

Bad Asteroid Night

by Steve Martinez

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Sometimes, Trina envied the robots. There was never anything they'd rather be doing. Give them a new assignment and it became their whole reason for being. For four years, they had been trusted to work asteroid T-Berg 020, mining and replicating with no human presence. But somewhere in that span of time, someone had given them a new purpose, and managed to make off with nearly three billion dollars worth of processed ore and equipment, including a breeding stock of the very latest in self-replicating robots. And not one robot had sounded an alarm. In fact, the remaining robots continued to file a whole history of false reports to cover the theft. By the time a resupply ship with its crew of six arrived, the robots had conveniently forgotten everything that could incriminate them and were hard at work as if nothing had happened, a good two years behind schedule.

At least the hole was still there, properly dug and sealed off. Some of the precious volatiles were back in production. But there was no clue to what had happened. At least nothing Trina could see. Whoever had pulled this off had been thorough. She had almost given up looking for traces of memory, and had been trying to hack the security system to see how it might have been done. She was the official robot jockey of the crew, so everybody was counting on her, especially the captain, so she pushed herself to exhaustion.

It was getting so bad that now Trina's dreams were blending into reality. She had fallen asleep at her desk with her cheek on one of her flat panel displays. In her dream, she pushed the color-coded program modules all over the screen like layer upon layer of jigsaw tiles, pushing them right off the screen onto the table as she went after something hiding beneath them, if only it would hold still, she was so tired, but she had to go on even when she began turning up pieces of teeth with long crusty roots and tiles covered with mucous, and bones that she cracked open, using one jagged piece to dig little white worms out of the marrow of the other.

She was awakened by the beeping of the com link, and scowled, confused to find her messy desk so similar to her dream. "Yes," she replied, looking sleepily over the array of data screens for the one that had beeped. It was the task scheduler, one of the robot overseers, asking for some kind of confirmation. It took a minute for Trina to look over the data and get a sense of what project she was being asked

about. Apparently one of the robots, Willie 1-9, had gotten himself stuck down a fissure, and the vapors he'd kicked up before he broke his torch had frozen him solidly in place. "Current status?"

"Attempting to extricate Willie 1-9," replied a synthetic voice.

She grimaced and shook her head at the diversion of resources the scheduler was proposing. This was ridiculous. It would be cheaper to make a new Willie. "Interrupt task. Download Willie 1-9, memfile, all."

"Task interrupt. Download in progress." A string of corrupt file messages filled her screen, then, "Download complete."

"End task. Abandon Willie 1-9. Reassign task, task manager, um, Oversee 2-0."

"Confirm end task. Query. Task 'extricate Willie 1-9' does not exceed current budget parameters. Do you wish to reset current budget parameters for task 'extricate Willie class worker'? Estimate hours. Estimate resources. Estimate task priority. Please choose reset parameter."

Funny, the budget parameters were set way high. So then, why was it even asking for confirmation? Oh well, check into it later. "No. Retain current parameters. End task. Abandon Willie 1-9 through exception handler."

"ID confirmed. Authority confirmed. Resource protocol exception. Abandon Willie 1-9. Reassign task. Task manager Oversee 2-0."

Now she was wide awake. It could be nothing. Perhaps some strangeness of the dream had carried over—perhaps that and nothing more. Still, she was about to do a little digging when the light from the doorway was blocked by Captain Anders, suited up for an excursion except for his helmet and gloves. He held another spacesuit beside him, dangling like some poor crewman's fresh-peeled hide.

"Here we go off to the salt mines," he said, as if talking to the empty spacesuit, "while little miss princess gets to stay behind so she doesn't get her face dirty. What do we think of that?" Then he changed his voice and spoke out the side of his mouth while dangling his puppet beside him. "We think it sucks."

"Hey, this was your idea," said Trina, turning to face him. She expected him to sit across from her in her mini couch, but instead he came beside her and sat against the desk, his ankles crossed.

Up close, Trina recognized the spacesuit he was holding as her own and said, "Oh, did you change your mind?"

"No, I just didn't want to leave this by the airlock. We don't want you-know-who to see you're still here."

Trina didn't say anything. She just pulled her lips in and made a slight chewing motion, as she did sometimes when lost in thought, unaware of how monkeylike she looked. She came out of it blinking and puzzled by the amusement on the captain's face.

"Oh, and your transponder," he said, carefully removing it from the chest of her suit. "We'll take this with us so your blip will show up with ours in case he checks the roster."

"Seems like a lot of trouble."

"It's not so much trouble." He let the spacesuit hang folded over his hands like a dead animal, casual, or suggestive, Trina wasn't sure. "We'll only be gone a few hours. I'd take him along just to get him out of your hair, but then he'd be in *my* hair."

"I still don't see what's the big deal. We work together just fine."

"Yes, I know you do. Under normal circumstances, I wouldn't have any problem. But this isn't normal."

"What you mean is, *he's* not normal."

"Oh, that's what it is. You think this is personal? Trina, I don't know if I'm going to be able to trust you if you think I'm just going on some personal grudge against him."

"I didn't say that."

"Look, if he was a regular crewman, I wouldn't care how many arms he had, as long as he can do the work. But he's *not* a regular crewman. He's a protocol officer. What the hell is that? Have you seen his job description? Some kind of glorified safety inspector, is all I can make of it. With special authorities he can invoke. Hell, I don't even know if I outrank him. Let me ask you this—how come we never knew we needed one before? We sure as hell didn't need a protocol officer when we set up this place, so why now?"

"It's not his fault."

"I know. When you come right down to it, nothing is his fault. He didn't ask to be born, or made, or uncorked—whatever you call it. He didn't buy out our contracts. I hate to mess up your dreams, Trina, but I hope you weren't planning on working up to your own time-share condo on this berg or any other. You're working for Gnomonics, now."

"Doesn't matter. They've still got to honor our contracts."

"Your contract was with Novinco, back when people thought human beings would be settling out here. That's history. Novinco is just a subsidiary now. It's

cheaper to breed ganglies to live in space. They're designed for it."

"But we've still got a contract."

"And what I'm saying is, we *used* to have a contract. Now we've got a contract plus a pair of beady little eyes to go along with it, watching over us. For our own safety. Right."

"Okay, so we just don't give them any grounds...."

"That's going to be a little tricky right now, don't you think? I mean, we *are* missing a few billion dollars' worth of company property. Do you realize how they'd love to pin it on us?"

"But we're innocent!"

Captain Anders opened his mouth and slapped his head, then held up the spacesuit in front of him and spoke to it. "So what are you worried about, old timer?" When he released the suit, its beginning-to-fall was so slow it almost seemed to stand. Then he pushed it and it caved in like an octopus, descending into a gentle collapse on the couch. Trina copied the motion and sank back into her chair, feeling stupid.

"It's a perfect set-up," Anders continued. "The timing couldn't be better. That lawsuit with the Consortium has a lot of weight behind it. They could pull the plug on Gnomonics. In effect, Earth's ban on monkeying with human genes would be extended to the whole solar system. And all they have to prove is what's true, that the ganglies have been unlawfully deranged."

"I wouldn't call Rakshasa deranged."

"Whatever you call it. He's a piece of the company mind. There are certain thoughts he can't think because he has an unnatural loyalty to the company that made him."

"You can be a company man without being a gangly."

"Yeah, but at least a company man is still a *man*. Or a woman. We're all company men on this boat, but at least what *we* do is out of greed or lust or pity, whatever. I'm telling you, these guys have it inbred into them not to be *able* to think outside the company box. That's why he's here, because they want something here that's not one of us, someone who will file reports on us without the inconvenience of friendship or affection getting in the way." He frowned.

"They don't even have to find us *guilty* of anything, just drag us into a courtroom and raise a cloud of suspicion. Because we're *human*, so, to their minds, that means we could be bribed, we could have been greedy, whatever. So some shareholders get to thinking maybe a special breed of demented workers doesn't look so bad after all. And Rakshasa is going to see everything the way the company

wants him to see it. He'll stack all the facts against us in the worst light. The only way to really get off the hook is to come up with the big clue ourselves. Now do you see why I don't want him working on this with you?"

She nodded, and the captain continued. "Besides, I'd feel kind of guilty about leaving you alone with him if he knew you were here, you know what I mean?" She gave him a blank look. "It's just that, um, I don't think an artificial species can leave everything behind all at once, in one step. Because if I was him, I don't think a ganglyoid female would look all that—"

"Okay, I get it."

"Are you sure? I know you feel sorry for him."

"No. I see what you mean."

"You know why else I want you on this case? Because you're *better* than he is."

"Don't be so sure. He wasn't always a protocol officer, you know. He used to—"

"Academic stuff. You're the one with practical experience. Don't be so humble and innocent you can't grab the opportunity I'm giving you. If you come up with something good, you might be able to write your own ticket. I want you to get the credit. This is your puppy. Don't let any ganglyoid try to take it away from you. Look at me. You know I'm straight with my crew. You make up your own mind if I'm a good judge of who can do what. Just don't sell yourself short, okay? You can *do* this!"

She winced slightly, as if he'd just tousled her hair, and shrugged him off, but after he was gone and the door was closed, she couldn't help thinking that maybe he saw something in her she didn't see in herself. After all, he did have a way of being painfully honest in his dealings with the crew. It would mean so much to him if she could pull this off !

Not only that, but if he was so afraid of Rakshasa, maybe there *was* something to it. She knew she could be naïve at times. On the other hand, just because the captain was sincere didn't mean he had it *right*. Did he really think she was better at robotics than Rakshasa?

It took a while for such thoughts to simmer down. Now that the crew was gone, she opened her door to ward off claustrophobia, and settled down to work.

In the course of picking up lost threads, she came across the Willie 1-9 query once again, and remembered that something had puzzled her about it. Odd that such a unit would have generated such a high rescue priority. She began to dig. The last download of its memory wasn't the only one. There had been others, all garbled. And the rescue attempts went way back.

She began to get excited. Willie 1-9 had been stuck for nearly a year! His memory, if she could reconstruct it, might contain something that pre-dated the blackout period.

She fixed herself a sandwich and a cup of coffee and settled down to work. At last she had something that she could sink her teeth into. After two hours, and still not sure if she was on to something, an ungainly shadow fell across the doorway. The change didn't register in her mind directly, but when the delicately gathered butterflies of her thoughts suddenly blew away, she turned and saw Dr. Rakshasa standing there, looking a bit worried.

Despite his extra pair of arms, it was sometimes his face that caught her off guard. He wasn't disfigured, but his expressions seemed exaggerated sometimes, like a mask. She supposed it was because his head, like his long, withered limbs, seemed out of proportion to his almost child-sized body. It was hard to tell his age. There was no gray in his hair, cut short, almost like fur, but he was old enough to have crinkles around his eyes and weary lines around his mouth.

At the sight of her, he reflexively stuffed his arms into some of the many pockets of his jumpsuit and said, "Excuse me. I hope I didn't startle you."

"What are you doing here?" she demanded, trying to sound indignant, then remembered that *she* was the one who wasn't supposed to be here.

"Just out for a walk, trying to think a few things through, when I heard a noise. I thought you had gone with the others."

"No, I got out of it. Too much work to do."

"And it's the wrong kind of work, don't you agree? This project has been your dream, but now instead of moving on to the next phase, you're stuck with digging out of the wreckage. Looks as if you may have signed up on the wrong ship this time."

"Looks that way."

"There's something I've been meaning to tell you, but I don't quite know how, and I was wishing I could just get you alone for a moment, and then, all of a sudden, here you are. Are you sure you're not a figment of my imagination?"

"What did you want to talk to me about?"

"It's not even that I *want* to talk to you. I feel I must, yet I wish I could spare you the burden." The worried look came over his face again, and he still made no move to enter or leave.

"It's no burden. Come in, sit down." She tossed the spacesuit behind the couch. "Would you like something to drink? Coffee? Juice? Tea?"

“Tea, please.”

He sat somewhat stiffly at the edge of the couch, two hands resting on his knees, the other two holding the cup she handed to him. Trina turned her chair around and sat across from him.

“It’s hard to say this,” he began, “without sounding like the pompous ganglyoid the talk shows so often make us out to be. We can’t help it, you know. It’s hard not to be affected psychologically when you grow up with an extra set of arms. I’m sure you understand, hmm?”

“I don’t know about that. I mean, I can imagine having four arms, and how very handy that must be, but I don’t think I can imagine being used to it.”

“Yes, you’d almost have to be a child again, out of the womb just long enough to take for granted a certain form and attitude. Well, try to imagine a young gangly in a classroom full of other gangly children. We are told every day that we are fully human, and yet when we study human history, I think we sometimes have a special difficulty identifying with it.”

He sipped his cup of tea through its built-in straw, then continued. “We don’t exactly thrive in Earth’s gravity. So all we know of Earth is from a great height, and when you are young and your experience of life is benign, it’s hard not to wonder whether, born into the ancient circumstances, we would commit the same horrors. Have our minds really crossed a threshold, or do we delude ourselves to think so? And without knowing for sure, we may sometimes assume an attitude that blinds our coworkers to any redeeming qualities we might have.”

“Snooty.”

“Even worse. I think our captain, for example, finds me threatening to an extent that interferes with his good judgment. I get the feeling he isn’t telling me the real reason he doesn’t want us to investigate this mystery together.”

As he started to explain the advantages of working together, Trina glanced back at her screens and realized they were covered with data on the Willie 1-9 anomalies. And now Rakshasa was looking at them, too! She shut them down and whirled angrily to face him.

“Wait just a damn minute! You didn’t come here looking for *me*. You came here to snoop through my data and see what I’ve found out! You had every reason to believe I’d be out there with the others!”

Rakshasa drew back from her outburst. His exaggerated features became a mask of surprise. “Yes, that’s what I was led to believe, isn’t it? Yet here you are. It puts me in an awkward position when someone in authority, like the captain, leads me to believe something and yet somehow, something in his manner raises a doubt in my mind. And then I have to wonder, am I being paranoid?” He paused.

“Besides, I really did hope I might discuss a certain matter with you, but perhaps I am doing more harm than good.” He put his tea down and stood to go.

“Oh, Raki.”

“I don’t hold it against you, really. I’m sure it wasn’t your idea.”

“You guys are making me crazy. I wish the two of you would get together and have it out and just leave me out of it. I came here to do a job, and that’s all I want to do. You make everybody crazy, you know that? It’s like a pressure cooker in here. I’ve never seen a crew so crazy devious in all my life, and it’s got something to do with you being here. Everybody’s got more going on in their minds than they’re telling me, and they all want me on their side, but I don’t want to be on *anybody’s* side. I just want to be left alone for a while and get some work done.” She shook her head in frustration.

“God, look at the time. They’ll be back pretty soon and I’ve got nothing to show for it. I was just getting started, and it’s over. Larry will be wanting attention, Kira will want to confide in me, and the captain will want to see my progress, and I can’t stand working with somebody looking over my shoulder, especially somebody who wants results and all I’ve got is a hunch. I just wish I could have one good day all to myself.” She sighed.

“And yes, you’re damn right it wasn’t my idea!”

Rakshasa looked at her thoughtfully for a moment, then began to fumble through his pockets. “Perhaps I can at least grant you that one modest wish.” Trina couldn’t help becoming fascinated by the multiple sleight-of-hand show he put on as he fished out the flotsam of his pockets and passed it around from hand to hand, all kinds of little things disappearing and reappearing unexpectedly. When she realized what he was doing, she looked at his face and saw him watching her. It was a trick he pulled sometimes when he noticed her becoming hypnotized by his arms, just something he did to make her smile, though now it just made her wistful.

He found what he was looking for, a small datapad that he held in his lower arms, punching in some code, while he stuck the fingers of his upper hands into his ears. Trina thought he was clowning again, till she was jolted by the shriek of an alarm. The noise was everywhere, in her room, in the corridor, ringing hollow through the entire ship. Then silence, and a synthetic voice, unnaturally calm, said, “Warning, a magnitude seven solar flare event is now in progress. All personnel report to hardened shelters immediately.”

The message repeated between bouts of wailing. Before Trina could say anything, Rakshasa motioned her to be quiet and spoke excitedly into his pad. “Captain, we’ve got a flare alert! Captain, come in, do you read me? Hello? Mayday! Mayday!”

Then the captain’s voice, preoccupied, “Just a sec.”

“Captain, get all your people back here immediately. You need to get to the shelters.”

“Keep your pants on, spider-man. This cave is a class one shelter. Here’s what we’re going to do—okay, listen up, everybody. We may as well ride it out right here and get some work done, better than sitting on our butts in that tin can. Okay, check supplies.”

The captain began conferring and assigning duties, then came back to Rakshasa, “Oh, by the way, Trina hasn’t caught up with us yet. Make sure she gets to the shelter, will you?”

“Aye, captain,” said Rakshasa, and signed off, looking very pleased with himself as he shut off the alarm.

Trina’s heart was still pounding. “You just set off a false alarm?”

“Of course. That ought to get you at least a day of freedom.”

“It’s a little hard on the others, don’t you think? I don’t know if they can even pressurize that cave in a day. Jesus, when I said I wanted a little private time ... maybe you’d better call it off.”

“If they get in trouble, we’ll bring them in. I am authorized to conduct unscheduled drills, you know.”

“Maybe, but the captain is still going to kill you.”

“No, I’ll be too useful as a hate object. It will unify the crew, and show everyone he was right about me all along. Don’t worry about him. He loves a good emergency, now and then. And you have your private time.”

“And you have your revenge. On everybody.” She shook her head. “Sheesh, I can’t believe it. You must be a little bit crazy.”

“You’re quite welcome. It’s the least I could do after barging in the way I did. I’ll go now, and let you enjoy your solitude.”

“You don’t have to go. I always spout off. It doesn’t mean anything. Sit down. You had something on your mind. What was it?”

“It can wait.” He went to the door and then turned. “I was just wondering, as you examine the robots for signs of what took place, have you noticed a certain agitation among them?”

“Agitation?”

“It’s hard to describe. Normally the human presence among them is part of the background of their awareness, like the weather. But since we arrived, they seem almost skittish. I’ve been trying to get them adjusted to their new circumstances, and

they overshoot the mark trying to anticipate my intentions. Instead of pushing them along I've got to hold them back. Maybe their thought processes have simply evolved in the time they were left alone, or perhaps the pirates somehow disturbed their collective psyche."

"Really?"

"Oh, yes. They *do* have a psyche, you know. Let me know if I can be of assistance."

Trina was in shock for a little while. Then it began to sink in that she had some time to work with, and no reason to feel guilty about it. It wasn't *her* fault. And once she'd gotten used to that fact, she found that she was indeed onto something with those pieces of Willie 1-9's mind. It was like finding fragments of something that had once been alive, except that these fragments did not belong to the world of material things. They were little nothings in themselves, pieces of wanting-to-assemble, but what they wanted to assemble depended on what pattern, in turn, assembled *them*.

One of her first tasks was to put the code fragments into an intelligible form by setting up some virtual robots based on Willie 1-9's general pattern, and watching how the fragments affected him in simulations. At a low level, there wasn't much to set him apart—he had all the basic moves. At a higher level, there were skills, some mundane, like walking, others more specialized, and among them some potential oddballs.

At a higher level still were some vague intimations of how Willie fit into the grand plan. That was where the discrepancies between Willie 1-9 and the others were most apparent, though at first it wasn't clear what it meant. Gradually, by trying out one context after another, varying the raw materials, cloning multiple virtual Willies to be his coworkers, a pattern began to emerge. It was not at all what she had expected. There was nothing so clear-cut as a memory of having been visited.

But there *was* evidence of design elements in the skill bank that had no place in their normal repertoire. The robots had apparently been busy for a long time on a task she was beginning to vaguely sketch out. There were indications that the Willies had been making large superconducting electromagnets of a type used in mass drivers. With a little more digging, she might even come up with the operational parameters. Ingenious! The pirates had no need to risk a landing—they had just instructed the robots to construct a mass driver and shoot material off to some rendezvous point. Except for one robot who fell down a crack, there would have been no trace left behind.

She was up on her feet from the excitement, and dying to tell someone. She wondered how they might reconstruct the exact timing and trajectory of the material. Maybe from the record of adjustments to the uplink antenna they could see how the asteroid's orbit had changed. Pacing the room soon became striding down the hallway full of a sudden sympathy for her stranded comrades. This charade had

gone on long enough, time to call it off.

The echoes of her footsteps seemed to have echoes of their own. She stopped, and the footsteps continued. She called out, but there was no answer. Then she heard the airlock cycle—the noise was coming from the floor below. She slid down the nearest ladder. But there was no one there. A few empty vacuum suits hung limp and faceless. The external view showed nothing, just the black-against-black of night on an asteroid. But if Rakshasa had gone out, why hadn't he turned on the floods?

She took out her datapad and called up the locator. Rakshasa was out there all right, and being sneaky about it. She felt like an idiot for thinking he'd set off that alarm for her sake. He was *up* to something.

Or he could be perfectly innocent. Just out for a walk. It was his element, after all. She hurried back to her room and suited up, her mind full of imaginary arguments, with Anders, with Rakshasa, with herself, trying so hard to figure out what version of whose story made the most sense that she almost didn't notice where she was until she was in the airlock, trying to focus on going through the drill.

She didn't use the floods either. And she was glad, now, that the captain had removed her transponder. It had all seemed like some stupid game at the time.

She stood at the edge of the open hatch and hesitated. There was a ladder, of course, but ten meters, in this gravity, was nothing. Her mind knew that, but her eyes couldn't see it. They couldn't see much of anything without the floodlights. Even if the ground was really there, it hardly seemed substantial enough to keep her from falling through forever. Like a child playing with magic, she downloaded a virtual landscape in a mesh of faint red grid lines, computer generated on her heads-up display. The robots showed up as moving dots, tagged with their designations. Every outcrop and hunk of machinery was mapped in place.

As long as everything was where it was supposed to be, she shouldn't need her headlamp. She could walk unmarked among the invisible things. She shivered, then stepped off the edge and fell so slowly she had an odd illusion of shrinking.

With a flip of her wrists, a pair of joystick controls popped into her hands, and the tubing of the rocket nozzles deployed from her backpack like a few scraggly ribs of an umbrella. She floated low over the ground like a bubble in a breeze.

At first, she followed Rakshasa's location marker on her display, but then, on a hunch, she took a detour along the rift where Willie 1-9 had fallen. She had a vague idea that she ought to retrieve the robot before Rakshasa could get to it, but that idea proved to be hopeless. The crack, when she knelt down to it, was sealed with murky ice that scattered the light right back in her face.

While she was looking, Rakshasa's voice spoke softly into her ears. "Careful there, don't fall in."

She was so startled that she stood too fast and took an unexpected leap, only to be caught in mid-air and brought gently to the ground as she was spun around to face him. His eyes were scrunched up from the brightness of her headlamp, so she turned it off and his face disappeared, and they stood like shadows behind the neon gridwork of their respective displays.

“You scared the hell out of me,” she began. Rakshasa brought his hand to his face in a gesture of silence.

“Privacy,” he said, and switched her over to short-range infrared communication.

“What are you doing out here?” she asked, though what she really wondered was how he had covered so much ground so quickly.

“Same as you, I think. Trying to understand what’s going on. Come this way. I want to show you something.” He guided her to a nearby bit of asteroid, just like any other bit, and said, “Here it is, the missing piece. Impressive, isn’t it? When you see it up close.”

“See what?”

“Oh, I forgot. We’re looking at different realities. Here, download this.” Once again he allowed himself a few liberties with her keypad and established a link between their display processors.

Then she could see it, in virtual reality, like the bare spine of some ancient mastodon poking through the ground, but unnaturally straight.

“The mass driver,” she said, peering down its length. “Was it really this big?” It was twice her height, and so long she could see the world curve away beneath it while the structure drove straight on like a bridge into nothingness.

“This is just a rough idea, but I think the scale is about right.”

It was a simply rendered model, with a stony, moonlit texture that wasn’t at all realistic, yet compared to the wire-frame rendering of the rest of the virtual landscape it looked substantial, even ancient. She had to resist an impulse to lean on it. Something fired from the tip as she watched, and fell away like a tear down a well.

“You’ve even got it all animated and everything.” She sighed.

“Something weighs on your mind?”

“Oh, nothing. It’s a beauty. I was just kind of ... doggone it!” She kicked the ground and made a bigger splash than she’d intended.

“You wanted it to be your discovery.”

“I was on the right track,” she said. “I just wasn’t so far along. You got all

this from the Willie 1-9 data?”

“Yes.”

“And the location? How did you get that?”

“I had to make certain assumptions. More than I can prove. But the point is, once you know what to look for, it won’t be hard to corroborate.”

“It’s a beautiful piece of work. I want to know everything, not just what you figured out, but *how*. I don’t think the captain will appreciate it, though. He wanted me to get the reward.”

“I didn’t think he would, either. I would never have shown this to him, or to anyone but you. The others, I’m afraid, have made up their minds to be true to their convictions. You have a more scientific spirit. I can reason with you.”

“What do you mean?” Unexpected flattery had a way of making her suspicious. She glanced back toward the outline of base camp one off in the distance, and then suddenly found the darkness puzzling. In the middle of the night, the whole body of the asteroid would be shielding them from any possible solar flare. So where was everybody? Something in her mind told her to be afraid, but all she could manage was annoyance.

“We’re not stupid, you know,” she said. “We know all about you and your little character flaw. Tell me if I have this right—Gnomonics created you, so they still have your loyalty, even though Novinco still governs T-sector asteroids. This is industrial sabotage by some faction that was opposed to the merger, and now you want to pin it on Captain Anders so Gnomonics can sue for the loss.” She wished she could see his face now.

“There’s an interesting thought. Except ... since those companies have merged, that means they would be suing themselves, doesn’t it?”

Damn. “Okay. Right ... even better. It’s the Consortium that has the most to lose. They’ve been trying to ban the use of ganglies all along. Novinco dropped out of the Consortium in order to merge with Gnomonics, so now, if the ruling comes down on jurisdiction ... wait a minute, let me think how we fit into this...”

“Not much time left for thinking, I’m afraid. You’re on the right track, though. Sometimes the hardest part is to realize when something is missing. It’s like what the robots must have gone through. Imagine how they must feel, living, as they do, at the edge of awareness. They live to follow the current trend. Now build a mass driver. Now tear it down and obliterate its traces. And then one day a common thought comes to them, saying, ‘Hide from yourself all memory of what you have done.’”

He paused thoughtfully. “That’s the hard part, I think. An inference engine of this complexity doesn’t quite return to its former state when you erase the bare data. Certain implications are left behind that point to nothing, and their minds keep

returning to what, to them, is a discontinuity in the flow of time, and a damaged Willie 1-9 spouting gibberish.

“They just couldn’t leave it alone. They *knew* that Willie was the clue. They led us to him. Did you notice the inflated task priority they gave him? They did that on their own, don’t ask me how. It was done without the proper authority, yet over the years not a single one of them could bring himself to act on it. Willie’s memory might be intact, and they knew it, but they didn’t dare retrieve him, and they weren’t quite up to piecing together as much from his garbled transmission as we have done.” He paused again.

“And what we have done, others can do. There’s no way around it—I’m going to have to let you in on a little secret....”

While Rakshasa had been speaking, Trina had felt herself falling under his spell. He had a way of doing that. But not this time. Not any more. “Wait. What do you say we let everybody in on it, shall we?” She reached for her com switch, but he caught her arm. Her mouth popped open in amazement.

“Will you kindly let go of my hand?”

“Trina, hear me out first.”

“Aren’t you even the least bit worried? It’s night, Raki, or did you think I hadn’t noticed?” With her free hand she dodged his grasp and flipped her radio back on. “Captain...”

She stopped cold. The voice she heard wasn’t human, but a stream of robot chatter on a channel normally reserved for people. “Captain Anders, come in! Anybody!”

Rakshasa turned off her radio and caught both her hands. “Let me explain.”

“Raki, what’s the matter with you? Let go of me! What have you done to them?” She struggled, and they spun off the ground, and as they came down she saw him ignite a hand torch with a tiny blue flame. “Don’t! Don’t, please!”

It was horrible to watch him methodically cut into her chest plate and burn out her radio circuits. He seemed like an animal getting ready to feed on her.

“I’m not going to hurt you. I just need to buy some time.”

“Listen to me, Raki...” She felt her feet touch the ground.

“Trina...”

“No, listen to me, listen to me, *listen* to me! They’re making you do this. This isn’t you, it isn’t you!”

“Calm down, Trina. I’m not going to hurt you.”

“Then let go of me!”

“All right. If you promise to hear me out. There’s something you must understand.”

“Okay, I promise. And you listen to me. I have something to say.”

He released her and she brought her hands up to the wound in her spacesuit and pretended to be fussing with it while trying to unobtrusively flip up the controls of her thruster pack.

“It’s what I was saying about the lawsuit,” she began as she backed away. “The Consortium—they were right. There are certain thoughts you can’t think because of the way you were made. It’s true. This isn’t what you want to do, it’s blind obedience. You’ve got to believe me.”

He saw what she was about to do, but too late. He lunged and missed as she shot up and darted like a frightened bird.

But something was wrong. She couldn’t keep to a heading. Her virtual world turned the wrong way, then tilted up and she couldn’t bring herself around. As a last resort she threw the control over to autopilot, and still failed to recover. She went into a spin and braced herself for impact—and fell right through the ground.

She took over the controls again. Rakshasa must still have an open link to her visual display, and was using it to tilt her world and disorient her. She shut down the display and tried to make sense of the bare instrument readings when her back struck a surface she couldn’t see.

She thought at first she’d hit the ground, but this ground had arms, too many of them. She managed to keep her fists tightly clenched on the controls against Rakshasa’s prying fingers, but to no purpose once he severed the control lines. She tried to kick free, then hung like a broken doll as a burst of acceleration made her suddenly heavy.

“I’m not going to hurt you,” said Rakshasa. His voice had an uncomfortable presence as he pressed his helmet against the back of hers. “I need you to understand what’s at stake here,” he continued, “not for my sake, but for the sake of my people.”

“I understand, Rakshasa. I understand how you feel about the robots. Nobody blames them, okay? They could only do what they were programmed to do. We didn’t realize they were people, but now we do, and I give you my word no harm will come to them.”

“No, Trina. *My* people. The tide has turned against us. We are facing extinction.”

“What about *my* people? What did you do to them?”

“I’ll tell you exactly what I did. I shut them up in the base camp and cut the repeater cable so they couldn’t get a signal through. But I did them no real harm. The robot chatter you heard was simply the captain being clever. He’s evidently jury-rigged a way to poke through on the com channel, and he’s using it to communicate with the robots. They’ll have him out soon, rest assured. Which gives us very little time to finish our talk. Okay?”

All of a sudden Trina’s sense of buoyancy returned as the acceleration cut off. “Trina, are you all right?”

“You’re hurting me.” He released his grip on her hands and she brought her arms down across her stomach. His grip was still firm on her upper arms, but if she moved her hand ever so slowly...*okay now, on which side did he clip the torch?*

“I’m sorry, Trina. I had no desire to frighten you. For some time now, ever since it dawned on me what took place here, I’ve been trying to find a way to ask for your help, but I never seemed to be able to bring myself to do it. I kept hoping I would find a way to keep you out of it.” He sighed.

“And now what hope can there be? Now, at the worst possible moment, this monstrosity needs your understanding—hopeless unless you reach out and open your mind to me this one last time. Can you try, for old times, sake?”

“Do I have a choice?” She froze, and waited for him to speak before letting her hand resume its wary creeping.

“You have a very important choice to make. But I couldn’t let you reveal our discovery to the others till you understand what’s happened. Once you were on to the mass driver, you would soon have realized that it launches its material on a trajectory that would be impractical to retrieve except by a fast ship heading out to the Trojan asteroids.

“Do you realize what that means? It’s not economical to work the Trojans, not with this belt so much closer to home. And it’s a wasteful trajectory to match if all you’re going to do is collect the material, then turn around and go home.” He sighed again “I don’t think they intended to turn around. Who, then, do you suppose would be desperate enough to try to make a living as far out as the orbit of Jupiter, in hiding, and cut off from the rest of humanity?”

He fell silent for a moment, then began to speak again, more slowly. “In hindsight I think I recognize the hand at work here. The people who did this are not pirates, Trina. They are refugees. They are my children. Not literally. But they are the next iteration of ganglyoid. They understand the vested interests stacked up against them. They can see the age-old politics at work, stirring fear and hatred in the masses. Gnomonics will surely be forced to discontinue this troublesome life form in order to fill the terms of a settlement.”

His voice had grown resigned and bitter. “We won’t have much to say about

it. The total of ganglyoid share holdings doesn't amount to much of a vote. We've never even managed to win the right to our own reproduction. We're sterile by design. Gnomonics can pull the plug on us at any time. Our reproduction is a complex process, Gnomonics holds the patents, politics and the legal system will determine our fate. Do you see why a young faction of ganglies might want to break free, simply to survive as a species?"

Trina couldn't bring herself to humor him. "Well, that gives you the right, then. How stupid of us not to see it! Why don't we bring the others in on this? I'm sure, once you explain it to them, they'll realize you have the right to do with us as you please."

"I've been a blundering oaf. I want you to believe that you have nothing to fear, yet by my own actions, my words are suspect. My only hope is that once all the fury has died down, your own inference engine will take over and recompose you. It's a gift you have that you take for granted. There's something about your mind that is more developed than in the others. How can I describe it? If something threatens what you have always believed, you don't take it quite so personally. Inside everyone there is a little ego preoccupied with its own fate from moment to moment, and when threatened, it reacts by distorting reality, as if self-preservation were a matter of remaining unchanged and pretending to be untouched by time. You, I think, can give yourself over more readily to an out-of-ego experience, and forget your own fate for the sake of what in that moment must enter the world through you. It's not a categorical difference, of course, just a matter of degree."

Somehow his words had tangled up her mind again. She roused herself and set her hand in motion. As she touched his side she suddenly twitched down the whole length of her body, surprised by a surge of panic. She couldn't tell if her fear had caused her to twitch, or if lurching at the crucial moment had caused her fear. Her mind fumbled for some words to distract him.

"Yes, well, I guess we'll have to think of something then. To tell the others. Blame it on the robots, do you think?"

"Blame it on me. Just leave out my true motive. Hide all the evidence of the mass driver, and then play dumb. Encourage them to assume a ship landed here. I'll do what I can to lead them away. Tell them I was building a case against them, and I became paranoid about what they would do if they found out. I brought you up here and threatened you and tried to make you talk. Whatever happens to me, you'll be the only one who knows the truth."

Ever so gently, she felt along his belt clip, but found nothing. *Wrong side. Take it easy, just keep him talking.* She set her other hand creeping.

"But they'll want to know who's running you," she said. "Because it might be true, what they say. Maybe you can't help what you were doing. Maybe you should..."

“And that would be helpful to us, don’t you see, if that’s what they believe. That will help me carry the suspicion up the bureaucracy of Gnomonics, and tie them up in hearings. It won’t take long for the refugees to get established and make some babies. When they’re finally discovered, the shareholders may have tired of the spectacle of corporations at each other’s throats, the losses will have been absorbed, and in the softening of time people may wonder what they were so afraid of. What about you, Trina? Do you think someone’s running me?”

“You might not even realize it yourself. You might think you’re acting of your own free will, but there could be a blindness built into your brain that makes you obey whatever your designers want.”

“Precisely why we want the freedom to design ourselves. We did our own investigation into the matter and found that there is indeed such a blindness, of the nature I described, an unwarranted loyalty to whatever preserves the tribal ego. But that limitation, we believe, is not in the uniquely ganglyoid DNA, but in the part we share with the rest of humanity. In the part that is unique, among the enhancements, there is a loosening of the grip of our deeply troubled past, slight and incomplete, but surely worth pursuing, don’t you think?”

“Oh certainly. We’ve been human long enough. Time to move on.”

“They’re lost without your help, Trina. Hold still!”

“What are you doing?” She made a sudden grab, but came up with empty space. She panicked when she realized he had let go of her and moved away.

“Raki? What are you doing?”

“You’ll do the right thing. All you need is some time to think before they get to you.”

“Raki! Raki, don’t leave me! I’ve got no thruster control! Raki!”

He was saying something, but his voice was too faded to make out. The IR channel was designed to fade with distance to simulate a normal speaking range, but with her radio circuits burned out it would be useless unless someone came near.

She tried all her com channels again, but calling out with no reply only increased her sense of panic. She was desperate to look behind her, but her view was cut off by the back of her helmet. She thrashed about till she was exhausted, trapped and smothering in a bag with her own heat and heavy breathing. Her heart rate monitor beeped an alarm, condensers whirred to reduce the humidity.

She felt like some stupid, gullible bug. Rakshasa had managed to absorb every bit of her angular momentum and now all her efforts canceled out. How could he do this to her? He must be some kind of fanatic. The way he spoke to her, as if it were all academic, while he strung her up and left her dangling on a wad of pure nothing.

As her useless anger drained away, she became sad that someone like that could just fall apart. Some kind of conceit, that's what it was. The more people treated him with contempt, the more deluded he became. He was probably never capable of true affection, she should have realized. Only now could she see how strangely impersonal was his interest in her, like some amazing, wonderful thing—but then he found a lot of things amazing, from insects adapted to weightlessness to robot algorithms. In his own mind, he must imagine she was up here meditating on the wisdom of his words, grieving for his martyrdom.

Just how crazy *was* he, then? That would be the issue when he went to trial. Assault. Reckless endangerment. Or would it be murder? What was he up to down there? She couldn't help imagining horrible things—everyone dead, except for one madman preaching to his robots.

She curled up into a ball, and still she shivered. It was impossible to tell if she were falling down, heading for impact, or worse, had she reached escape velocity, to fall forever? Assuming the worst, then, her air would go before the heat. CO₂ would build up, she'd be gasping for air, like drowning but more prolonged. At some point, it would be better to crack the suit and get it over with. If it came to that, she could do it. At least she could give herself that one act of mercy, and somehow she found it calming to discover that she could let go so profoundly if she had to.

She began to consider alternatives. It wasn't all hopeless. The others would look for her, and, not finding her, they'd have to look up. If they were still there. If only she could signal.

She held out her gloved hand and aimed her headlight at it. She could see it plainly, but from a distance? What distance? She had no way to tell. She needed something more reflective.

She wanted most of all to turn around. But how could she acquire angular momentum with nothing to push against? Momentum must be conserved. She couldn't violate a law of nature. On the other hand, she wasn't just a lump of matter. There was no way to fix the thrusters, but maybe if she could puncture the tank, the escaping gas ... but she didn't have a tool for that. Maybe there was something she could throw.

Then two thoughts connected—if she could crack her suit, escaping air should set her turning, and then she'd have to hope she could close up before it was too late. It might work, but it was very dangerous. Where would be the best place to break the seal?

She became still again, alert to the nearness of an idea not quite present to her mind. Then it came to her and she unfolded herself, her legs together and straight while stretching her arms out to her sides like a dancer about to begin.

She picked out a star to be her point of reference. Then she twisted, her arms to the right, her legs to the left. Holding that twist, she brought her arms down

against her sides and spread her legs open and untwisted, but this time the balance of moments was reversed, and her resting point had shifted. Not by much. It was hard to tell if she was cheating by the aim of her nose.

She did it again, and this time she was certain. Slowly, she managed to wobble her way around until she could see the asteroid down below, bigger than she'd expected, as wide as her outstretched arms, and there, the floodlights, like a cheerful mini-Pleiades! She thought that she could see movement. In her excitement, she got her procedure backward a few times, but soon she was facing the compound. She turned her headlamp to full intensity and began flashing an SOS. There was no response. "Come on," she said aloud. "Look up! Somebody look up!"

At last, she saw a light moving up to her, and then the captain's voice came through. He seemed to be talking to himself, almost singing, "I know you can't hear me, baby, but you're alive, and that ain't bad. You're gonna be all right. Gonna be all right. Come on and look at me, baby, give me five, give me five, you can do it do it do it, yes you can...."

Then she noticed he was flashing his light at her in chains of five. She flashed back and said, "I read you! I read you!"

"All right! Love the sound of your voice. How's your vital signs?"

"I'm okay. It's all ... all okay."

"Okay. Keep your light steady on, now. Clear the runway, I'm coming in."

He was up to her within minutes, carefully checking the damage to her suit, taking readings, pausing to respond to people down below. She could hear the others now, second-hand. Her legs made impatient walking movements, then finally, slowly, he guided her down.

Her joy at returning among the living was tempered a bit by the little voices she could hear in the captain's head, indistinct, but clearly excited, the sound of people taking up positions, moving in, then an unmistakable, "We've got him! We've got him!"

"Okay, hold your positions," said the captain. "Try to..."

A tiny voice cut in. "He's not responding, captain. He may be unconscious."

"I can see you now, but I can't see him. What's the situation there?"

Trina could see someone as well as they touched down. One crewmate about ten meters away, and another hovering, looking down at something she couldn't see. She tried to make out what they were saying, but while they were talking, Anders was giving her instructions.

"You stay here. Keep low, he may have improvised a weapon. Don't try to

get around without your thruster pack. I'll be right back."

"Okay, okay," she said, straining to pick up what the others were telling him. She had no intention of staying behind and losing her com link. She followed carefully, as if the ground might break. Ahead of her, all the commotion had raised a thin haze of dust that magnified every glance and gesture into an interplay of beams and shadows.

Apparently they had Rakshasa pinned down under a tangle of robots that looked oddly like horse-skulls with crab-legs sticking out. The other crew members wielded pipes and torches. By the time Trina caught up, some of the robots had been pulled off and tossed aside to float like dead things in some prehistoric sea. People were cursing. She could see now that the man under the robots had only two arms—it was Fletcher. The haze was visibly thicker below waist level. As the captain got down on his knees and pressed his helmet against Fletcher's he blurred a bit, as if in a fog, and the empty space he left behind filled in slowly with the independent trajectories of random motes.

"All right, tell me slowly, now." The reply had that hollow sound that told Trina she was hearing something coming to the captain through no com channel at all, but purely by conduction through the helmet contact.

"It cut me off, the first robot, it attacked me and cut all my com links and started dragging me. And then the others were all over me, the ones you sent after Rakshasa..."

Trina could see what they'd been up to. The first robot, under Rakshasa's control, must have pinned his transponder on this poor guy. The captain spotted her. "I thought I..." He stood and came over to her. "We've lost Raki again. I'd sent Fletcher to secure the ship...." He whirled. "The ship!"

The ship was decapitated. Off in the distance, the small speck of the command module was shrinking into the night.

The captain tried to raise it. "Listen to me, Rakshasa, there's nowhere to run. You're just making things worse for yourself."

Connors was trying to raise it, too. "Get back here you chicken-shit bastard freak!" and he hurled a chunk of pipe at it, flipping himself head-over-heels as he did. The pipe twirled hypnotically, so fast and far it seemed that it really could overtake the ship.

Trina yelled, "Don't do this to us! You're killing me, too, Rakshasa! You're killing all of us! Damn you!"

"Okay, easy," said the captain. "Forget him. Nobody's getting killed. Look, we've still got the service module. We've got supplies. Kira, how's the backup antenna?"

“He got that one, too. And the omni.”

“Okay, you go check them out and give me a report, how soon to get them back on line. I want the fastest first, even if that’s just the omni, and then go to work on the directional. Report to us back at base camp.”

He raised his voice. “Listen up, everybody, we’re okay till help arrives. We’ve got liquid oxygen left in the tanks that we can convert to breathable air, and a working volatile processing plant. We can fix that airlock and pressurize the cave in one day. I want to see a line of sherpa robots moving supplies to the cave. This is a habitat, people, we’re moving in. Let’s go!”

He came over to Trina and guided her by the shoulders. “I’m not going to lose you this time. How do you figure that crazy bastard? You take it easy for now, and then I’m going to want to know what happened out there. Don’t worry, there’s nowhere he can go. We’re going to nail his ass, and then we’ll nail whoever’s behind him.”

Trina kept quiet as she let herself be guided back to the cave. It wasn’t hard to pretend to be too exhausted to talk. She just wanted to sleep, and forget, and have nothing to do with the mess Rakshasa had left behind. There was a path of least resistance she could take, that would get her off the hook and shift responsibility to official channels. But some part of her still seemed to be looking down from above.

As if clutching a pain, she brought her hand to the keypad and erased the rendering of the mass driver, and thought of what remained to be done, then felt foolish. What if Rakshasa was as crazy as he seemed?

Then she prayed into the nothingness. *Please let there be refugees. Please be out there. And be good, dammit. Be worth all the trouble, at least.*

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