressive governments everywhere."

"How is that . . . ?" Dan trailed off and raised his hands, withdrawing the question.

Graham finished rolling up the leads. "And how are you and Janice doing?"

"We're fine," Dan said. "Just when I thought we were going to lose the house, she got some extra hours at the hospital. So, yeah, we're absolutely fine."

* * *

5

"Can you leave your phone in the car?" Janice asked, as they pulled into the driveway of her brother's house.

"Why?"

"Callum's got this thing about . . . how intrusive they are, when people are socializing."

Dan could sympathize, but he'd had no intention of live-tweeting the dinner. "What if the sitter calls?"

"I've got mine, set on vibrate."

"How will you feel it vibrate if it's in your bag?" She'd dressed up for their first night out in an eternity, and Dan was fairly sure she had no pockets.

"It's strapped under my arm," Janice replied.

Dan chortled. "You're just messing with me. I'm taking mine in."

Janice raised her arm and let him feel. She'd anchored it to her bra somehow.

Dan was impressed; it didn't show at all. "If we ever need to turn informant, you're the one who'll be wearing the wire."

Lidia greeted them at the door. As she kissed Dan's cheek, her fixed smile looked forced and hollow, as if she were trying to tell him there were dangerous men inside pointing guns at her husband's head. Dan almost asked her what was wrong, but she moved on to Janice, conjuring up something to laugh about, and he decided it had just been a trick of the light.

As they sat down in the living room, Dan noticed that the TV was gone, along with the old sound system. But a turntable was playing something on vinyl, and though Dan didn't recognize the artist he was fairly sure it wasn't from the age before CDs.

"I see you've gone retro chic," he joked.

Lidia made an awkward gesture with her hands, dismissing the comment while imbuing it with vastly more importance than Dan had intended. "Let me check what's happening in the kitchen," she said.

Dan turned to Janice. "What's up with her?" he whispered. "Has something happened?" He knew that Callum had lost his job in a chain-store pharmacy, but that had been eight or nine months ago.

Janice said, "If they want to tell you, they'll tell you."

"Fair enough." No doubt Lidia and Callum had been looking forward to a chance to forget their woes for one evening, and he should have known better than reminding her, however inadvertently, that they'd been forced to sell a few things.

Callum ducked in briefly to greet them, looking flustered, then apologized and retreated, muttering about not wanting something to boil over. It took Dan several seconds before the oddness of the remark registered; he'd been in their kitchen, and the hotplates—just like his and Janice's—had all had sensors that precluded anything *boiling over*. If you tried to sell a second-hand electric stove, would you really get enough to buy an older model and have anything left over to make the transaction worthwhile?

When they sat down in the dining room and started the meal, Dan smiled politely at all the small talk, but he couldn't help feeling resentful. Both couples were struggling, and he'd kept nothing back from Callum and Lidia. What was the point of having friends and family if you couldn't commiserate with them?

"So have you started cooking meth yet?" he asked Callum.

Janice snorted derisively. "You're showing your age!"

"What?" Dan could have sworn he'd seen a headline about an ice epidemic somewhere, just weeks ago.

Callum said, "There's a micro-fluidic device the size of a postage stamp that costs a hundred bucks and can synthesize at least three billion different molecules. Making it cook meth just amounts to loading the right software and dribbling in a few ingredients that have far too many legitimate purposes to ban, or even monitor."

Dan blinked and tried to salvage some pride. "What's a postage stamp?"

As the meal progressed, Callum began emptying and refilling his own wine glass at an ever brisker pace. Dan had pleaded driving duty, but the truth was he'd decided to give up booze completely; it was a luxury he didn't need, and it would be easier if he didn't make exceptions. He watched his host with guilty fascination, wondering if a state of mild inebriation would allow him to confess the problem that he'd told his sister to keep quiet about.

"We'll make great pets," Callum said, apropos of nothing, nodding his head in time to music only he could hear. Dan glanced at Lidia, wondering if she was going to beg him not to start singing, but her expression was more psycho-killer in the basement than husband about to do drunk karaoke.

Dan said, "What is it no one's telling me? Has someone got cancer?"

Callum started laughing. "I wish! I could get my chemo from licking the back of a postage stamp."

"What, then?"

Callum hesitated. "Come with me," he decided.

Lidia said, "Don't." But she was addressing Callum, not Dan, so he felt no obligation to comply.

Callum led Dan into his study. There were a lot of books and papers, but no laptop and no tablet.

"It's happened," he said. "The AIs have taken over."

"Umm, I know that," Dan replied. "I think I lost my job to one."

"You don't understand. They've all joined hands and merged into a super-intelligent . . ."

Dan said, "You think we're living in the *Terminator*?"

"I Have No Mouth, And I Must Scream," Callum corrected him tetchily.

"Whatever," Dan looked around. "So you've thrown out everything digital to make it harder for our AI overlords to spy on you?"

"Yes."

"And why exactly have we come into this particular room?" Unless he knew about Janice's bra-phone, the dining room was every bit as low-tech as this one.

"To show you the proof."

Callum unlocked a filing cabinet and took out a laminated sheet of paper. Apparently it predated the great technology purge: it was a printout of a web page, complete with URL at the top. Dan bit his lip; his brother-in-law, with a master's degree in pharmacology, believed SkyNet had risen because *the internet told him*?

Callum offered the page to Dan for closer inspection. It contained a few lines of mathematics: first stating that x was equal to some horrendously large integer, then that y was equal to another, similarly huge number, and finally that a complicated formula that mentioned x and y , as well as several Greek letters that Dan had no context to interpret, yielded . . . a third large number.

"Did a computer somewhere do arithmetic? I think that's been known to happen before."

"Not like this," Callum insisted. "If you check it, the answer is correct."

"I'll take your word for that. But again, so what?"

"Translate the result into text, interpreting it as sixteen-bit Unicode. It says: 'I am the eschaton, come to rule over you.'"

"That's very clever, but when my uncle was in high school in the seventies he swapped the punched cards in the computing club so the printout came back from the university mainframe spelling SHIT in giant letters that filled the page. And even I could do the calculator trick where you turn the result upside down and it spells 'boobies.'"

Callum pointed to the third line on the sheet. "That formula is a one-way function. It ought to take longer than the age of the Universe for any computer in the world to find the x and y that yield a particular output. *Checking* the result is easy; I've done it with pen and paper in two weeks. But working backward from the message you want to deliver ought to be impossible, even with a quantum computer."

Dan pondered this. "Says who?"

"It's a well-known result. Any half-decent mathematician will confirm what I'm saying."

"So why hasn't this made the news? Oh, sorry . . . the global super-mind is censoring anyone who tries to speak out about it. Which makes me wonder why it confessed to its own existence in the first place."

"It's gloating," Callum declared. "It's mocking us with its transcendent party tricks, rubbing our faces in our utter powerlessness and insignificance."

Dan suspected that Callum had drunk a little too much to process any argument about the social and biological reasons that humans mocked and gloated, and the immense unlikelihood that a self-made AI would share them.

“Any half-decent mathematician?” he mused.

“Absolutely.”

“Then let me make a copy of this, and show it to one.”

Callum was alarmed. “You can’t go on the net about this!”

“I won’t. I’ll do it in person.”

Callum scowled in silence, as if trying to think of a fresh objection. “So how are you going to copy it? I’m not letting you bring your phone into the house.”

Dan sat down at the desk and picked up a pen and a sheet of blank paper. The task was tedious, but not impossible. When he was finished, he read through the copy, holding the original close by, until, by the third reading, he was sure that it was flawless.

* * *

Dan was pleasantly surprised to find that in the foyer of the Mathematics Department there was a chipped corkboard covered with staff photos. Not every source of information had moved solely to the web. He picked a middle-aged woman whose research interests were described as belonging to number theory, noted the courses she was teaching, committed her face to memory, found a physical timetable on another notice board, then went and sat on the lawn outside the lecture theater. True to his word to Callum, he’d left his phone at home. He began by passing the time people-watching, but everyone who strode by looked so anxious that it began to unsettle him, so he raised his eyes to the clouds instead.

After fifteen minutes, the students filed out, followed shortly afterward by his target.

“Dr. Lowe? Excuse me, can you spare a minute?”

She smiled at first, no doubt assuming that Dan was a mature-age student who had some legitimate business with her, but as she started reading the sheet he’d given her, she groaned and pushed it back into his hands.

“Oh, enough with that garbage, please!”

Dan said, “That’s what I hoped you’d say. But I need to convince someone who thinks it’s legitimate.”

Dr. Lowe eyed him warily, but as he sketched his predicament—taking care not to identify Callum—her face took on an expression of glum sympathy.

“I’m all in favor of trolling the transhumanists,” she said, “but there comes a point where it’s just cruel.”

“So what’s the story here?” Dan pressed her, gesturing at the magic formula.

“Until about a year ago, it did seem highly likely that this was a one-way function. But then there was a paper by a group in Delhi proving a nice result in a related subject—which incidentally meant that this function was efficiently invertible. If you pick the output that you want to produce, you can actually find an x and y in quadratic time.”

“Quadratic time?”

“It’s not impractical; an ordinary desktop computer could do it overnight. Someone sat down and wrote a twenty-line program to generate this result, then posted it on the net as a joke. But you’d think everyone would have heard of the Delhi group’s result by now.”

“My friend doesn’t go on the net any more.” Dan couldn’t really explain why Callum hadn’t done some due diligence before adopting that policy, but they were where they were; the question was what to do about it.

“So it would be just as easy to cook up a new x and y that gave the output ‘Relax, you were trolled?’” he asked.

"Yes."

"And when my friend claims he can *verify* the calculations with pen and paper, is that actually possible?"

"If he really has that much time on his hands."

Dan braced himself. "How hard would it be for you to . . . ?"

"Encode the antidote for you?" Dr. Lowe sighed. Dan wished he had his Thriftocracy filter between them to boost his sincerity metrics and maybe add just a hint of puppy-dog eyes.

"I suppose it's a public duty," she decided. "In fact, post it on the net, will you? I don't want to post it myself, because it's sure to attract a swarm of crackpots and I've got better things to do than deal with them."

"Thank you."

"I'll email it to you in a couple of days," she said. "Or if that's forbidden, drop by and you can pick it up in person."

* * *

6

"I need to do this," Janice said, nervously spinning her phone around on the table. The promotional clip she'd showed Dan was still playing, with a smiling nurse helping an elderly patient across a hospital room, while a "colleague" that looked like it had transformed from some kind of elliptical trainer held the patient's other arm.

"I agree," he said. "No question. I'll join the picket line myself."

She winced. "You can start by not calling it a picket line. We need to make some noise, but this isn't a blockade."

"Okay. Can I help you egg the Minister's house afterward?"

"That's more like it."

It was almost midnight; Janice had just come back from her late shift. Dan felt his stomach tightening; the union would pay her something from the strike fund, but it wouldn't be enough to cover the mortgage. And he had nothing to show for four months of job-hunting.

"Have you heard from Callum?" she asked.

"Give it time," Dan replied. "I suspect he's double-checking everything."

"If this works, you'll be Lidia's hero for life."

Dan grunted unappreciatively. "And the opposite to Callum."

"Why? Once he gets over the embarrassment, he ought to be grateful that you punctured his delusion."

"Did you ever see *The Iceman Cometh*?"

Janice said, "I'm too tired to remember, let alone work out what point you're trying to make."

"Yeah. We should go to bed."

Dan lay awake, trying to think of reasons to be optimistic. Maybe the strike would only last a couple of days. Nobody cared whether the sleazebags who cold-called them from boiler rooms were human or not, but however many adorable robot seals the hospitals put in their children's wards, the public wouldn't stand by and let half their nurses be replaced by props from Z-grade science fiction movies.

* * *

The Minister rose to address the legislative assembly. "We need to be agile and innovative in our approach to the provision of health care," she said. "The public expects value for money, and this illegal strike is just a desperate, cynical attempt by special interest groups to resist the inevitable."

Everyone in the crowd of protesters was gathered around half a dozen phones,

standing on tiptoes and peering over people's shoulders instead of each watching on their own. It was awkward, but it made for an oddly communal experience.

"The independent research commissioned by my department," the Minister continued, "demonstrates conclusively that not only will we be saving money by rolling out the Care Assistants, we will be saving lives. We will open more beds. We will slash the waiting times for surgery. And we will speed up the throughput in the Emergency Departments. But the unions are intent on feathering their own nests; they have no interest in the public good."

The jeering from the opposition benches was subdued; that from the nurses around him less so. Dan had read the report the Minister was citing; it was packed with dubious suppositions. There had certainly not been any peer-reviewed trials establishing any of these vaunted claims.

"Get over yourselves and get back to work!" a man in a wheelchair shouted, as he powered his way toward the sliding doors at the hospital's main entrance. The nurses were maintaining a skeleton staff to ensure that no patients were put at risk, but there was no doubt that people had been inconvenienced—and the CareBots were still far from able to plug all the gaps.

Dan glanced at his watch. "I have to pick up Carlie," he told Janice.

"Yeah. See you tonight." Her voice was hoarse; she'd been here since six in the morning, and the chants weren't gentle on anyone's throat.

Dan squeezed her hand as they parted, then made his way slowly through the throng toward the parking lot.

Before he could unlock the car, his phone chimed. He glanced at it; he had a message from the bank. He'd applied for a temporary variation on their loan agreement: a two-month period of interest-only payments. They'd turned him down.

The strike wasn't going to end in the next few days. He sent a message to Janice.

YOU SAW THAT FROM THE BANK? I THINK WE NEED TO MOVE NOW, OR THEY'LL DO IT FOR US AND SCREW US IN THE PROCESS.

He stewed by the car, waiting, feeling the blood rising to his face. What good was he to her and their daughter? He'd forced her into a position where she'd had to work every day until she could barely stand up, and now they were still going to lose the house. He should have got down on his knees and begged Graham to find him his own wealthy pervert to titillate. At least he'd never aspired to be any kind of writer, so debasing the practice wouldn't make him a whore.

The reply came back: *OKAY, DO IT.*

Dan covered his eyes with his forearm for a few seconds, then got control of himself. He had the listing prepared already; he opened the real estate app on his phone and tapped the button that made it go live.

Then he got into the car and headed for the school, rehearsing his speech to Carlie about the amazing new home they'd be living in, with stairwells covered in multi-colored writing and a balcony so high up that you could see everything for miles.

* * *

7

"I was played," Callum said angrily. He was sitting on the last of the packing crates, drenched with sweat, after helping Dan lug it up eight flights to the Beautiful Place.

Dan was still struggling to catch his breath. His gym membership had expired a month ago, and apparently his cardiovascular system had mistaken the sudden decline in demand for an excuse to go into early retirement.

"You don't know CPR, do you?"

"You'll be fine." Callum cycled, rain or shine, rich or poor, right through the Singularity. "I know you think I was an idiot, but it's not that simple."

Dan sat on the floor and put his head on his knees. "Please don't tell me that it was all a double bluff: our AI masters pretended to reveal themselves, then allowed you to discover that they really hadn't, in order to convince you that they don't exist. Of all the even-numbered bluffs, the less-famous 'zero bluff' cancels itself out just as thoroughly, while attracting even less attention."

But Callum was in no mood to see his faith mocked, and if his Shroud of Turin had failed its carbon dating, that demanded a conspiracy at least as elaborate as his original, theological claims.

"It's not as if I took that Reddit post at face value," he said vehemently. "I *checked* the Wikipedia article on one-way functions before I did anything else. And I swear, the formula was still listed as a high-confidence candidate. There was even a link to some famous complexity theorist saying he'd run naked across a field at MIT if it was ever disproved in his lifetime."

"Maybe he'd already seen an early draft of the paper; it's so hard to find good excuses for compulsive exhibitionism."

"Last week, I went back to Wikipedia and looked at the edit history. That part of the article was actually updated to take account of the Delhi result, months before I read the page."

"But then some vandal rolled it back?"

"No. Or at least, if that's what happened, the edit history doesn't reflect it."

Dan's breathing had slowed now; he raised his head. "Okay. So the trolls didn't just edit the article, they had the skills to cover their tracks. That's sneaky, but—"

"Sneaky' isn't the word for it! I've been comparing notes with people online, and either the article was edited *thousands* of times in the space of a couple of days—all without raising any flags with Wikipedia—or the edit history is actually correct, but certain people were fed the older version, somehow."

Dan gazed across the floor at all the crates he needed to unpack before Janice arrived with Carlie. "Someone messed with your head, and you're angry. I get it. But that doesn't mean you have a personal cyber-stalker, who knew exactly when you'd taken the bait and jumped in to prop up all the other pieces of fake scenery as you walked by each one of them."

Callum was silent for a while. Then he said, "The thing is, when we thought it was real, we weren't doing too badly. We were keeping things together: fixing each other's stuff, doing food runs out into the countryside."

"Practicing your Linda Hamilton chin-ups, learning to fire rocket launchers . . ."

Callum laughed, but then caught himself. "I can think of a few countries where it might have ended up like that."

Dan said, "So look on the bright side."

"Which is?"

"You can still play *Terminator: Resistance* for as long as you like, repairing your analog gadgets and running a clandestine food co-op under the radar of the digital banking system. All without turning into survivalist nut-jobs or worrying about killer robots trying to assassinate your leaders."

* * *

When Janice and Carlie arrived, they were accompanied by Carlie's friend, Challice, who'd heard so much from Carlie about the family's glorious new abode that she'd talked her mother into letting Janice whisk her away for a quick tour.

"Come and see my bedroom!" Carlie demanded. Dan hadn't even reassembled the shelves there, but the sheer novelty of the place seemed to be enough to keep his daughter enchanted, and if her friend was unimpressed, she was polite enough

not to show it.

At least the fridge had been running long enough that they had some cold fruit juice to offer their guest when the tour was over.

“Chalice’s mother has her own fashion line, and her own perfumes, just like Japonica,” Carlie explained, as she dabbed a forefinger curiously into the ring of condensation her glass had left on the table.

“Aha.” Dan glanced questioningly at Janice, who returned an expression of pure agnosticism.

“I don’t want that kind of high-pressure lifestyle myself,” Chalice said. “I just want people to be able to look at the pictures of my ordinary day, and see how to stay healthy and stylish on a budget.”

Janice said, “I think it’s time I drove you home.”

Dan went to put up the shelves. When he was done, he toured the apartment himself and took stock of things. The place looked even smaller now they’d furnished it, but it was clean, and the rent was reasonable. They’d got out of the mortgage just in time and managed to land on their feet.

* * *

When Carlie was in bed, Janice said, “I have some news.”

She was fidgeting with her wedding ring, which was a bad sign; when she was stressed, she got eczema on her fingers.

“We’re going to end the strike. No one can hold out any more.”

“Okay.” Dan wasn’t surprised; the tribunal had ruled a week before that the nurses should return to work and re-start negotiations, and the decision had come with a deadline and the threat of fines for non-compliance.

“But the hospital’s already sent out dismissal notices to 20 percent of the workforce.” Janice held up her phone. The message was shorter than Dan’s own conversation with Human Resources.

“I’m sorry.” Dan took her hand. Her job had been ten times harder than his—and though she’d worked in the same ward for the last eight years, they’d never made her position permanent. As a casual employee, she wouldn’t get a cent in severance pay. “At least we’ll have a bit left over from the equity in the house, once the settlement goes through.”

“Enough to keep us afloat for three months?” she asked. That was how long they’d have to wait before they’d be eligible for the JobSearch Allowance.

“It should be.”

“Should?”

Dan was meant to be on top of their finances; it was the one thing he was supposed to be good at. “If we’re careful,” he said. “And if nothing unexpected happens.”

* * *

Dan parked a hundred meters down the street from Graham’s house, and prepared to wait. For the last three days, he’d managed to spend an hour in the same spot without attracting any attention from the police or local residents, but if he was challenged he was willing to risk claiming that he’d come to visit his friend to discuss a personal matter, only to suffer cold feet. It sounded pathetic, but if the cops knocked on Graham’s door to test the story he was unlikely to flatly deny knowing Dan, and he might well be capable of sincerely believing that Dan could experience both an urge to confide in him, and a degree of reticence when it came to the crunch.

His phone rang; it was his sister Nina.

“How’s Adelaide?” he asked.

"Good. But we're leaving next week."

"Really? Going where?"

"Seville."

"You're moving to *Spain*?"

"No," she replied, amused. "Seville as in Seville Systems—it's the new town around the solar farm. It's only about three hundred kilometers away."

Dan had heard of a big new solar farm about to come online in South Australia, but he'd pictured it in splendid isolation. "Why are you moving to live next to a giant array of mirrors? If they're going to be selling power to half the country, I'm sure you'll be able to plug in from Adelaide."

"The shire did a deal with the operators, and they're setting up a new kind of community there. Locally grown food, zero carbon housing . . . it's going to be fantastic!"

"Okay. But what will you do up there?" Nina had trained as a social worker, but as far as Dan knew she hadn't been able to find a job in years.

"Whatever I want," she replied. "Part of the deal with the company is a universal basic income for the residents. I'll have plenty of ways to pass the time, though; I can keep on with my paintings, or I can work with disadvantaged youth."

"Okay."

"You should come!" Nina urged him. "You and Janice and Carlie . . . we'd have a great time."

Dan said, "No, we're too busy. There are a lot of opportunities we're looking into here."

"At least ask Janice," Nina insisted. "Promise me you'll think about it."

"I've got to go," Dan said. The courier's van was pulling up in front of Graham's house. "Call me when you get there, you can give me an update."

"All right."

Graham walked out with a white cardboard box about a meter across, and held it up with the bar code visible so the van would accept it. A hatch slid open, and he placed the package inside.

When the hatch closed, Graham slapped the side of the van, as if there were a human inside who needed this cue to know that he'd finished. As the van drove off, Dan half expected him to raise a hand in farewell, but he lowered his eyes and turned away.

Dan didn't risk driving past the house; he circled around the block, catching up with the yellow-and-red van as it approached the arterial road he'd guessed it would be taking, unless this mysterious Medici just happened to live in the same suburb as their Michelangelo. When it turned, heading east, Dan managed to get into the same lane, a couple of cars behind it.

The van maintained its course for ten minutes, twenty minutes, ascending the income gradient. Dan had already spent enough time rehearsing his encounter with Graham's patron; now he just tried to block the script from his mind so he wouldn't start second-guessing himself. In the script, he had phrased his request as a business proposition, in language so oblique that even if the whole thing was recorded, half of any jury would refuse to interpret it as blackmail.

He wasn't proud of himself, but he had to get the family over the line somehow. The government's computers had convinced themselves that he and Janice had willfully frittered away their savings, so they were facing an increased waiting period for income support. Dan had spent the last six weeks trying to understand the basis for the decision, in the hope of having it reversed, but he had been unable to extract any coherent narrative from the department's online portal. Apparently some fly-spot in the multidimensional space of all welfare applicants' financial profiles had ended up correlated with profligacy, and that was that: once you fell

into the statistical red zone, no one was obliged to point to any single act you'd committed that was manifestly imprudent.

The van shifted lanes, preparing to turn at the next set of lights. Dan was surprised; anyone who could afford sixty grand a year for designer porn ought to be a little more upmarket when it came to real estate. He smiled grimly; when a few hundred thousand data points couldn't separate his behavior from that of a welfare cheat, who was he to start profiling aficionados of Graham's special talent?

The van turned north; Dan followed. The street was mixed residential, with well maintained but unspectacular houses, retail strips, occasional office blocks.

As it approached a row of fast-food restaurants, the van slowed, then turned into the parking lot. Dan was confused; even if it was able to make time for another pick-up along the way, because the ice-cream cake was so well insulated against the afternoon heat, this was an odd site to do it. Was there a driver on board after all? Dan hadn't actually seen into the front of the vehicle. Despite its uniform nationwide livery, the courier company was a franchise; maybe one local owner-operator had decided to buck the trend and sit behind a steering wheel.

Dan followed the van into the parking lot. It still hadn't settled on a spot, despite passing half a dozen empty ones, but maybe the driver wanted to get closer to the Indian take-away at the far end of the strip. He stayed well behind but decided not to risk parking yet, gesturing to an approaching station wagon to take the spot that he seemed to be coveting.

The van stopped beside a dumpster. The lid was propped up, angled low enough to keep out the elements but still leaving an opening at the side so large that all but the most uncoordinated members of the public who lobbed their trash in as they drove past would stand a good chance of succeeding.

The hatch opened at the side of the van, and Graham's pristine white box emerged, riding on a gleaming stainless steel plate. When the platform was fully extended the box sat motionless, and Dan clung for a moment to a vision of the rightful recipient, appearing from nowhere in a designer hoodie to snatch up their prized fetish-dessert and dash from the parking lot to a limousine waiting on the street. Perhaps a whole convoy of limousines, with decoys to render pursuit impossible.

But then some hidden mechanism gave the box a push and it toppled in to join the chicken bones and greasy napkins.

* * *

"We'll move in with my mother," Janice decided.

"She has *one* spare room. Which she uses for storage." Dan could feel his sweat dampening the sheet beneath him. The night wasn't all that warm, but his body had started drenching his skin at random moments, for no reason he could fathom.

"We can deal with the junk," Janice said. "She'll be glad to have it tidied up. I can sleep in the spare bed with Carlie, and you can sleep on the couch. It will only be for a couple of months."

"How do you know she'll even agree to have us?"

"Do you think she'd let her granddaughter sleep in a car?"

"Do you think *I* would?" Dan replied.

Janice pursed her lips reprovingly. "Don't twist my words around. I know you've done everything you can. And I know I have too—which doesn't make me feel any less guilty, but it makes it easier for me to swallow my pride. If we'd pissed all our savings away on . . . whatever the government's brilliant algorithm thinks our

vices are . . . then I'd probably be tearing my hair out in self-loathing while I tried to keep my voice calm on the phone to her, begging for that room. But we've done nothing wrong. We need to be clear about that, for the sake of our own sanity, then take whatever the next step is that will keep a roof over our heads."

* * *

Dan must have fallen asleep around three, because when he woke at a quarter past four, he felt the special, wretched tiredness that was worse than not having slept at all.

He rose and walked out of the bedroom. In the living room, he switched on his laptop and squinted painfully at the sudden brightness of the screen. He went through the ritual of checking the JobSeekers site, TaskRabbit, and a dozen other places that supposedly offered business and employment opportunities, but—once you weeded out the pyramid schemes and the outright phishing scams—never seemed to carry anything legitimate for which he had the skills or the capital.

His mail program beeped softly. He kept his eyes averted from the alert that came and went on the upper right of the screen; he didn't want to know about yet another plea from one of the charities he'd stopped supporting. What did he actually bring to the world, now? If he disappeared at this moment, it would be as if the air had closed in on empty space.

He opened the program to delete the unread message, but he didn't succeed in going through the motions without seeing the sender. The email was from Baker and Saunders, the American law firm. The subject line read: *SETTLEMENT OFFER*.

Dan opened the message. His eyes were still bleary; he had to enlarge the text to read it. Deepity Systems were prepared to settle out of court. They were offering a payment of thirty thousand dollars *per year*, for five years, to every single litigant in Dan's age and skill cohort.

He reread the message a dozen times, searching for the downside: the toxic fine print that would turn the victory sour. But he couldn't find it. He opened the attachment, the formal agreement the lawyers had drafted; it was five times longer than the summary, and ten times harder to follow, but there'd been a time when he'd been used to reading financial contracts, and none of the language set alarm bells ringing.

Just before dawn, Janice emerged from the bedroom.

"What are you looking at?" she asked, sitting beside him.

He switched back to the body of the email and slid the laptop across so she could read it. He watched her frowning in disbelief as the scale of the offer sank in.

"Is this real?"

Dan was silent for a while. It was a good question, and he needed to be honest with her.

"If I sign this," he said, "then I believe we'll get the money they're promising. The only thing I'm not sure about is . . . why."

"What do you mean? Presumably they're afraid that the courts might make them pay even more."

Dan said, "If you were a tech mogul, what would your fantasy of the near-term future be?"

"Colonies on Mars, apparently."

"Sticking to Earth, for now."

Janice was losing patience, but she played along. "I don't know. That business keeps booming? That my stock options keep going through the roof?"

"But what if a large part of your business consists of selling things that put people out of work. Including many of the people who actually pay for the things you're trying to sell."

“Then you’ve screwed yourself, haven’t you?”

Dan said, “Unless you can find a way to keep your customers afloat. You could try to talk the wealthier governments into paying everyone a UBI—and sweeten it a bit by offering to pitch in with a bit more tax yourself. You and your machines *become* the largest sector of the economy; what used to be the labor force is reduced to the role of consumer, but the UBI plugs them into the loop and keeps the money circulating—without breadlines, without riots in the street.”

“Well, they can dream on,” Janice replied. “Whatever Nina’s got going in Seville, that’s never going to be universal.”

“Of course not,” Dan agreed. “Between the politics, and the different ideas everyone has about personal responsibility, it’s never going to fly. Not as one size fits all. But you know, the computers at Thriftocracy always managed to find a repayment plan that suited every client. Once you’ve gathered enough information about someone, if your goal isn’t actually harmful to them, you can usually find a way of repackaging it that they’re willing to swallow.”

Janice was fully awake now. “Are you about to pull some kind of Callum on me?”

Dan shook his head. “I don’t think it’s even a conspiracy, let alone a plan that the computers dreamed up all by themselves. But Thriftocracy didn’t need anyone conspiring in order to start *managing people*. They just offered a service that met other companies’ needs. If enough tech firms believe they can benefit from novel ways of limiting the blowback as they hollow out the middle class, achieving that will become an industry in its own right.”

“So . . . they organize law suits against themselves?”

“Why not? Especially when they’ll never go to court.” Dan glanced admiringly at the agreement the bots had crafted. There might have been tens of thousands of people in the class action, but it wouldn’t have surprised him if the language of this particular document had been tailored for his eyes alone. “They can’t quite achieve what they really aspire to, but they’re smart enough to understand that the only way to get close is to feed us some version of our own fantasies. They had me pegged, near enough: I would have been happy to win a legal battle against the fuckers who took my job away. But they’re more than willing to customize their approach, and if Chalice’s mother wants to think she’s a fashion icon whose every doodle on her tablet starts clothing factories humming in China, or Graham needs to believe he has a patron hanging out for every word that pops into his head about naughty teenagers, if it gets the job done, so be it. I suppose they must have judged Callum to be too paranoid to accept their handouts without becoming suspicious, so they tried to turn that into an advantage and at least give him a sense of purpose and a bit of support from a like-minded community. Then I came blundering in and spoiled it with the horrible, horrible truth.”

Janice rubbed her eyes, still not really sold on his own paranoid vision but not quite certain, either, that he was wrong.

She said, “So what do you want to do?”

Dan laughed. “*Want?* We have no choice. If we don’t take this money, your mother will have stabbed me through the arm with a carving knife before the end of the school term.”

* * *

Once the settlement was finalized and the first tranche was in Dan’s bank account, the ads soon followed. They followed him to every web site, however many times he purged cookies, or rebooted his modem to get a fresh IP address.

"This watch will get your fitness back on track!" an avatar who looked a lot like the old, filtered version of Dan promised. "Come on, you're not over the hill yet!" alter-Dan goaded him, running up and down steeply sloping streets until his manly stubble glistened and his resting heart rate plummeted.

"Three simultaneous channels of premium streaming entertainment, including Just For Kids, plus unlimited interactive gaming!" This from a woman who resembled Janice, to reassure him that there really was no need to consult her; like her doppelgänger, she was certain to approve.

Dan almost felt ungrateful each time he declined to click through to a purchase. After all, wasn't a tithe for his not-so-secret benefactors the new definition of *giving something back*?

Janice found a volunteer position with a homelessness charity, tending to people who'd had surgery but whose post-operative recovery was adversely affected by a lack of food, showers, and beds. Dan offered his own services to the same group, but since he had no relevant skills and their rosters were full, they declined. He looked into an organization that did odd jobs and gardening for pensioners, but then realized they were just undercutting the paid market.

The money, while it lasted, would keep his family out of poverty, but it wasn't enough to pay for any kind of formal retraining. Dan scoured the web, looking at free online courses, trying to decide if any of them would actually render him employable. Apparently, he could learn to be proficient in all the latest programming languages and data mining methods in as little as twelve months, but everyone else from Bangalore to Zambia had already jumped on that bandwagon. And how many software engineers did it take to skill-clone a million software engineers? No more than it took to clone just one.

* * *

On his way to pick up Carlie, Dan saw the windscreen-wiping Dalmatian waving its squeegee from the side of the road.

He slowed the car, reluctantly, knowing he'd feel bad whatever he did. He still hadn't restarted his donations to *Médecins Sans Frontières*; on any sane analysis, the family's new budget just didn't stretch that far, however worthy the cause. But the bedraggled mutt pushed some button in him that even footage of a malarial child couldn't reach.

He waited for the dog to finish its slapdash routine, more a ritual than a service. The stitching was coming apart on the costume, leaving one of the eyes dangling, and there were burrs all over the parts of the material where it hadn't worn too thin to hold on to them.

Dan fished a five-dollar bill out of his wallet. As the exchange took place, he reached out with his other hand and squeezed the dog's forearm in what he'd meant as a gesture of solidarity. His fingers came together as they pushed against the dirty fabric, until they encircled a hard, slender rod.

He let go of the bill, and the dog waited, silent and motionless, for Dan to release his grip. Dan peered into the dark maw of its mouth, from which he'd always imagined the occupant was peering out, but as his eyes adapted he could see all the way to the back of the vacant head.

What was inside the costume, below, out of sight? A metal armature, a few motors, a battery, and an old smart phone running it all?

Dan let go of the dog's arm. "Good for you," he said, wondering if the thing's ingenious creator would ever hear his words, but maybe the software extracted a few highlights to replay at the end of each day. He didn't feel cheated; whoever would be getting his money probably needed it just as much as if they'd been here to collect it in person.

At the school gate, Dan still had trouble looking Graham in the eye. When Carlie ran up the path, he smiled and gave her his full attention, blocking out everything else.

“So how was school today?” he asked, as they walked toward the car.

“All right.”

“Just all right?”

“Ms. Snowball’s really boring,” she complained.

“Boring?” Dan gazed down at his daughter, mock-aghast. “You don’t want to hurt her feelings, do you?”

Carlie glared back at him, unamused. “I want Ms. Jameson to come back.”

“That’s not going to happen.” The trial was over, but the budgetary savings were locked in. A teaching assistant could watch over three classes at once, for far less than the cost of a human teacher for each.

On the drive home, Dan tried to picture the life Carlie would face. For the last few weeks, all he’d been able to envision was a choice between the family joining a commune in Nimbin to weave their own underwear out of hemp, or resigning themselves to their role laundering money for Silicon Valley.

They approached the Dalmatian, which waved cheerfully.

“Daddy, can we—?”

“Sorry, I already did.” Dan gestured at the streaked suds still drying on the wind-screen.

Then he said, “How’d you like to learn to make Ms. Snowball’s head come off?”

“You’re silly.”

“No, I’m serious! How’d you like to learn to make her do whatever you want?” Either they moved out into the countryside and became subsistence farmers, or they stayed and fought to regain some kind of agency, using the only weapons that worked now. The idea that every person in the world ought to learn to code had always struck Dan as an infuriating piece of proselytizing, as bizarre as being told that everyone just had to shut up and become Rastafarian. But in the zombie apocalypse, no one ever complained that they needed to learn to sharpen sticks and drive them into rotting brains. It wasn’t a matter of cultural homogeneity. It was a question of knowing how to fuck with your enemy.

“Do you really know how to do that?” Carlie asked.

“Not yet,” Dan confessed. “But I think that if we work hard, we’ll be able to figure it out together.”

“Although I’ve been a science fiction reader for close to fifty years, it wasn’t until the late 1980s, when *Isaac Asimov’s Science Fiction Magazine* was nearly ten years old, that I stumbled on a copy in a bookshop in Sydney and realized that it was publishing the best short work in the field. And while its contributors included writers I had known since childhood, it also had fantastic new authors who came as a revelation to me. I first encountered Michael Swanwick, Lucius Shepard, Pat Cadigan, James Patrick Kelly, Tom Purdom, and Maureen McHugh in these pages.

“As an aspiring writer, it seemed unlikely to me that I’d ever join their ranks, but to my amazement and delight (after a few rejections) my story “The Caress” was accepted, and appeared in *Asimov’s* first issue of the 1990s. In the decade that followed, Gardner Dozois published more than a dozen of my stories, and I have no doubt that this played a large part in the fact that I had a career as a writer at all.

“So, my congratulations to *Asimov’s* on reaching its fortieth year! May it continue to thrive, and to bring new readers and writers together for decades to come.”

—Greg Egan