

Induction

GREG EGAN

Greg Egan (www.gregegan.net) lives in Perth in Western Australia. A recluse whom few people in SF have met, he is one of the most respected writers of Hard SF in the last twenty years. He is also a programmer, and his website prominently features his mathematical computer animations. One of the most significant aspects of his fiction is the characterization. He tends to write what we sometimes call neuropsych hard sf, treating character as a scientific problem and writing about people based on how action and feeling are determined by the biochemistry of the brain. He has two books coming out in 2008: his fourth collection, *Dark Integers and Other Stories*, and his seventh SF novel, *Incandescence*.

"Induction" appeared in *Foundation 100*, the first fiction issue of the British SF Foundation's journal, celebrating one hundred issues of publication. Here Egan explores what it really takes to colonize other planets, and what kind of person might want the job.

1

Ikat spent three of the last four hours of 2099 out on the regolith, walking the length of her section of the launch gun, checking by eye for micrometeorite impacts or any other damage that the automatic systems might improbably have missed.

Four other junior engineers walked a few paces ahead of her, but Ikat had had enough of their company inside the base, and she kept her coms tuned to Earth, sampling the moods of the century's countdown.

The Pope had already issued a statement from Rio, imploring humanity to treat "Christianity's twenty-first birthday" as an opportunity to embrace "spiritual maturity"; the Council of Islamic Scholars in Brussels, surrendering to the ubiquity of the Gregorian calendar, had chimed in with a similar message of their own. In the pyrotechnic rivalry stakes, Sydney was planning to incinerate the decommissioned Harbour Bridge with artificial lightning, while Washington had arranged for no less than twenty-one ageing military satellites to plunge from the sky into the Potomac at the stroke of midnight.

There was no doubt, though, that Beijing had stolen the lion's share of global chatter with the imminent launch of the Orchid Seed. You could forget any purist's concept of lunar midnight; the clocks on Procellarum had been set to the easternmost of Earth's time zones ever since the construction of the base two decades before, so the official zeroing of the digits here would precede celebrations in all of the globe's major cities. The PR people really had planned that far ahead.

As she paced slowly along the regolith, Ikat kept her eyes diligently on the coolant pipes that weaved between the support struts to wrap the gun barrel, although she knew that this final check was mostly PR too. If the launch failed, it would be down to a flaw that no human eye could have detected. Six successful but unpublicised test firings made such a humiliation unlikely. Still, the gun's fixed bearing rendered a seventh,

perfectly timed success indispensable. Only at "midnight" would the device be aimed precisely at its target. If they had to wait a month for a relaunch, hundreds of upper-echelon bureaucrats back on Earth would probably be diving out of their penthouse windows before dawn. Ikat knew that she was far too low in the ranks to make a worthwhile scapegoat, but her career could still be blighted by the ignominy.

Her mother was calling from Bangkok. Ikat pondered her responsibilities, then decided to let the audio through. If she really couldn't walk, talk and spot a plume of leaking coolant at the same time, she should probably retire from her profession straight away.

"Just wishing you good luck, darling," her mother said. "And Happy New Year. Probably you'll be too busy celebrating to talk to me later."

Ikat scowled. "I was planning to call you when it reached midnight there. But Happy New Year anyway."

"You'll call your father after the launch?"

"I expect so." Her parents were divorced, but her mother still wanted harmony to flow in all directions, especially on such an occasion.

"Without him," her mother said, "you never would have had this chance."

It was a strange way of putting it, but it was probably true. The Chinese space program was cosmopolitan enough, but if her mother hadn't married a Chinese citizen and remained in the country for so long, Ikat doubted that she would have been plucked from provincial Bangkok and lofted all the way up to Procellarum. There were dozens of middle-ranking project engineers with highly specific skills who were not Chinese born; they were quite likely the best people on the planet for their respective jobs. She was not in that league. Her academic results had secured her the placement, but they had not been so spectacular that she would have been head-hunted across national borders.

"I'll call him," she promised. "After the launch."

She cut the connection. She'd almost reached the end of Stage Nine, the ten-kilometre section of the barrel where the pellets would be accelerated from sixteen to eighteen per cent of light speed, before the final boost to twenty per cent. For the last three years, she had worked beneath various specialist managers, testing and re-testing different subsystems: energy storage, electromagnets, cooling, data collection. It had been a once-in-a-lifetime education, arduous at times, but never boring. Still, she'd be glad to be going home. Maglev railways might seem anticlimactic after this, but she'd had enough of sharing a room with six other people, and the whole tiny complex with the same two hundred faces, year after year.

Back inside the base, Ikat felt restless. The last hour stretched out ahead of her, an impossible gulf. In the common room, Qing caught her eye, and she went to sit with him.

"Had any bites from your resumé?" he asked.

"I haven't published it yet. I want a long holiday first."

He shook his head in dismay. "How did you ever get here? You must be the least competitive person on Earth."

Ikat laughed. "At university, I studied eighteen hours a day. I had no social life for six years."

"So now you've got to put in some effort to get the pay-off."

"This is the pay-off, you dope."

"For a week or so after the launch," Qing said, "you could have the top engineering firms on the planet bidding for the prestige you'd bring them. That won't last forever, though. People have a short attention span. This isn't the time to take a holiday."

Ikat threw up her hands. "What can I say? I'm a lost cause."

Qing's expression softened; he was deadly serious about his own career, but when he lectured her it was just a kind of ritual, a role play that gave them something to talk about.

They passed the time with more riffs on the same theme, interleaved with gossip and bitching about their colleagues, but when the clock hit 11.50 it became impossible to remain blasé. Nobody could spend three years in a state of awe at the feat they were attempting, but ten minutes of sober contemplation suddenly seemed inadequate. Other probes had already been sent towards the stars, but the Orchid Seed would certainly outrace all those that had gone before it. It might yet be overtaken itself, but with no serious competitors even at the planning stage, there was a fair chance that the impending launch would come to be seen as the true genesis of interstellar travel.

As the conversation in the common room died away, someone turned up the main audio commentary that was going to the news feeds, and spread a dozen key image windows across the wall screens. The control room was too small to take everyone in the base; junior staff would watch the launch much as the public everywhere else did.

The schematics told Ikat a familiar story, but this was the moment to savour it anew. Three gigajoules of solar energy had already been packed into circulating currents in the superconducting batteries, ready to be tapped. That was not much, really; every significant payload launched from Earth had burnt up far more. One third would be lost to heat and stray electromagnetic fields. The remainder would be fed into the motion of just one milligram of matter: the five hundred tiny pellets of the Orchid Seed that would race down the launch gun in three thousandths of a second, propelled by a force that could have lofted a two-tonne weight back on Earth.

The pellets that comprised the seed were not physically connected, but they would move in synch in a rigid pattern, forming a kind of sparse crystal whose spacing allowed it to interact strongly with the microwave radiation in the gun. Out in deep space, in the decades spent in transit, the pattern

would not be important, but the pellets would be kept close together by electrostatic trimming if and when they strayed, ready to take up perfect rank again when the time came to brake. First, in the coronal magnetic field of Prosperity B; again near its larger companion star, and finally in the ionosphere of Prosperity A's fourth planet, Duty, before falling into the atmosphere and spiralling to the ground.

One cycling image on the wall rehearsed the launch in slow motion, showing the crest of electromagnetic energy coursing down the barrel, field lines bunched tightly like a strange coiled spring. A changing electric field induced a magnetic field; a changing magnetic field induced an electric field. In free space such a change would spread at the speed of light—would be light, of some frequency or other—but the tailored geometry and currents of the barrel kept the wave reined in, always in step with the seed, devoted to the task of urging this precious cargo forward.

"If this screws up," Qing observed forlornly, "we'll be the laughing stock of the century."

"You don't think Beijing's prepared for a cover-up?" Ikat joked.

"Some jealous fucker would catch us out," Qing replied. "I'll bet every dish on Earth is tuned to the seed's resonant frequency. If they get no echo, we'll all be building toilet blocks in Aksai Chin."

It was 11.58 in Tonga, Tokelau and Procellarum. Ikat took Qing's hand and squeezed it. "Relax," she said. "The worst you'll come to is building synchrotrons for eccentric billionaires in Kowloon."

Qing said, "You're cutting off my circulation."

The room fell silent; a synthetic voice from the control room counted down the seconds. Ikat felt light-headed. The six test firings had worked, but who knew what damage they'd done, what stresses they'd caused, what structures they'd weakened? Lots of people, actually; the barrel was packed with instrumentation to measure exactly those things, and the answers were all very reassuring. Still—

"Minus three. Minus two. Minus one."

A schematic of the launch gun flashed green, followed by a slow-motion reconstruction of the field patterns so flawless it was indistinguishable from the simulations. A new window opened, showing tracking echoes. The seed was moving away from the moon at sixty thousand kilometres per second, precisely along the expected trajectory. There was nothing more required of it: no second stage to fire, no course change, no reconfiguration. Now that it had been set in motion, all it had to do was coast on its momentum; it couldn't suddenly veer sideways, crashing and burning like some failed chemical rocket launched from the ground. Even if collisions or system failures over the coming decades wiped out some of the pellets, the seed as a whole could function with as little as a quarter of the original number. Unless the whole thing had been a fraud or a mass hallucination, there was now absolutely nothing that could pull the rug out from under this triumph; in three milliseconds, their success had become complete and irrevocable. At least for a century, until the seed reached its destination.

People were cheering; Ikat joined them, but her own cry came out as a tension-relieving sob. Qing put an arm around her shoulders. "We did it," he whispered. "We've conquered the world."

Not the stars? Not the galaxy? She laughed, but she didn't begrudge him this vanity. The fireworks to come in Sydney might be more spectacular, and the dying hawks burning up over Washington might bring their own sense of closure, but this felt like an opening out, an act of release, a joyful shout across the light years.

Food and drink was wheeled out; the party began. In twenty minutes, the seed was farther from the sun than Mars. In a day, it would be farther than Pluto; in ten days, farther than Pioneer 10. In six months, the Orchid Seed would have put more distance behind it than all of the targeted interstellar missions that had preceded it.

Ikat remembered to call her father once midnight came to Beijing.

"Happy New Year," she greeted him.

"Congratulations," he replied. "Will you come and visit me once you get your Earth legs, or will you be too busy signing autographs?"

Fake biochemical signals kept the Procellarans' bones and muscles strong; it would only take a day or two to acclimatise her nervous system to the old dynamics again. "Of course I'll visit you."

"You did a good job," he said. "I'm proud of you."

His praise made her uncomfortable. She wanted to express her gratitude to him—he'd done much more to help her than providing the accident of her birthplace—but she was afraid of sounding like a giddy movie star accepting an award.

As the party wound on and midnight skimmed the globe, the speechwriters of the world's leaders competed to heap praise upon Beijing's achievement. Ikat didn't care that it had all been done for the glory of a fading empire; it was more than a gesture of status and power.

Only one thing seemed bittersweet, as she contemplated the decades to come. She was twenty-eight years old, and there was every chance that these three years, these three milliseconds, would turn out to have been the pinnacle of her life.

2

The caller was persistent, Ikat gave him that. He refused to leave a message or engage with her assistant; he refused to explain his business to anyone but Ikat herself, in a realtime dialogue.

From her balcony she looked out across the treetops, listening to the birds and insects of the Mekong valley, and wondered if she wanted to be dragged back into the swirling currents of the world. The caller, whose name was Vikram Ali, had probably tracked her down in the hope of extracting a comment from her about the imminent arrival of signals from the Orchid Flower. That might have been an egotistical assumption, were it

not for the fact that she'd heard of no other participant in the launch publishing anything on the matter, so it was clear that the barrel would have to be scraped. The project's most famous names were all dead or acorporeal—and the acorporeals were apparently Satisfied, rendering them even less interested in such worldly matters than an ageing flesh-bound recluse like Ikat.

She pondered her wishes and responsibilities. Most people now viewed the Orchid Seed as a curiosity, a sociological time capsule. Within decades of its launch, a new generation of telescopes had imaged and analysed its destination with such detail and clarity that the mission had come to seem redundant. All five planets in the Prosperity system appeared lifeless, and although there were astrophysical and geochemical subtleties that in situ measurements might yet reveal, with high-resolution maps of Duty splashed across the web, interest in the slightly better view that would arrive after a very long delay began to dwindle.

What was there for Ikat to say on the matter? Should she plead for the project to be taken seriously, as more than a quaint nationalist stunt from a bygone era? Maybe the top brass weren't Satisfied; maybe they were just embarrassed. The possibility annoyed her. No one who'd been sincere in their work on the Orchid Seed should be ashamed of what they'd done.

Ikat returned Vikram Ali's call. He responded immediately, and after the briefest of pleasantries came to the point.

"I represent Khamoush Holdings," he said. "Some time ago, we acquired various assets and obligations of the URC government, including a contractual relationship with you."

"I see." Ikat struggled to remember what she might have signed that could possibly be relevant a hundred and twenty years later. Had she promised to do media if asked? Her assistant had verified Khamoush Holding's bona fides, but all it knew about the Procellarum contract was that Ikat's copy had been lost in 2145, when an anarchist worm had scrambled three per cent of the planet's digital records.

"The opportunity has arisen for us to exploit one of our assets," Ali continued, "but we are contractually obliged to offer you the option of participating in the relevant activity."

Ikat blinked. Option? Khamoush had bought some form of media rights, obviously, but would there be a clause saying they had to run down the ranks of the Orchid Seed team, offering each participant a chance to play spokesperson?

"Am I obliged to help you, or not?" she asked.

Now it was Ali's turn to be surprised. "Obliged? Certainly not! We're not slave holders!" He looked downright offended.

Ikat said, "Could we get the whole thing over in a day or two?"

Ali pondered this question deeply for a couple of seconds. "You don't have the contract, do you?"

"I chose a bad archive," Ikat confessed.

"So you have no idea what I'm talking about?"

"You want me to give interviews about the Orchid Seed, don't you?" Ikat said.

"Ultimately, yes," Ali replied, "but that's neither here nor there for now. I want to ask you if you're interested in travelling to Duty, taking a look around, and coming back."

In the lobby of the hotel in Mumbai, Ikat learnt that someone else had accepted the offer from Khamoush Holdings.

"I thought you'd be rich and Satisfied by now," she told Qing.

He smiled. "Mildly rich. Never satisfied."

They walked together to the office of Magic Beans Inc., Ikat holding her umbrella over both of them against the monsoon rain.

"My children think I'm insane," Qing confessed.

"Mine too. But then, I told them that if they kept arguing, I'd make it a one-way journey." Ikat laughed. "Really, they ought to be grateful. No filial obligations for forty years straight. It's hard to imagine a greater gift."

In the Magic Beans office, Ali showed them two robots, more or less identical to the ones the Orchid Flower, he hoped, would already have built on the surface of Duty. The original mission planners had never intended such a thing, but when Khamoush had acquired the assets they had begun the relevant R&D immediately. Forty years ago they had transmitted the blueprints for these robots, in a message that would have arrived not long after the Orchid Seed touched down. Now that confirmation of the Flower's success in its basic mission had reached Earth, in a matter of months they would learn whether the nanomachines had also been able to scavenge the necessary materials to construct these welcoming receptacles.

"We're the only volunteers?" Qing asked, gazing at his prospective doppelgänger with uneasy fascination. "I would have thought one of the acorporeals would have jumped at the chance."

"Perhaps if we'd asked them early enough," Ali replied. "But once you're immersed in that culture, forty years must seem a very long time to be out of touch."

Ikat was curious about the financial benefits Khamoush were hoping for; they turned out to revolve largely around a promotional deal with a manufacturer of prosthetic bodies. Although the designs the company sold were wildly different from these robots—even their Extreme Durability models were far more cosily organic—any link with the first interstellar explorers trudging across rugged landscapes on a distant, lifeless world carried enough resonance to be worth paying for.

Back in the hotel they sat in Qing's room, talking about the old times and speculating about the motives and fates of all their higher-ranked

colleagues who'd turned down this opportunity. Perhaps, Ikat suggested, some of them simply had no wish to become acorporeal. Crossing over to software didn't preclude you from continuing to inhabit a prosthetic body back on Earth, but once you changed substrate the twin lures of virtual experience and self-modification were strong. "That would be ironic," she mused. "To decline to engage with the physical universe in this way, for fear of ultimately losing touch with it."

Qing said, "I plan to keep my body frozen, and have my new self wired back into it when I return, synapse by synapse."

Ikat smiled. "I thought you said mildly rich." That would be orders of magnitude more costly than her own plan: frozen body, prosthetic brain.

"They caught us at just the right stage in life," Qing said. "Still interested in reality, but not still doting on every new great-great-grandchild. Not yet acorporeal, but old enough that we already feel as if we've been on another planet for forty years."

Ikat said, "I'm amazed that they honoured our contracts, though. A good lawyer could have let them hand-pick their travellers." The relevant clause had simply been a vague offer of preferential access to spin-off employment opportunities.

"Why shouldn't they want us?" Qing demanded, feigning indignation. "We're seasoned astronauts, aren't we? We've already proved we could live together in Procellarum for three years, without driving each other crazy. Three months—with a whole planet to stretch our legs on—shouldn't be beyond us."

Later that week, to Ikat's amazement, their psychological assessments proved Qing's point; their basic personality profiles really hadn't changed since the Procellarum days. Careers, marriages, children, had left their marks, but if anything they were both more resilient.

They stayed in Mumbai, rehearsing in the robot bodies using telepresence links, and studying the data coming back from the Orchid Flower.

When confirmation arrived that the Flower really had built the robots Khamoush Holdings had requested, Ikat sent messages directly to her children and grandchildren, and then left it to them to pass the news further down the generations. Her parents were dead, and her children were tetchy centenarians; she loved them, but she did not feel like gathering them around her for a tearful bon voyage. The chances were they'd all still be here when she returned.

She and Qing spent a morning doing media, answering a minute but representative fraction of the questions submitted by interested news subscribers. Then Ikat's body was frozen, and her brain was removed, microtomed, and scanned. At her request, her software was not formally woken on Earth prior to her departure; routine tests confirmed its functionality in a series of dreamlike scenarios which left no permanent memories.

Then the algorithm that described her was optimised, compressed, encoded

into a series of laser pulses, and beamed across twenty light years, straight on to the petals of the Orchid Flower.

3

Ikat woke standing on a brown, pebbled plain beneath a pale, salmon-coloured sky. Prosperity A had just risen; its companion, ten billion kilometres away, was visible but no competition, scarcely brighter than Venus from Earth.

Qing was beside her, and behind him was the Flower: the communications link and factory that the Orchid Seed had built. Products of the factory included hundreds of small rovers, which had dispersed to explore the planet's surface, and dozens of solar-powered gliders, which provided aerial views and aided with communications.

Qing said, "Punch me, make it real."

Ikat obliged with a gentle thump on his forearm. Their telepresence rehearsals had included virtual backdrops just like the Flower's actual surroundings, but they had not had full tactile feedback. The action punctured Ikat's own dreamy sense of *déjà vu*; they really had stepped out of the simulation into the thing itself.

They had the Flower brief them about its latest discoveries; they had been twenty years behind when they'd left Earth, and insentient beams of light for twenty more. The Flower had pieced together more details of Duty's geological history; with plate tectonics but no liquid water, the planet's surface was older than Earth's but not as ancient as the moon's.

Ikat felt a twinge of superfluosity; if the telescope images hadn't quite made the Orchid Flower redundant, there was precious little left for her and Qing. They were not here to play geologists, though; they were here to be here. Any science they did would be a kind of recreation, like an informed tourist's appreciation of some well-studied natural wonder back on Earth.

Qing started laughing. "Twenty fucking light years! Do you know how long that would take to walk? They should have tried harder to make us afraid." Ikat reached out and put a hand on his shoulder. She felt a little existential vertigo herself, but she did not believe they faced any great risk. The forty lost years were a *fait accompli*, but she was reconciled to that.

"What's the worst that can happen?" she said. "If something goes wrong, they'll just wake your body back on Earth, with no changes at all."

Qing nodded slowly. "But you had your brain diced, didn't you?"

"You know me, I'm a cheapskate." Non-destructive scanning was more expensive, and Khamoush weren't paying for everything. "But they can still load the backup file into a prosthesis."

"Assuming it's not eaten by an anarchist worm."

"I arranged to have a physical copy put into a vault."

"Ah, but what about the nihilist nanoware?"

“Then you and I will be the only survivors.”

Their bodies had no need for shelter from the elements, but the Flower had built them a simple hut for sanity’s sake. As they inspected the spartan rooms together, Qing seemed to grow calm; as he’d said back on Earth, anything had to be easier than the conditions they’d faced on the moon. Food would have been too complex an indulgence, and Ikat had declined the software to grant her convincing hallucinations of five-course banquets every night.

Once they’d familiarised themselves with everything in the base camp, and done a few scripted Armstrong moments for the cameras to satisfy the promotional deal, they spent the morning hiking across the rock-strewn plain. There was a line of purplish mountains in the distance, almost lost in haze, but Ikat declined to ask the Flower for detailed aerial imagery. They could explore for themselves, find things for themselves. The longing to be some kind of irreplaceable pioneer, to be the first pair of eyes and hands, the first scrutinising intelligence, was impossible to extinguish completely, but they could find a way to satisfy it without self-delusion or charade.

Her fusion-powered body needed no rest, but at noon she stopped walking and sat cross-legged on the ground.

Qing joined her. She looked around at the barren rocks, the delicate sky, the far horizon. “Twenty light years?” she said. “I’m glad I came.”

Their days were full of small challenges, and small discoveries. To cross a mountain range required skill and judgement as well as stamina; to understand the origins of each wind-blasted outcrop took careful observation and a strong visual imagination, as well as a grasp of the basic geological principles.

Still, even as they clambered down one treacherous, powdery cliff-face, Ikat wondered soberly if they’d reached the high-tide mark of human exploration. The Orchid Seed’s modest speed and reach had never been exceeded; the giant telescopes had found no hints of life out to a hundred light years, offering little motivation to launch a new probe. The shift to software was becoming cheaper every year, and if that made travel to the stars easier, there were a thousand more alluring destinations closer to home. When you could pack a lifetime of exotic experiences into a realtime hour, capped off with happiness by fiat, who would give up decades of contemporaneity to walk on a distant world? There were even VR games, based on telescope imagery, where people fought unlikely wars with implausible alien empires on the very ground she was treading.

“What are you planning to do when you get home?” she asked Qing that night. They had brought nothing with them from the base camp, so they simply slept on the ground beneath the stars.

“Back to work, I suppose.” He ran his own successful engineering consultancy; so successful that it didn’t really need him. “What else is there? I’m not interested in crawling up a computer’s arse and pretending that I’ve gone to heaven. What about you?”

“I don’t know. I was retired, happily enough. Waiting for death, I suppose.”

It hadn't felt like that, though.

Qing said, "These aren't the highest mountains on the planet, you know. The ones we've just crossed."

"I know that."

"There are some that reach into a pretty good vacuum."

Duty's atmosphere was thin even on the ground; Ikat had no reason to doubt this assertion. "What's your point?" she asked.

He turned to her, and gave her his strangest robot smile. "From a mountain like that, a coil gun could land a package of nanomachines on Patience."

Patience was a third the mass of Duty, and had no atmosphere to speak of. "To what end?"

Qing said, "High vacuum, relativistic launch speeds. What we started doesn't have to stop here."

She searched his face, unsure if he was serious. "Do you think the Flower would give us what we needed? Who knows how Khamoush have programmed it?"

"I tested the nanoware, back on Procellarum. I know how to make it give us whatever we ask."

Ikat thought it over. "Do we know how to describe everything we'll need? To identify a new target? Plan a whole new mission?" The Orchard Seed had taken thousands of people decades to prepare.

Qing said, "We'll need telescopes, computing resources. We can bootstrap our way up, step by step. Let's see how far we get in three months. And if we solve all the other problems, maybe we can go one step further: build a seed that will self-replicate when it reaches its destination, launching a couple of new seeds of its own."

Ikat rose to her feet angrily. "Not if you want my help! We have no right to spew mindless replicators in all directions. If someone from Earth wants to follow the seed we launch, and if they make their own decision when they get there to reach out further, then that's one thing, but I'm not starting any kind of self-sustaining chain reaction that colonises the galaxy while everyone sits at home playing VR games."

Qing stood up, and made a calming gesture. "All right, all right! I was just thinking out loud. The truth is, we'll be struggling to launch anything before it's time to go home. But better to try, than spend three months taking in the scenery."

Ikat remained wary for a moment, then she laughed with relief. "Absolutely. Let the real geologists back on Earth fret about these rocks; I've had enough of them already for a lifetime."

They didn't wait for dawn; they headed back for the base camp immediately.

As they approached the mountains, Qing said, "I thought it would give me some great sense of accomplishment, to come here and see with my own eyes that this thing I helped to start was finally complete. But if I could wish my descendants one blessing now, it would be never to see the end, never to find completion."

Ikat stopped walking, and mimed a toast. "To the coming generations. May they always start something they can't finish."