



CHILDREN OF RUIN

'This is really smart
science fiction'
Peter F. Hamilton

ADRIAN TCHAIKOVSKY

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MACMILLAN

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FUTURE: WHERE TWO OR THREE SHALL GATHER

EPILOGUE

To Paul

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*'If you can look into the seeds of time,
And say which grain will grow and which will not . . .'*

William Shakespeare, *Macbeth*

PAST 1
JUST ANOTHER GENESIS

So many stories start with a waking. Disra Senkovi had been asleep for decades. Something like a lifetime passed back home while he slumbered; a fraction of a lifetime passed around his oblivious form, the timespan squeezed down the relativity gradient by his proximity to the speed of light. For him, though, there was no time, nothing but the oblivion of the cold-sleep chamber. They knew how to build them back in those days.

Senkovi chose the manner of his waking. Some of his colleagues – those he thought of as less imaginative – would let themselves be fed crucial mission information, news from home, metrics from the ship, so they could spring from cold sleep with a mind full of data, ready to leap to their stations and steal a march on the day. Ludicrous, given the work they had ahead of them would take decades. Senkovi had always been unimpressed by most of his colleagues.

Instead, paradoxically, he woke himself with a dream.

He hung in the water of a warm, clean Coral Sea that hadn't existed in that virgin state since long before his birth. The sun filtered down through the waters like an embarrassment of sapphires. Below him, his best-guess reconstruction of the vanished Great Barrier Reef extended in multicoloured profusion, reds, purples and greens as far as the eye could see, like an alien city. Life whirled about the coral metropolis in a riot of motion, swimming, jetting, drifting, crawling. He turned gently, casting a benign and godlike gaze over his creation, half-sleeping, half-knowing, so that he felt the joy of having brought this into being yet not the pain of knowing the original had long predeceased him.

At last, one of his special friends signalled its presence, squirming its malleable body from a crevice within the rocks and undulating cautiously towards him. Eyes like and unlike his own regarded him with the sort of ersatz wisdom nature otherwise gave only to owls. It – determining the gender of an octopus was not a task easily performed at this remove – reached an arm towards him, Adam to his divinity, and he let his hand drift outwards slowly to accept that touch.

It was a good dream. He'd programmed it himself, creating a complex sequence of mental stimulation that drew on his specific memories and jumbled them into something semi-novel. It was still dream like, unreal, but that was what he was aiming for, so, fine. He also had to hack the ship computers with considerable ingenuity to make it happen, given that encounters with marine fauna were not on the *à-la-carte* menu when choosing a wake-up sequence. The hard part had not been inserting the neurological sequence into the ship's database but erasing all sign of his meddling. By then he'd been in and out of the mission systems quite a lot without anyone noticing, though. Senkovi had come to the conclusion that the Terraform Initiative back home was very, very lax in its digital security, and then shrugged idly and carried on with his own personal tinkering. What, after all, was the worst that could happen?

Amongst his travels within the virtual architecture of the mission protocols, Disra Senkovi had also come face to face with Disra Senkovi, or at least the crew profile and assessment record of that name. While extreme technical expertise was a given with all crew, he was interested to see the results of his personality assessments. There were two main poles, for a multi-decade mission like this, and they pulled in opposite directions. One related to how well a crewmember could cope working in isolation for long periods of time, and how they might tolerate being severed from the great mass of humanity and the course of human history. He aced that one. The other related to working in close confinement alongside other human beings you simply could not escape from, and he was dismayed to see how close he had come to rejection on that ground alone. Senkovi felt himself an affable, outgoing man. From the age of nine he had been working on constructing pseudointelligences to have conversations with, and hadn't he – more than anyone else in the crew – surrounded himself with pets back home? What better indication of a warm and loving human nature was there? He'd owned nineteen aquariums, three large enough to dive in. Many of the aquatic denizens were like close personal friends to

him. How could anyone think him antisocial, let alone make all those unfair and hurtful comments?

He was being tongue-in-cheek, of course. They meant human friends, and that had never been his strong suit. Still, he had a few, and he worked well in a task-focused environment where everyone was fixed on a common goal. And when it came to R&R, well, if he wasn't the life and soul of the party, at least he didn't step on anybody else's toes. And there was, in his humble opinion, not a human being alive who enjoyed jokes more than he did; it was just that nobody else found his funny.

Anyway, his general social inoffensiveness was just sufficient, when added to his undeniable competence, to get him on the crew, and then some combination of evaluations and computer subroutines kicked him up to be head of the Terraforming team, one below Overall Command, because if you had a slightly deranged genius on the team it was probably better to let him cox than row. That was the actual comment of the psychologist who recommended the promotion and Senkovi, having got into that file as well, treasured the perceived compliment.

But they needed him awake now. In that unreal ocean he strained, but the touch of the tentacle never quite reached his finger, and all his pets were long dead and gone on an Earth more than thirty light years away.

Disra Senkovi opened his eyes, aware that his beatific smile had crossed over from his dream and was still on his face. He felt refreshed and ready to start his day. A quick interrogation of the ship systems assured him they had arrived, their long cold journey done, the deceleration over. He sat up, stretching (more for the form of it than from any need, but he was used to doing all sorts of things because *people do them*, as a sop to the sensibilities of his fellows). He was neither alone in his sleeping compartment, nor surrounded by the bustle of a woken crew. Instead, his performance had an audience of one: Yusuf Baltiel, Overall Command.

'Boss,' Senkovi acknowledged. The lack of context to Baltiel watching him wake was disconcerting. Senkovi liked to have a handle on cause and effect and was usually smart enough to avoid surprises. He queried the ship again and found a weight of data embargoed, blocked from him, blocked from everyone except Baltiel himself. *That's not good.*

'I need a second opinion,' Baltiel told him.

'Let me guess, the planet's not there?' It had been the joke with the very first exoprobes – sometimes the data said there was an Earth-type planet but the indicators were just a bunch of other factors conspiring to give that impression. Of course, a probe had actually been shot out here, accelerating far faster than a manned ship could manage, checked that an actual terraformable planet was present and reported back. They wouldn't just send a manned mission off on a whim, now, would they? Senkovi really didn't want to have to turn around and go home.

'There's a planet.' Only now did Senkovi notice the curious tension to Baltiel, a man generally in complete command of himself. He was practically vibrating like a plucked string. 'There's a planet,' he repeated. 'But there's a problem. I'm keeping it hush, for now, but it's too big for me to make the call. I need you to see.'

Because of the embargo – which Senkovi felt was a childish way to go about things – they actually had to walk to Overall Command to see the *thing* Baltiel was so agitated about. Everyone else was still peacefully on ice. Who, then, was all this cloak and dagger supposed to thwart? He kept throwing queries at the system to find out what he could and couldn't know, because the computer wasn't able to tell him what was off limits until he hit a nerve and it clammed up on him. Actual walking from one place to another was, in Senkovi's book, something the future should have done away with long before, and his legs were having difficulty with the rotational gravity so that he bandy-kneed his way around the edge of the crew ring behind Baltiel's brisk stride. Baltiel was blocking transmission back home, he discovered uneasily, despite the fact that any urgent cry for help Senkovi might make would take thirty years and change to arrive. It wasn't like he'd be able to hold a murderous Baltiel off for that long, or indeed at all.

‘Just tell me, boss,’ he complained to the man’s back.

Baltiel stopped, turned. There was a kind of fervour in his face that made Senkovi flinch. *He’s found God*, was his instant thought, which was all sorts of extra not good, especially considering the most recent news from home. He had idly sifted through the updates while walking – all of it was decades out of date, but it looked like Earth had gone through a spot of trouble a while back, with anti-science terrorism and all sorts. *Makes you glad you’re in space, man*.

‘I need you to see.’ It wasn’t just mystery for the sake of it. Baltiel had drawn himself up to deliver the revelation, and failed.

A hundred more rubbery steps and they arrived at Overall Command, where the large screens displayed solar and planetary data and a visual representation of the destination system they had at last achieved, known as Tess 834 after the long-ago Earth-orbiting satellite that had first picked it out of the firmament.

Senkovi started with the big stuff, making sure the star wasn’t about to go nova, looking for major disruptions or absences among Tesses 834b, c and d, the three colossal gas giants that filled out the waist of the virtual orrery and had the privilege of the first few letters because their mass had them detected first by Earth’s instruments. Two of them were not much shy of Jupiter for size, one of them quite a bit bigger. *Nice meteor screen for our inner worlds*, he thought. ‘E’ and ‘f’ were further out, rock-and-ice monsters carving lonely paths in the reaches where the system’s sun was little more than one more star among many. Of inner worlds there were three, one of them virtually rolling through the star’s upper atmosphere, the other two close neighbours in the broad habitable zone but as different as siblings could be. Senkovi pulled up more data, still looking for the problem. The outermost of the pair, Tess 834g, was a little smaller than Earth, shining with an icy albedo through a thin atmosphere shorn of greenhouse gases. Any heat thrown its way just bounced right back off and was lost to space; Goldilocks zone or no, any fair-haired visitor was going to find her porridge inedibly frozen save at high summer around the equator. The other, their target Tess 834h, was warmer than Earth, slightly larger, its atmosphere muggy and heat-retaining, jealously hoarding everything the sun threw its way. There was a moon large enough for its gravity to make tides and keep its spin axis stable, and initial scans showed the presence of most elements human life would find useful. All in all, it would be a good match for human habitation once they’d let the terraformers loose on it. They could install a working ecology with a minimum of fuss and then maybe someday people could come and live on it. Or else that crazy lady Kern would arrive and do unspeakable things in the name of science. A lot of the terraforming team were frustrated with their glorious champion and leader Avrana Kern because her priorities did not seem to actually match the mission statement, while Senkovi was frustrated with her because she was doing all the fun stuff he would have preferred to do.

‘This all looks . . .’ *Good*, except it all looked a bit too good, now he mentioned it. Oxygen content on Tess 834h in particular was higher than he would expect. ‘Ah . . . what am I . . .?’

‘This was one of the late surveys,’ Baltiel said over his shoulder. ‘By then they were very focused. They’d given up looking for the other stuff. The left-field stuff.’ *The real stuff*. He hadn’t said it but Senkovi heard the ghost of the thought in the other man’s words.

The ship had performed its own survey as it closed in with the Tess 834 system, its instruments far in advance of the old exoprobes, drawing up a detailed picture of the terraforming challenge ahead. The ship itself had not blinked at the data, nor considered that it was making a discovery. Just like the exoprobe, it could only see what it was looking for. Senkovi was having a similar difficulty. He even pulled up the best visual image of the planet, taken by the ship as it zipped past on its way to brake around the red-orange sun. A single brown megacontinent, a great ink-coloured sea, spiralling wisps of cloud. ‘This looks ideal terraforming territory, to be honest . . .’

But Baltiel just said nothing, and eventually every sound in the room, every shuffle and rustle, fell into the cavernous void of his silence as he waited for Senkovi to flip the data like an optical illusion, to see the other side of the story. And eventually Senkovi stopped looking at the readings like the exoprobe and read them like a human being, and he fell still and silent, too.

They had come as far from Earth as any human ever had, travelled for a generation, left behind a planet fragmenting into political disarray to gift this distant desert orb with life. But they were too late. Life was already there.

The terraforming vessel had been named the *Aegean*, which everyone except Senkovi and Baltiel assumed was just one more name from the long electronic list that some computer kept for giving ships inoffensive monikers. Senkovi happened to have hacked the vulnerable part of the data chain and changed the *Maratha* to the *Aegean* because he preferred it, but no point letting that become public knowledge, not with so much on everybody's minds.

The *Aegean* had a crew of thirteen, and every one of them was awake now. The ship's datasphere was busy with eleven men and women trying to work out what was going on. Senkovi's preference would be to either just post the information up or not tell them at all, but Baltiel was a showman at heart, and moreover he was about to propose a rather radical departure from their mission. Senkovi, forewarned, was already working on his own counter-proposals, because he had come out here for a reason and didn't much like people messing with his routines, even routines planned out decades in advance.

He and Baltiel had been busy, prior to waking the others. The *Aegean* was in stable orbit around Tess 834h, although the data embargo extended to the viewscreens that otherwise would have given a window-like view of the world below. The two early risers had fabricated a long-range in-atmosphere scout remote for a special mission. Honestly, the most complex part had been thoroughly disinfecting the thing. There were Earth microbes that could survive vacuum and the burn of re-entry, and a century of space industry had created a bizarre new habitat that bacteria and fungi had evolved to inhabit. It wasn't usually a concern of terraformers, whose job was, after all, to seed new planets with as much new life as possible. Baltiel was taking no chances, though. There was a living world out there and the last thing he wanted was to unleash some microbial apocalypse.

So they had printed the thing off, built it from the ground up in sterile conditions, coated it with foam and then vented it out into space, its rubbery armour ablating away until the pristine remote was all that was left, untouched by human hands.

Then they had sent it into the planet's atmosphere to take a look. Senkovi's imagination was full of algal pools, bacterial mats, stromatolites. The history of life on Earth was one of a long age of primitive single cells, alone or clinging together in makeshift, unorganized colonies. Complex life was merely the recent froth over a great vat of prokaryotes feeding and dividing and dying. That was what they expected to find: a scum of undifferentiated life clinging to the coastlines of that one great continent.

Then the remote had gone low enough to start recording images, and they had watched and watched, revising their impressions, glancing at one another. Senkovi had twined his fingers at the implications for his work; Baltiel had been stock still, a man given a destiny.

They put the remote into its own orbit and told the ship to wake the others, and here they were, gathered together so Baltiel could draw aside the curtain and show them the magic.

'You're probably wondering if I've gone mad,' he addressed them. In fact he had been keeping tabs on just what enquiries they had made of the ship's systems, using Overall Command access to eavesdrop on the conversations flitting between their implants. Some of them did indeed think he'd suffered some breakdown as a result of the cold-sleep process, even though that was supposedly impossible with the modern units. Others had been picking up the news from Earth, sifting through all the signals that had chased after the *Aegean* and coming to the uncomfortable conclusion that the Earth – as it had been thirty-one years ago – was in the grip of war in all but name. Was Baltiel about to declare for one side or another? Was he about to accuse some of them of being anti-science quislings? The conflict brewing back home – the conflict that *had* been brewing way back when, anyway – went further than science versus conservatism, but as they were all scientists their takes on it were naturally skewed.

A number of them had tried to circumvent his embargo, either to glean more information or, in the case of Doctor Erma Lante, to send a report home. Senkovi, now Baltiel's willing co-

conspirator, had been able to thwart them all for the same reasons that poachers make the best gamekeepers. And what Lante felt a report home would accomplish, at this remove, was anybody's guess. They were their own little state with thirteen citizens, cut off from human progress, marooned on a desert island in a sea the size of the universe.

'Just watch,' Baltiel told them, when he had gathered them all in one of the *Aegean's* briefing rooms, and called up his selected excerpts from the remote's travelogue.

Coming down from a cloudy, mackerel-striped sky, below was a great reddish-brown bowl, crossed by a couple of mountain chains like half-buried lines of vertebrae, sutures holding the megacontinent together. This was the hot, dry heart of the tropical latitudes, the drone coursing steadily over a dust bowl the size of Asia. At this remove, without magnification, it seemed almost featureless. The point of view dropped, though, as the remote made its controlled descent. Data on altitude, temperature and the like flickered in constantly shifting footnotes.

For a moment it could have been old Mars down there, save for the lack of craters. The world was a desert: terrible, inhospitable. Ripe for humanity to build a new Eden.

The remote dropped lower, skimming on towards this world's north and east. Ahead there was a line of darkness where night began and the footage was catching up on it. The view shifted, magnified, jerking to the right – this was Baltiel's post-flight editing, a little clumsy because he was a dreamer but not necessarily an artist. There were lakes in the desert, though of what was unclear. They leapt at the eye from the dull brown expanse, yellow, ferrous red, the blue-green of copper compounds, often concentric rings of one unlikely, toxic-looking colour within another and then another. They looked like waste pools from some factory about to be shut down by the environmental lobby, their shores crusted with glittering crystals. The sight was beautiful, yet a poster child for something inimical to human life. The display recorded a temperature of sixty-one degrees centigrade.

The remote descended further. There was no sound, and indeed the only sound would have been the wind and the rattle of grit and the roar of the machine's airscoops as it fought to stop itself overheating. Someone had been drawing in the dirt around the pools, and drawing in the poisonous water, too. There were complex radial designs, like dark snowflakes that branched and branched and met each other. Baltiel believed these were something like bacterial colonies; Senkovi said they could just as easily be inorganic. But these were the least exciting of the images he wanted the crew to see; a showman, after all.

However, he had guessed his audience might be getting slightly restless after looking at an alien desert for almost thirty minutes. The remote's view switched again, looking off towards the marching teeth of one of the mountain ranges, magnifying, zooming until there was a dot there, moving past the face of that red rock. Even with the remote giving them its all, it was hard to see what they were looking at. Something pale moved in the air and the human eye tried to recast it as a bird, a machine. The remote was closing as fast as it could, chasing the thing down. Now it resembled nothing so much as a filmy plastic bag caught on the wind, dipping and rising.

Where the desert met the mountains, the winds were strong; they'd had the run of the place, after all, and now these rising shelves of rock came to thwart them. The remote recorded gusting clouds of brown-red grit, dust devils, a great complex of thermals whirling upwards and carrying all sorts of fine debris into the higher atmosphere.

The camera had lost sight of the plastic bag; now it veered back into view, far closer. The remote was rising, above the peaks now, looking down. The thing – the indisputably living thing – lazily undulated its way along the line of the mountains.

'We think it's more than ten metres across,' Baltiel's voice broke in, because the remote gave little indication of scale.

It was like a jellyfish, a thing of absurdly thin layers, radial in layout, riding the winds and trailing filaments barely visible save where they shimmered in the sunlight. Following it for a long time, Baltiel pointed out that it was not simply airborne flotsam at the mercy of the elements. Some structure within it constantly trimmed its shape and dimensions as though a crew of sailors was taking in and letting out sails. The mood in the audience was that perhaps

Baltiel was seeing what he wanted to see, but everyone was seeing a gigantic airborne cnidarian. Everyone saw the alien. Whatever they thought of Baltiel's individual conclusions, the mood of the audience was forever changed, as were they.

They were the first humans to set eyes on something that had evolved on another world and owed nothing to Earth.

'This is nothing,' Baltiel told them, and switched to the next item in his extra-terrestrial playlist.

This was one of his favourites, for pure artistry. The remote drifted through a night sky, and below the land seemed barren, rugged yet flat; this was more of the desert, but temperate uplands, a plateau approximately the size (and, by pure chance, shape) of Texas. The planet's moon was a crescent sliver in the sky. The remote's cameras did their best to amplify the light. The ground below had a curious texture to it, whorled with knotted clusters like closed fists, each sitting in a span of empty space away from its neighbours.

The timing was utter serendipity; the remote (under Baltiel's guidance) was still trying to work out what it was looking at when dawn crested the edge of the world and threw out its red light. As day brightened over the plateau, the fists unclenched spirally, throwing out five branching arms whose inner surfaces were dark like pools – not the green of chlorophyll nor any other colour, they seemed more like solar cells than plants, and yet surely they were drinking in the sunlight in some exchange analogous to photosynthesis. And to do what? Their world was bounded by the plateau-top that they carpeted. Or perhaps this sessile form was merely the adult and their larvae rode the winds to be captured and consumed by vast jellyfish . . . Perhaps, perhaps, and here the best guesses of Baltiel or any of them were just spitting into the hurricane of the unknown.

Now the remote drifted over the sea, but that was a medium it was unsuited for and the water was almost completely opaque. There was something wallowing just below the surface, though – some huge round thing like a pale shadow glimmering within the inky ocean. Unable to make out more of it, the remote coasted on. Now they saw little nodules bobbing on the waves – 'little' meaning larger than human size, but the dark ocean was so vast that anything was dwarfed in comparison. They were translucent, veined. Baltiel thought they were immature sky-jellyfish. Perhaps, perhaps.

He showed them the poles, too – there was no land, no ice, but instead a weird sargassum of tendrils and coils and flowers, extending for hundreds of square kilometres. Everything was organized in hubs and spokes, a bizarre tessellating pattern when seen from above. The tangle seemed living but inanimate, and yet there was a constant sense of motion from beneath.

By now nobody queried the computer or tried to get round the embargo. He had them, and who can blame them? And yet he had saved the best until last.

This last sequence was where the sea met the land, shielded from the baked interior by mountains that broke the moist air and shook it down for all the rain it had to offer. Here they were on the high latitudes, still hot by Earth standards but a breath of cool air compared to the murderous tropics. The remote's eye-view soared over a flat landscape of pools and creeks and mud, a salt marsh as far as its view could take it.

Everywhere there was life opening petals or leaves or some other alien organs to the sun, digging down roots to drag the sea-borne minerals from the salt-saturated ground. Or perhaps doing something else, some alien process without an Earth equivalent. Everything was low and stunted; the biology of this world had not produced anything that could keep a tall tree standing. Everything was blackish, with iridescent hints of blue-green or rust-red. The remote drifted lower, lenses hunting movement. Something flitted past between it and the ground, something winged and definitely not a jellyfish, pale and swift, moving quite unlike a bird, a series of staccato lunges through the air. In its wake, movement began on the ground again, the narrative of prey and aerial predator impossible to resist. There were things like spiny stones rocking into motion, making slow progress as they grazed the edge of the pools.

Baltiel ended his presentation there. They'd seen enough to know how much more there must be to see. Oh, perhaps one or two were harbouring some sneaking disappointment, brought up on a certain kind of story. Because when you went to an alien world and met the aliens, the aliens were supposed to be able to greet you. Advance science as far as you like, the human mind continued to place itself at the centre of the universe. If not to create intelligence, what was it all *for*? Where were the cities, the spaceports, even the abandoned ruins of an elder civilization? And yet this was all the alien life ever discovered that the human eye could make out unaided. A miracle that it had broken out of bacteria-analogues in the first place; a miracle that the result was something they could even recognize as 'life'.

Then Baltiel called up their mission statement which was, of course (and entirely incidentally), to destroy all this and replace it with something more like home.

Senkovi watched the reactions of the crew with interest. There was no guarantee that they would see things from Baltiel's perspective. *After all, like the old films say, we came thirty-one light years from Earth to terraform planets and chew gum, and we're all out of gum.* Actually, there was gum, or at least the means to manufacture it, but that wasn't the point.

What, after all, was the 'type' for a terraformer? They were hardy frontiers-people, surely, tough engineers come out to carve a home for themselves in the far reaches of humanity's sphere of influence, like the railroad builders of old. Except that was bunk, of course. Nobody here was eking out a desperate, dangerous living to send back pennies for their families. Nor were they the colonists, destined to tough it out under an alien sky until either they or the planet surrendered to the other. When the accelerated terraforming procedures took, the terraformers themselves would be on the first ship out, leaving the planet virgin for someone else to live on. Unless they grew so in love with their handiwork that they decided to stay, against all policy and orders. And, speaking of that . . .

'This has given me something of a quandary,' Baltiel was saying, showing his working even though he'd already found his answer to the sum. 'This is an unprecedented situation. Our mission briefing doesn't cover it.' A grimace, more calling up of records on their mind's-eye displays or the ship's screens for them to peruse. 'The very first terraforming expeditions did – the in-solar ones, and the first ever out-system mission. Everyone was hopped up about extraterrestrial life. And they didn't find even a microbe, and they were spending a whole lot of money and resources. And so it fell by the wayside for later missions. Nobody puts it in the manual any more. And it's not as if we can call Earth for clarification and then wait sixty-two years for their thoughts on the matter. The decision's ours.' By which, of course, he meant 'mine'.

Senkovi considered that they could actually just go back to sleep for six decades and change, and have the ship wake them when Earth had made up its mind, but that smacked of a slavish devotion to authority that he'd never espoused. He was surprised at this crusading flame in Baltiel, though, who was apparently a less orthodox character than Senkovi had taken him for.

'I hope you'll support me in the command decision I'm making here. We can't just go to work on this planet,' Baltiel told them all. 'It would be a crime, a genocide of something we may never find again in the lifespan of our species.' And he was preaching to the choir, mostly. What made a terraformer? Apparently, a willingness not to terraform if there was something more interesting around, as though they'd all come down with ADHD. Seeing him frown, Baltiel sent over a direct message: *Do you blame them?*

No. And I'm broadly supportive of your decision . . . Senkovi threw back, letting the 'but' hang there, unspoken.

And there were a handful who would obviously rather be terraforming – they'd come out here to do a job, and though they weren't unmoved by the marvels they'd been shown, they weren't ready to just sit on their hands.

'I propose we change our mission,' Baltiel told everyone. 'Our suite of technology here is designed to cope with a wide range of investigatory tasks as well as the actual rewriting of planets, after all. We have a duty to study what we've found here, to report on it for Earth. We

won't be the last here. This planet will become the jewel of the galaxy for scientists. But we can be first, and do a good job of laying the groundwork. We can be in the history books, all of us.'

'All of us' meaning 'me', but probably there would be other names in footnotes, or immortalized as geographical features. *Mount Senkovi . . . or maybe not. Sounds like an instruction to a taxidermist.*

And again, Baltiel had most of them, but a few more were unhappy with this turn of events now. They were, after all, experts chosen for a particular task, and this wasn't it. Senkovi counted four: Maylem, Han, Lortisse, Poullister. The other seven were right with Baltiel about what they should be doing.

Senkovi decided this was his moment and flagged up a request to speak. Baltiel gave him the side-eye and asked for a little more context than that, and in return Senkovi just data-dumped the entire plan on him. *Let's see if he's as clever as he thinks he is.*

Baltiel blinked twice – that momentary pause was all the others saw – and then nodded briskly. 'Mr Senkovi, you have the floor.'

Senkovi blinked too, licked dry lips, preferring to be the scorer than the scoree when points were being dished out. All eyes on him, he coughed to buy a little time, then said, 'It's not like they'd just leave us alone, after all.' He didn't have Baltiel's grandiloquence. It was all he could do not to mumble into his chest. 'You know what they were calling the terraforming initiative, when we left Earth orbit? The Forever Project. Because this is it. This is when the human race becomes immortal, you get me? We're off Earth. We're *making* new homes amongst the stars, whether the stars want us or not. We have godlike power. People will come here, expecting to find a home. They'll be properly impressed by the jellyfish and the moving rocks and thing-what, but then they'll start asking awkward questions like, "Which house is mine, then?" I mean, you know people. We all do. Moan, moan, demand, demand, "We came thirty light years and you're showing us pictures of tidal marshland." He essayed a small smile, saw a couple of people return it. Baltiel was expressionless, waiting. *How the hell did he digest all of that? Did he get the ship to parse it for him? Did he hack my files and read it before the meeting?*

'But Yusuf's right,' he went on, making a nervous, fidgety gesture in Baltiel's direction. 'We can't do the mission, not like we're s'posed to. But we can do it anyway. Look.' And he began bringing up his diagrams and data, which he could hide behind enough that his voice gained strength as he soldiered on. 'The next planet out, Tess 834g – it's mostly an iceball, right on the very limit of the liquid water zone, but it's geologically active, and terraforming 101 says we can precision-bomb the faultlines to set it all off at once and then it won't be an iceball for long, and the gas we get out of that will kill off the albedo, and after that it'll be warm enough for the water to stay water. And there's a little land. Just a little. And there'll be more once the ice has slimmed down to liquid.'

'Not much more,' Han pointed out. 'I get 2.1 per cent of total surface area, all small island chains.' She threw her own scratch calculations into the communal virtual display for everyone to look at. Lea Han was the oldest of them, Baltiel's senior by two years, and her maths was faultless at very short notice. *Nobody was heckling the other guy*, Senkovi thought, but Han was at least playing the game.

'So the colonists live on boats,' he suggested. 'It's that or they go live alongside your aliens, and how's that going to go in three or four generations? You think everyone's going to be a responsible neighbour?'

'That's a very pessimistic appraisal of the human spirit,' objected someone – Senkovi chased down the name and got 'Sparke', and an assessment record that spoke of reliable competence without brilliance.

'One I happen to agree with.' Baltiel killed off the topic effortlessly. 'We don't know what the political milieu will be, amongst any colonists.' And people's faces showed that the old news they'd had from Earth was front and centre in most minds. Any new arrivals could be a wave of ideological maniacs, come to practice their mania out of the reach of their foes on Earth. 'We don't know what their priorities will be,' Baltiel went on. 'Mine is to conserve what we've discovered here, and to study it. I will be taking an independent module from the *Aegean* to remain in orbit around 834h. I'm looking for volunteers for that team. Mr Senkovi has my

support to attempt a terraforming of Tess 834g, and he'll retain the lion's share of the ship's resources to do so. He will, likewise, be looking for volunteers, and I can guarantee that, when we do finally get word to or from Earth, it'll be his team that has a future in the terraforming business.'

Still not as interesting as studying flying medusae, though, Senkovi concluded, but he couldn't say Baltiel hadn't given him a fair crack of the whip. For himself, he was already considering the technical challenges of bringing the ice-world to life.

In the end he got Maylem, Poullister and Han, with Lortisse defying Senkovi's assessment of him to join Team Alien. Three co-workers was, by his estimation, probably two more than he really needed. The machines would be doing the heavy lifting, after all.

'One question,' bright Sparke piped up, just as everything had been decided. 'What if you find life under the ice on 834g?'

Senkovi shrugged. 'Then, unless it has radio capacity and is a very quick learner, it's probably fucked,' he said.