

DINOSAURS

By Walter Jon Williams

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Let us not deceive you--this is not a tale of the prehistoric and there are no dinosaurs as such in it. This is a tale of a very far future and of a highly evolved and changed human being. It is also, in its own subtle way, a tale that lives up to its deceptive title.

The Shars seethed in the dim light of their ruddy sun. Pointed faces raised to the sky, they sniffed the faint wind for sign of the stranger and scented only hydrocarbons, far-off vegetations, damp fur, the sweat of excitement and fear. Weak eyes peered upward, glistened with hope, anxiety, apprehension, and saw only the faint pattern of stars. Short, excited barking sounds broke out here and there, but mostly the Shars crooned, a low ululation that told of sudden onslaught, destruction, war in distant reaches, and now the hope of peace.

The crowds surged left, then right. Individuals bounced high on their third legs, seeking a view, seeing only the wide sea of heads, the ears and muzzles pointed to the stars.

Suddenly, a screaming. High-pitched howls, a bright chorus of barks. The crowds surged again.

Something was crossing the field of stars.

The human ship was huge, vaster than anything they'd seen, a moonlet descending. Shars closed their eyes and shuddered in terror. The screaming turned to moans. Individuals leaped high, baring their teeth, barking in defiance of their fear. The air smelled of terror, incipient panic, anger.

War! cried some. *Peace!* cried others.

The crooning went on. *We mourn, we mourn*, it said, *we mourn our dead billions.*

We fear, said others.

Soundlessly, the human ship neared them, casting its vast shadow. Shars spilled outward from the spot beneath, bounding high on their third legs.

The human ship came to a silent rest. Dully, it reflected the dim red sun.

The Shars crooned their fear, their sorrow. And waited for the humans to emerge.

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These! Yes. These. Drill, the human ambassador, gazed through his video walls at the sea of Shars, the moaning, leaping thousands that surrounded him. Through the mass a group was moving with purpose, heading for the airlock as per his instructions. His new Memory crawled restlessly in the armored hollow atop his skull. *Stand by*, he broadcast.

His knees made painful crackling noises as he walked toward the airlock, the silver ball of his translator rolling along the ceiling ahead of him. The walls mutated as he passed, showing him violet sky, far-off polygonal buildings; cold distant green . . . and here, nearby, a vast, dim plain covered with a golden tissue of Shars.

He reached the airlock and it began to open. Drill snuffed wetly at the alien smells--heat, dust, the musky scent of the Shars themselves.

Drill's heart thumped in his chest. His dreams were coming true. He had waited all his life for this.

Mash, whimpered Lowbrain. Drill told it to be silent. Lowbrain protested vaguely, then obeyed.

Drill told Lowbrain to move. Cool, alien air brushed his skin. The Shars cried out sharply, moaned, fell back. They seemed a wild, sibilant ocean of pointed ears and dark, questing eyes. The group heading for the airlock vanished in the general retrograde movement, a stone washed by a pale tide. Beneath Drill's feet was soft vegetation. His translator floated in the air before him. His mind flamed with wonder, but Lowbrain kept him moving.

The Shars fell back, moaning.

Drill stood eighteen feet tall on his two pillarlike legs, each with a splayed foot that displayed a horny underside and vestigial nails. His skin was ebony and was draped in folds over his vast naked body. His pendulous maleness swung loosely as he walked. As he stepped across the open space he was conscious of the fact that he was the ultimate product of nine million years of human evolution, all leading to the expansion, diversification, and perfection that was now humanity's manifest existence.

He looked down at the little Shars, their white skin and golden fur, their strange, stiff tripod legs, the muzzles raised to him as if in awe. *If your species survives*, he thought benignly, *you can look like me in another few million years.*

The group of Shars that had been forging through the crowd were suddenly exposed when the crowd fell back from around them. On the perimeter were several Shars holding staffs--weapons, perhaps--in their clever little hands. In the center of these were a group of Shars wearing decorative ribbon to which metal plates had been attached. *Badges of rank*, Memory said. *Ignore*. The shadow of the translator bobbed toward them as Drill approached. Metallic geometrics rose from the group and hovered over them.

Recorders, Memory said. *Artificial similarities to myself. Or possibly security devices. Disregard.*

Drill was getting closer to the party, speeding up his instructions to Lowbrain, eventually entering Zen Synch. It would make Lowbrain hungrier but lessen the chance of any accidents.

The Shars carrying the staffs fell back. A wailing went up from the crowd as one of the Shars stepped toward Drill. The ribbons draped over her sloping shoulders failed to disguise four mammalian breasts. Clear plastic bubbles covered her weak eyes. In Zen Synch with Memory and Lowbrain, Drill ambled up to her and raised his hands in friendly greeting. The Shar flinched at the expanse of the gesture.

"I am Ambassador Drill," he said. "I am a human."

The Shar gazed up at him. Her nose wrinkled as she listened to the booming voice of the translator. Her answer was a succession of sharp sounds, made high in the throat, somewhat unpleasant. Drill listened to the voice of his translator.

"I am President Gram of the InterSharian Sociability of Nations and Planets." That's how it came through in translation, anyway. Memory began feeding Drill referents for the word "nation."

"I welcome you to our planet, Ambassador Drill."

"Thank you, President Gram," Drill said. "Shall we negotiate peace now?"

President Gram's ears pricked forward, then back. There was a pause, and then from the vast circle of Shars came a mad torrent of hooting noises. The awesome sound lapped over Drill like the waves of a lunatic sea.

They approve your sentiment, said Memory.

I thought that's what it meant, Drill said. *Do you think we'll get along?*

Memory didn't answer, but instead shifted to a more comfortable position in the saddle of Drill's skull. Its job was to provide facts, not draw conclusions.

"If you could come into my Ship," Drill said, "we could get started."

"Will we then meet the other members of your delegation?"

Drill gazed down at the Shar. The fur on her shoulders was rising in odd tufts. She seemed to be making a concerted effort to calm it.

"There are no other members," Drill said. "Just myself."

His knees were paining him. He watched as the other members of the Shar party cast quick glances at each other.

"No secretaries? No assistants?" the President was saying.

"No," Drill said. "Not at all. I'm the only conscious mind on Ship. Shall we get started?"

Eat! Eat! said Lowbrain. Drill ordered it to be silent. His stomach grumbled.

"Perhaps," said President Gram, gazing at the vastness of the human ship, "it would be best should we begin in a few hours. I should probably speak to the crowd. Would you care to listen?"

No need. Memory said. *I will monitor.*

"Thank you, no," Drill said. "I shall return to Ship for food and sex. Please signal me when you are ready. Please bring any furniture you may need for your comfort. I do not believe my furniture would fit you, although we might be able to clone some later."

The Shars' ears all pricked forward. Drill entered Zen Synch, turned his huge body, and began accelerating toward the airlock. The sound of the crowd behind him was the murmuring of wind through a stand of trees.

Peace, he thought later, as he stood by the mash bins and fed his complaining stomach. *It's a simple thing. How long can it take to arrange?*

Long, said Memory. *Very long.*

The thought disturbed him. He thought the first meeting had gone well.

After his meal, when he had sex, it wasn't very good.

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Memory had been monitoring the events outside Ship, and after Drill had completed sex, Memory showed him the outside events. *They have been broadcast to the entire population*, Memory said.

President Gram had moved to a local elevation and had spoken for some time. Drill found her speech interesting--it was rhythmic and incantorial, rising and falling in tone and volume, depending heavily on repetition and melody. The crowd participated, issuing forth with excited barks or low moans in response to her statements or questions, sometimes babbling in confusion when she posed them a conundrum. Memory only gave the highlights of the speech. "Unknown . . . Attackers . . . billions dead . . . preparations advanced . . . ready to defend ourselves . . . offer of peace . . . hope in the darkness . . . unknown . . . willing to take the chance . . . peace . . . peace . . . hopeful smell . . . peace." At the end the other Shars were all singing "Peace! Peace!" in chorus while President Gram bounced up and down on her sturdy rear leg.

It sounds pretty, Drill thought. *But why does she go on like that:*

Memory's reply was swift.

Remember that the Shars are a generalized and social species, it said. *President Gram's power, and her ability to negotiate, derives from the degree of her popular support. In measures of this significance she must explain herself and her actions to the population in order to maintain their enthusiasm for her policies.*

Primitive, Drill thought.

That is correct.

Why don't they let her get on with her work? Drill asked.

There was no reply.

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After an exchange of signals the Shar party assembled at the airlock. Several Shars had been mobilized to carry tables and stools. Drill sent a Frog to escort the Shars from the airlock to where he waited. The Frog met them inside the airlock, turned, and hopped on ahead through Ship's airy, winding corridors. It had been trained to repeat "Follow me, follow me" in the Shars' own language.

Drill waited in a semi-inclined position on a Slab. The Slab was an organic sub-species used as furniture, with an idiot brain capable of responding to human commands. The Shars entered cautiously, their weak eyes twitching in the bright light. "Welcome, Honorable President," Drill said. "Up, Slab." Slab began to adjust itself to place Drill on his feet. The Shars were moving tables and stools into the vast room.

Frog was hopping in circles, making a wet noise at each landing. "Follow me, follow me," it said.

The members of the Shar delegation who bore badges of rank stood in a body while the furniture-carriers bustled around them. Drill noticed, as Slab put him on his feet, that they were wrinkling their noses. He wondered what it meant.

His knees crackled as he came fully upright. "Please make yourselves comfortable," he said. "Frog will show your laborers to the airlock."

"Does your Excellency object to a mechanical recording of the proceedings?" President Gram asked. She was shading her eyes with her hand.

"Not at all." As a number of devices rose into the air above the party, Drill wondered if it were possible to give the Shars detachable Memories. Perhaps human bioengineers could adapt the Memories to the Shar physiology. He asked Memory to make a note of the question so that he could bring it up later.

"Follow me, follow me," Frog said. The workers who had carried the furniture began to follow the hopping Frog out of the room.

"Your Excellency," President Gram said, "may I have the honor of presenting to you the other members of my delegation?"

There were six in all, with titles like Secretary of Syncopated Speech and Special Executive for External Coherence. There was also a Minister for the Dissemination of Convincing Lies, whose title Drill suspected was somehow mistranslated, and an Opposite Secretary-General for the Genocidal Eradication of Alien Aggressors, at whom Drill looked with more than a little interest. The Opposite Secretary-General was named Vang, and was small even for a Shar. He seemed to wrinkle his nose more than the others. The Special Executive for External Coherence, whose name was Cup, seemed a bit piebald, patches of white skin showing through the golden fur covering his shoulders, arms, and head.

He is elderly, said Memory.

That's what I thought.

"Down, Slab," Drill said. He leaned back against the creature and began to move to a more relaxed position.

He looked at the Shars and smiled. Fur ruffled on shoulders and necks. "Shall we make peace now?" he asked.

"We would like to clarify something you said earlier," President Gram said. "You said that you were the only, ah, conscious entity on the ship. That you were the only member of the human delegation. Was that translated correctly?"

"Why, yes," Drill said. "Why would more than one diplomat be necessary?"

The Shars looked at each other. The Special Executive for External Coherence spoke cautiously.

"You will not be needing to consult with your superiors? You have full authority from your government?"

Drill beamed at them. "We humans do not have a government, of course," he said. "But I am a diplomat with the appropriate Memory and training. There is no problem that I can foresee."

"Please let me understand, your Excellency," Cup said. He was leaning forward, his small eyes watering. "I am elderly and may be slow in comprehending the situation. But if you have no government, who accredited you with this mission?"

"I am a diplomat. It is my specialty. No accreditation is necessary. The human race will accept my judgment on any matter of negotiation, as they would accept the judgment of any specialist in his area of expertise."

"But why you? As an individual?"

Drill shrugged massively. "I was part of the nearest diplomatic enclave, and the individual without any other tasks at the moment." He looked at each of the delegation in turn. "I am incredibly happy to have this chance, honorable delegates," he said. "The vast majority of human diplomats never have the chance to speak to another species. Usually we mediate only in conflicts of interest between the various groups of human specialties."

"But the human species will abide by your decisions?"

"Of course," Drill was surprised at the Shar's persistence. "Why wouldn't they?"

Cup settled back in his chair. His ears were down. There was a short silence.

"We have an opening statement prepared," President Gram said. "I would like to enter it into our record, if I may. Or would your Excellency prefer to go first?"

"I have no opening statement," Drill said. "Please go ahead."

Cup and the President exchanged glances. President Gram took a deep breath and began.

Long. Memory said. Very long.

The opening statement seemed very much like the address President Gram had been delivering to the crowd, the same hypnotic rhythms, more or less the same content. The rest of the delegation made muted reponses. Drill drowsed through it, enjoying it as music.

"Thank you, Honorable President," he said afterwards. "That was very nice."

"We would like to propose an agenda for the conference," Gram said. "First, to resolve the matter of the cease-fire and its provisions for an ending to hostilities. Second, the establishment of a secure border between our two species, guaranteeing both species room for expression. Third, the establishment of trade and visitation agreements. Fourth, the matter of reparations, payments, and return of lost territory."

Drill nodded. "I believe," he said, "that resolution of the second through fourth points will come about as a result of an understanding reached on the first. That is, once the cease-fire is settled, that resolution will imply a settlement of the rest of the situation."

"You accept the agenda?"

"If you like. It doesn't matter."

Ears pricked forward, then back. "So you accept that our initial discussions will consist of formalizing the disengagement of our forces?"

"Certainly. Of course I have no way of knowing what forces you have committed. We humans have committed none."

The Shars were still for a long time. "Your species attacked our planets, Ambassador. Without warning, without making yourselves known to us." Gram's tone was unusually flat. Perhaps, Drill thought, she was attempting to conceal great emotion.

"Yes," Drill said. "But those were not our military formations. Your species were contacted only by our terraforming Ships. They did not attack your people, as such--they were only peripherally aware of your existence. Their function was merely to seed the planets with lifeforms favorable to human existence. Unfortunately for your people, part of the function of these lifeforms is to destroy the native life of the planet."

The Shars conferred with one another. The Opposite Secretary-General seemed particularly vehement. Then President Gram turned to Drill.

"We cannot accept your statement, your Excellency," she said. "Our people were attacked. They defended themselves, but were overcome."

"Our terraforming Ships are very good at what they do," Drill said. "They are specialists. Our Shrikes, our Shrews, our Sharks--each is a master of its element. But they lack intelligence. They are not conscious entities, such as ourselves. They weren't aware of your civilization at all. They only saw you as food."

"You're claiming that you *didn't notice us?*" demanded Secretary-General Vang. "*They didn't notice us as they were killing us?*" He was shouting. President Gram's ears went back.

"Not as such, no," Drill said.

President Gram stood up. "I am afraid, your Excellency, your explanations are insufficient," she said. "This conference must be postponed until we can reach a united conclusion concerning your remarkable attitude."

Drill was bewildered. "What did I say?" he asked.

The other Shars stood. President Gram turned and walked briskly on her three legs toward the exit. The others followed.

"Wait," Drill said. "Don't go. Let me send for Frog. Up, Slab, up!"

The Shars were gone by the time Slab had got Drill to his feet. The Ship told him they had found their own way to the airlock. Drill could think of nothing to do but order the airlock to let them out.

"Why would I lie?" he asked. "Why would I lie to them?" Things were so very simple, really.

He shifted his vast weight from one foot to the other and back again. Drill could not decide whether he had done anything wrong. He asked Memory what to do next, but Memory held no information to comfort him, only dry recitations of past negotiations. Annoyed at the lifeless monologue, Drill told Memory to be silent and began to walk restlessly through the corridors of his Ship. He could not decide where things had gone bad.

Sensing his agitation, Lowbrain began to echo his distress. *Mash*, Lowbrain thought weakly. Food Sex.

Be silent, Drill commanded.

Sex, sex, Lowbrain thought.

Drill realized that Lowbrain was beginning to give him an erection. Acceding to the inevitable, he began moving toward Surrogate's quarters.

Surrogate lived in a dim, quiet room filled with the murmuring sound of its own heartbeat. It was a human subspecies, about the intelligence of Lowbrain, designed to comfort voyagers on long journeys through space, when carnal access to their own subspecies might necessarily be limited. Surrogate had a variety of sexual equipment designed for the accommodation of the various human subspecies and their sexes. It also had large mammaries that gave nutritious milk, and a rudimentary head capable of voicing simple thoughts.

Tiny Mice, that kept Surrogate and the ship clean, scattered as Drill entered the room. Surrogate's little head turned to him.

"It's good to see you again," Surrogate said.

"I am Drill."

"It's good to see you again, Drill," said Surrogate. "It's good to see you again."

Drill began to nuzzle its breasts. One of Surrogate's male parts began to erect. "I'm confused, Surrogate," he said. "I don't know what to do."

"Why are you confused, Drill?" asked Surrogate. It raised one of its arms and began to stroke Drill's head. It wasn't really having a conversation: Surrogate had only been programmed to make simple statements, or to analyze its partners' speech and ask questions.

"Things are going wrong," Drill said. He began to suckle. The warm milk flowed down his throat. Surrogate's male part had an orgasm. Mice jumped from hiding to clean up the mess.

"Why are things going wrong?" asked Surrogate. "I'm sure everything will be all right."

Lowbrain had an orgasm, perceived by Drill as scattered, faraway bits of pleasure. Drill continued to suckle, feeling a heavy comfort beginning to radiate from Surrogate, from the gentle sound of its heartbeat, its huge, wholesome, brainless body.

Everything will be all right, Drill decided.

"Nice to see you again, Drill," Surrogate said. "Drill, it's *nice* to see you again."

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The vast crowds of Shars did not leave when night fell. Instead they stood beneath floating globes dispersing a cold reddish light that reflected eerily from pointed ears and muzzles. Some of them donned capes or skirts to help them keep warm. Drill, watching them on the video walls of the command center, was reminded of crowds standing in awe before some vast cataclysm.

The Shars were not quiet. They stood in murmuring groups, but sometimes they began the crooning chants they had raised earlier, or suddenly broke out in a series of shrill yipping cries.

President Gram spoke to them after she had left Ship. "The human has admitted his species' attacks," she said, "but has disclaimed responsibility. We shall urge him to adopt a more realistic position."

"Adopt a position," Drill repeated, not understanding. "It is not a position. It is the truth. Why don't they understand?"

Opposite Minister-General Vang was more vehement. "We now have a far more complete idea of the humans' attitude," he said. "It is opposed to ours in every way. We shall not allow the murderous atrocities which the humans have committed upon five of our planets to be forgotten, or understood to be the result of some explicable lack of attention on the part of our species' enemies."

"That one is obviously deranged," thought Drill.

He went to his sleeping quarters and ordered the Slab there to play him some relaxing music. Even with Slab's murmurs and comforting hums, it took Drill some time before his agitation subsided.

Diplomacy, he thought as slumber overtook him, was certainly a strange business.

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In the morning the Shars were still there, chanting and crying, moving in their strange crowded patterns. Drill watched them on his video walls as he ate breakfast at the mash bins. "There is a communication from President Gram," Memory announced. "She wishes to speak with you by radio."

"Certainly."

"Ambassador Drill." She was using the first tones again. A pity she was subject to such stress.

"Good morning, President Gram," Drill said. "I hope you spent a pleasant night."

"I must give you the results of our decision. We regret that we can see no way to continue the negotiations unless you, as a representative of your species, agree to admit responsibility for your people's attacks on our planets."

"Admit responsibility?" Drill said. "Of course. Why wouldn't I?"

Drill heard some odd, indistinct barking sounds that his translator declined to interpret for him. It sounded as if someone other than President Gram were on the other end of the radio link.

"You admit responsibility?" President Gram's amazement was dear even in translation.

"Certainly. Does it make a difference?"

President Gram declined to answer that question. Instead she proposed another meeting for that afternoon.

"I will be ready at any time."

Memory recorded President Gram's speech to her people, and Drill studied it before meeting the Shar party at the airlock. She made a great deal out of the fact that Drill had admitted humanity's responsibility for the war. Her people leaped, yipped, chanted their responses as if possessed. Drill wondered why they were so excited.

Drill met the party at the airlock this time, linked with Memory and Lowbrain in Zen Synch so as not to accidentally step on the President or one of her party. He smiled and greeted each by name and led them toward the conference room.

"I believe," said Cup, "we may avoid fixture misunderstandings, if your Excellency would consent to inform us about your species. We have suffered some confusion in regard to your distinction between `conscious' and `unconscious' entities. Could you please explain the difference, as you understand it?"

"A pleasure, your Excellency," Drill said. "Our species, unlike yours, is highly specialized. Once, eight million years ago, we were like you--a small, nonspecialized species type is very useful at a certain stage of evolution. But once a species reaches a certain complexity in its social and technological evolution, the need for specialists becomes too acute. Through both deliberate genetic manipulations and natural evolution, humanity turned away from a generalist species, toward highly specialized forms adapted to particular functions and environments. We understand this to be a natural function of species evolution.

"In the course of our explorations into manipulating our species, we discovered that the most efficient way of coding large amounts of information was in our own cell structure--our DNA. For tasks requiring both large and small amounts of data, we arranged that, as much as possible, these would be performed by organic entities, human subspecies. Since many of these tasks were boring and repetitive, we reasoned that advanced consciousness, such as that which we both share, was not necessary. You have met several unconscious entities. Frog, for example, and the Slab on which I lie. Many parts of my Ship are also alive, though not conscious."

"That would explain the smell," one of the delegation murmured.

"The terraforming Ships," Drill went on, "which attacked your planets--these were also designed so as not to require a conscious operator."

The Shars squinted up at Drill with their little eyes. "But why?" Cup asked.

"Terraforming is a dull process. It takes many years. No conscious mind could possibly enjoy it."

"But your species would find itself at war without knowing it. If your explanation for the cause of this war is correct, you already have."

Drill shrugged massively. "This happens from time to time. Sometimes other species which have reached our stage of development have attacked us in the same way. When it does, we arrange a peace."

"You consider these attacks normal?" Opposite Minister-General Vang was the one who spoke.

"These occasional encounters seem to be a natural result of species evolution," Drill said.

Vang turned to one of the Shars near him and spoke in several sharp barks. Drill heard a few words: "Billions lost . . . five planets . . . atrocities . . . natural *result!*"

"I believe," said President Gram, "that we are straying from the agenda."

Vang looked at her. "Yes, honorable President. Please forgive me."

"The matter of withdrawal," said President Gram, "to recognized truce lines."

Species at this stage of their development tend to be territorial, Memory reminded Drill. Their political mentality is based around the concept of borders. The idea of a borderless community of species may be perceived as a threat.

I'll try and go easy on them, Drill said.

"The Memories on our terraforming Ships will be adjusted to account for your species," Drill said. "After the adjustment, your people will no longer be in danger."

"In our case, it will take the disengage order several months to reach all our forces," President Gram said. "How long will the order take to reach your own Ships?"

"A century or so." The Shars stared. "Memories at our exploration basis in this area will be adjusted first, of course, and these will adjust the Memories of terraforming Ships as they come in for maintenance and supplies."

"We'll be subject to attack for *another hundred years?*" Vang's tone mixed incredulity and scorn.

"Our terraforming Ships move more or less at random, and only come into base when they run out of supplies. We don't know where they've been till they report back. Though they're bound to encounter a few more of your planets, your species will still survive, enough to continue your species evolution. And during that time you'll be searching for and occupying new planets on your own. You'll probably come out of this with a net gain."

"Have you no respect for life?" Vang demanded. Drill considered his answer.

"All individuals die, Opposite Minister-General," he said. "That is a fact of nature which no species has been able to alter. Only species can survive. Individuals are easily replaceable. Though you will lose some planets and a large number of individuals, your species as a whole will survive and may even prosper. What more could a species or its delegated representatives desire?"

Opposite Minister-General Vang was glaring at Drill, his ears pricked forward, lips drawn back from his teeth. He said nothing.

"We desire a cease-fire that is a true cease-fire," President Gram said. Her hands were clasping and unclasping rhythmically on the edge of her chair. "Not a slow, authorized extermination of our species. Your position has an unwholesome smell. I am afraid we must end these discussions until you alter it."

"Position? This is not a position, honorable President. It is truth."

"We have nothing further to say."

Unhappily, Drill followed the Shar delegation to the airlock. "I do not lie, honorable President," he said, but Gram only turned away and silently left the human Ship. The Shars in their pale thousands received her.

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The Shar broadcasts were not heartening. Opposite MinisterGeneral Vang was particularly vehement. Drill collected the highlights of the speeches as he speeded through Memory's detailed remembrance. "Callous disregard . . . no common ground for communication . . . casual attitude toward atrocity . . . displays of obvious savagery . . . no respect for the individual ourselves . . . this stinks in the nose."

The Shars leaped and barked in response. There were strange bubbling high-pitched laughing sounds that Drill found unsettling.

"We hope to find a formula for peace," President Gram said. "We will confer with all the ministers in session." That was all.

That night, the Shars surrounding Ship moaned, moving slowly in a giant circle, their arms linked. The laughing sounds that followed Vang's speech did not cease entirely. He did not understand why they did not all go home and sleep.

Long, long, Memory said. No comfort there.

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Early in the morning, before dawn, there was a communication from President Gram. "I would like to meet with you privately. Away from the recorders, the coalition partners."

"I would like nothing better," Drill said. He felt a small current of optimism begin to trickle into him.

"Can I use an airlock other than the one we've been using up till now?"

Drill gave President Gram instructions and met her in the other airlock. She was wearing a night cape with a hood. The Shars, circling and moaning, had paid her no attention.

"Thank you for seeing me under these conditions," she said, peering up at him from beneath the hood. Drill smiled. She shuddered.

"I am pleased to be able to cooperate," he said.

Mash! Lowbrain demanded. It had been silent until Drill entered Zan Synch. Drill told it to be silent with a snarling vehemence that silenced it for the present.

"This way, honorable President," Drill said. He took her to his sleeping chamber--a small room, only fifty feet square. "Shall I send a Frog for one of your chairs?" he asked.

"I will stand. Three legs seem to be more comfortable than two for standing."

"Yes."

"Is it possible, Ambassador Drill, that you could lower the intensity of the light here? I find it oppressive."

Drill felt foolish, knowing he should have thought of this himself. "I'm sorry," he said. "I will give the orders at once. I wish you had told me earlier." He smiled nervously as he dimmed the lights and arranged himself on his Slab.

"Honorable Ambassador." President Gram's words seemed hesitant. "I wonder if it is possible . . . can you tell me the meaning of that facial gesture of yours, showing me your teeth?"

"It is called a smile. It is intended as a gesture of benevolent reassurance."

"Showing of the teeth is considered a threat here, honorable Ambassador. Some of us have considered this a sign that you wish to eat us."

Drill was astonished. "My goodness!" he said. "I don't even eat meat! just a kind of vegetable mash."

"I pointed out that your teeth seemed unsuitable for eating meat, but still it makes us uneasy. I was wondering . . ."

"I will try to suppress the smile, yes. Eating meat! What an idea. Some of our military specialists, yes, and of course the Sharks and Shrikes and so on . . ." He told his Memory to enforce a strict ban against smiling in the presence of a Shar.

Gram leaned back on her sturdy rear leg. Her cape parted, revealing her ribbons and badges of office, her four furry dugs. "I wanted to inform you of certain difficulties here, Ambassador Drill," she said. "I am having difficulty holding together my coalition. Minister-General Vang's faction is gaining strength. He is attempting to create a perception in the minds of Shars that you are untrustworthy and violent. Whether he believes this, or whether he is using this notion as a means of destabilizing the coalition, is hardly relevant--considering your species' unprovoked attacks, it is not a difficult perception to reinforce. He is also trying to tell our people that the military is capable of dealing with your species."

Drill's brain swam with Memory's information on concepts such as "faction" and "coalition." The meaning of the last sentence, however, was clear.

"That is a foolish perception, honorable President," he said.

"His assurances on that score lack conviction." Gram's eyes were shiny. Her tone grew earnest. "You must give me something, ambassador. Something I can use to soothe the public mind. A way out of this dilemma. I tell you that it is impossible to expect us to sit idly by and accept the loss of an undefined number of planets over the next hundred years. I plead with you, ambassador. Give me something. Some way we can avoid attack. Otherwise . . ." She left the sentence incomplete.

Mash, Lowbrain wailed. Drill ignored it. He moved into Zen Synch with Memory, racing through possible solutions. Sweat gathered on his forehead, pouring down his vast shoulders.

"Yes," he said. "Yes, there is a possibility. If you could provide us with the location of all your occupied planets, we could dispatch a Ship to each with the appropriate Memories as cargo. If any of our terraforming Ships arrived, the Memories could be transferred at once, and your planets would be safe." President Gram considered this. "Memories," she said. "You've been using the term, but I'm not sure I understand."

"Stored information is vast, and even though human bodies are large we cannot always have all the information we need to function efficiently even in our specialized tasks," Drill said. "Our human brains have been separated as to function. I have a Lowbrain, which is on my spinal cord above my pelvis. Lowbrain handles motor control of my lower body, routine monitoring of my body's condition, eating, excretion, and sex. My perceptual centers, short-term memory, personality, and reasoning functions are handled by the brain in my skull--the classical brain, if you like. Long-term and specialized memory is the function of the large knob you see moving on my head, my Memory. My Memory records all that happens in great details, and can recapitulate it at any point. It has also been supplied with information concerning the human species' contacts with other non-human groups. It attaches itself easily to my nervous system and draws nourishment from my body. Specific memories can be communicated from one living Memory to another, or if it proves necessary I can simply give my Memory to another human, a complete transfer. I have another Memory aboard that I'm not using at the moment, a pilot Memory

that can navigate and handle Ship, and I wore this Memory while in transit. I also have spare Memories in case my primary Memories fall ill. So you see, our specialization does not rule out adaptability--any piece of information needed by any of us can easily be transferred, and in far greater detail than by any mechanical medium."

"So you could return to your base and send our pilot Memories to our planets," Gram said. "Memories that could halt your terraforming ships."

"That is correct." Just in time, Memory managed to stop the twitch in Drill's cheeks from becoming a smile. Happiness bubbled up in him. He was going to arrange this peace after all!

"I am afraid that would not be acceptable, your Excellency," President Gram said. Drill's hopes fell.

"Why-ever not?"

"I'm afraid the Minister-General would consider it a naive attempt of yours to find out the location of our populated planets. So that your species could attack them, ambassador."

"I'm trying very hard, President Gram," Drill said.

"I'm sure you are."

Drill frowned and went into Zen Synch again, ignoring Lowbrain's plaintive cries for mash and sex, sex and mash. Concepts crackled through his mind. He began to develop an erection, but Memory was drawing off most of the available blood and the erection failed. The smell of Drill's sweat filled the room. President Gram wrinkled her nose and leaned back far onto her rear leg.

"Ah," Drill said. "A solution. Yes. I can have my Pilot memory provide the locations to an equivalent number of our own planets. We will have one another's planets as hostage."

"Bravo, ambassador," President Gram said quietly. "I think we may have a solution. But--forgive me--it may be said that we cannot trust your information. We will have to send ships to verify the location of your planets."

"If your ships go to my planet first," Drill said, "I can provide your people with one of my spare Memories that will inform my species what your people are doing, and instruct the humans to cooperate. We will have to construct some kind of link between your radio and my Memory . . . maybe I can have my Ship grow one."

President Gram came forward off her third leg and began to pace forward, moving in her strange, fast, hobbling way. "I can present it to the council this way, yes," she said. "There is hope here." She stopped her movement, peering up at Drill with her ears pricked forward. "Is it possible that you could allow me to present this to the council as my own idea?" she asked. "It may meet with less suspicion that way."

"Whatever way is best," said Drill. President Gram gazed into the darkened recesses of the room.

"This smells good," she said. Drill succeeded in suppressing his smile.

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"It's nice to see you again."

"I am Drill."

"It's nice to see you again, Drill."

"I think we can make the peace work."

"Everything will be all right, Drill. Drill, I'm sure everything will be all right."

"I'm so glad I had this chance. This is the chance of a lifetime."

"Drill, it's nice to see you again."

- - -

The next day President Gram called and asked to present a new plan. Drill said he would be pleased to hear it. He met the party at the airlock, having already dimmed the lights. He was very rigid in his attempts not to smile.

They sat in the dimmed room while President Gram presented the plan. Drill pretended to think it over, then acceded. Details were worked out. First the location of one human planet would be given and verified--this planet, the Shar capital, would count as the first revealed Shar planet. After verification, each side would reveal the location of two planets, verify those, then reveal four, and so on. Even counting the months it would take to verify the location of planets, the treaty should be completed within less than five years.

That night the Shars went mad. At President Gram's urging, they built fires, danced, screamed, sang. Drill watched on his Ship's video walls. Their rhythms beat at his head.

He smiled. For hours.

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The Ship obligingly grew a communicator and coupled it to one of Drill's spare Memories. The two were put aboard a Shar ship and sent in the direction of Drill's home. Drill remained in his ship, watching entertainment videos Ship received from the Shars' channels. He didn't understand the dramas very well, but the comedies were delightful. The Shars could do the most intricate, clever things with their flexible bodies and odd tripod legs--it was delightful to watch them.

Maybe I could take some home with me, he thought. They can be very entertaining.

The thousands of Shars waiting outside Ship began to drift away. Within a month only a few hundred were left. Their singing was quiet, triumphant, assured. Sometimes Drill had it piped into his sleeping chamber. It helped him relax.

President Gram visited informally every ten days or so. Drill showed her around Ship, showing her the pilot Memory, the Frog quarters, the giant stardrive engines with their human subspecies' implanted connections, Surrogate in its shadowed, pleasant room. The sight of Surrogate seemed to agitate the President.

"You do not use sex for procreation?" she asked. "As an expression of affection?"

"Indeed we do. I have scads of offspring. There are never enough diplomats, so we have a great many

couplings among our subspecies. As for affection ... I think I can say that I have enjoyed the company of each of my partners."

She looked up at him with solemn eyes. "You travel to the stars, Drill," she said. "Your species expands randomly in all directions, encountering other species, sometimes annihilating them. Do you have a reason for any of this?"

"A reason?" Drill mused. "It is natural to us. Natural to all intelligent species, so far as we know."

"I meant a conscious reason. Is it anything other than what you do in an automatic way?"

"I can't think of why we would need any such reasons."

"So you have no philosophy of constant expansion? No ideology?"

"I do not know what those words mean," Drill said.

Gram closed her eyes and lowered her head. "I am sorry," she said.

"No need. We have no conflicts in our ideas about ourselves, about our lives. We are happy with what we are."

"Yes. You couldn't be unhappy if you tried, could you?"

"No," Drill said cheerfully. "I see that you understand."

"Yes," Gram said. "I scent that I do."

"In a few million years," Drill said, "these things will become clear to you."

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The first Shar ship returned from Drill's home, reporting a transfer of the Memory. The field around Ship filled again with thousands of Shars, crying their happiness to the skies. Other Memories were now taking instructions to all terraforming bases. The locations of two new planets were released. Ships carrying spare Memories leaped into the skies.

It's working, Drill told Memory.

Long, Memory said. very long:

But Memory could not lower Drill's joy. This was what he had lived his life for, and he knew he was good at it. Memories of the future would take this solution as a model for negotiations with other species. Things were working out.

One night the Shars outside Ship altered their behavior. Their singing became once again a moaning, mined with cries. Drill was disturbed.

A communication came from the President. "Cup is dead," she said.

"I understand," Drill said. "Who is his replacement?"

Drill could not read Gram's expression. "That is not yet known. Cup was a strong person, and did not like other strong people around him. Already the successors are fighting for the leadership, but they may not be able to hold his faction together." Her ears flickered. "I may be weakened by this."

"I regret things tend that way."

"Yes," she said. "So do I."

The second set of ships returned. More Memories embarked on their journeys. The treaty was holding.

There was a meeting aboard Ship to formalize the agreement. Cup's successor was Brook, a tall, elderly Shar whose golden fur was darkened by age. A compromise candidate, President Gram said, his election determined after weeks of fighting for the successorship. He was not respected. Already pieces of Cup's old faction were breaking away.

"I wonder, your Excellency," Brook said, after the formal business was over, "if you could arrange for our people to learn your language. You must have powerful translation modules aboard your ship in order to learn our language so quickly. You were broadcasting your message of peace within a few hours of entering real space."

"I have no such equipment aboard Ship," Drill said. "Our knowledge of your language was acquired from Shar prisoners."

"Prisoners?" Shar ears pricked forward. "We were not aware of this," Brook said.

"After our base Memories recognized discrepancies," Drill said, "we sent some Ships out searching for you. We seized one of your ships and took it to my home world. The prisoners were asked about their language and the location of your capital planet. Otherwise it would have taken me months to find your world here, and learn to communicate with you."

"May we ask to arrange for the return of the prisoners?"

"Oh," Drill said. "That won't be possible. After we learned what we needed to know, we terminated their lives. They were being kept in an area reserved for a garden. The landscapers wanted to get to work." Drill bobbed his head reassuringly. "I am pleased to inform you that they proved excellent fertilizer for the gardens. The result was quite lovely."

"I think," said President Gram carefully, "that it would be best that this information not go beyond those of us in this room. I think it would disturb the process."

Minister-General Vang's ears went back. So did others'. But they acceded.

"I think we should take our leave," said President Gram.

"Have a pleasant afternoon," said Drill.

"It's important." It was not yet dawn. Ship had awakened Drill for a call from the President. "One of your ships has attacked another of our planets."

Alarm drove the sleep from Drill's brain. "Please come to the airlock," he said.

"The information will reach the population within the hour."

"Come quickly," said Drill.

The President arrived with a pair of assistants, who stayed inside the airlock. They carried staves. "My people will be upset," Gram said. "Things may not be entirely safe."

"Which planet was it?" Drill asked.

Gram rubbed her ears. "It was one of those whose location went out on the last peace shuttle."

"The new Memory must not have arrived in time."

"That is what we will tell the people. That it couldn't have been prevented. I will try to speed up the process by which the planets receive new Memories. Double the quota."

"That is a good idea."

"I will have to dismiss Brook. Opposite Minister-General Vang will have to take his job. If I can give Vang more power, he may remain in the coalition and not cause a split."

"As you think best."

President Gram looked up at Drill, her head rising reluctantly, as if held back by a great weight. "My son," she said. "He was on the planet when it happened."

"You have other offspring," Drill said.

Gram looked at him, the pain burning deep in her eyes. "Yes," she said. "I do."

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The fields around Ship filled once again. Cries and howls rent the air, and dirges pulsed against Ship's uncaring walls. The Shar broadcasts in the next weeks seemed confused to Drill. Coalitions split and fragmented. Vang spoke frequently of readiness. President Gram succeeded in doubling the quota of planets. The decision was a near one.

Then, days later, another message. "One of our commanders," said President Gram, "was based on the vicinity of the attacked planet. He is one of Vang's creatures. On his own initiative he ordered our military forces to engage. Your terraforming Ship was attacked."

"Was it destroyed?" Drill asked. His tone was urgent. There is still hope, he reminded himself.

"Don't be anxious for your fellow humans," Gram said. "The Ship was damaged, but escaped."

"The loss of a few hundred billion unconscious organisms is no cause for anxiety," Drill said. "An escaped terraforming Ship is. The Ship will alert our military forces. It will be a real war."

President Gram licked her lips. "What does that mean?"

"You know of our Shrikes and so on. Our military people are worse. They are fully conscious and highly specialized in different modes of warfare. They are destructive, carnivorous, capable of taking enormous damage without impairing function. Their minds concentrate only on tactics, on destruction. Normally

they are kept on planetoids away from the rest of humanity. Even other humans find their proximity too . . . disturbing." Drill put all the urgency in his speech that he could. "Honorable President, you must give me the locations of the remaining planets. If I can get Memories to each of them with news of the peace, we may yet save them."

"I will try. But the coalition . . ." She turned away from the transmitter. "Vang will claim a victory."

"It is the worst possible catastrophe," Drill said.

Gram's tone was grave. "I believe you," she said.

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Drill listened to the broadcasts with growing anxiety. The Shars who spoke on the broadcasts were making angry comments about the execution of prisoners, about flower gardens and values Drill didn't understand. Someone had let the secret loose. President Gram went from group to group outside Ship, talking of the necessity of her plan. The Shar's responses were muted. Drill sensed they were waiting. It was announced that Vang had left the coalition. A chorus of triumphant yips rose from scattered members of the crowd. Others only moaned.

Vang, now simply General Vang, arrived at the field. His followers danced intoxicated circles around him as he spoke, howling their responses to his words. "Triumph! United will!" they cried. "The humans can be beaten! Treachery avenged! Dictate the peace from a position of strength! We smell the location of their planets!"

The Shars' weird cackling laughter followed him from point to point. The laughing and crying went on well into the night. In the morning the announcement came that the coalition had fallen. Vang was now President-General.

In his sleeping chamber, surrounded by his video walls, Drill began to weep.

"I have been asked to bear Vang's message to you," Gram said. She seemed smaller than before, standing unsteadily even on her tripod legs. "It is his . . . humor."

"What is the message?" Drill said. His whole body seemed in pain. Even Lowbrain was silent, wrapped in misery.

"I had hoped," Gram said, "that he was using this simply as an issue on which to gain power. That once he had the Presidency, he would continue the diplomatic effort. It appears he really means what he's been saying. Perhaps he's no longer in control of his own people."

"It is war," Drill said.

"Yes."

You have failed, said Memory. Drill winced in pain.

"You will lose," he said.

"Vang says we are cleverer than you are."

"That may be the case. But cleverness cannot compete with experience. Humans have fought hundreds

of these little wars, and never failed to wipe out the enemy. Our Memories of these conflicts are intact. Your people can't fight millions of years of specialized evolution."

"Vang's message doesn't end there. You have till nightfall to remove your Ship from the planet. Six days to get out of real space."

"I am to be allowed to live?" Drill was surprised.

"Yes. It is our . . . our custom."

Drill scratched himself. "I regret our efforts did not succeed."

"No more than I" She was silent for a while. "Is there any way we can stop this?"

"If Vang attacks any human planets after the Memories of the peace arrangement have arrived," Drill said, "the military will be unleashed to wipe you out. There is no stopping them after that point."

"How long," she asked, "do you think we have?"

"A few years. Ten at the most."

"Our species will be dead."

"Yes. Our military are very good at their jobs."

"You will have killed us," Gram said, "destroyed the culture that we have built for thousands of years, and you won't even give it any thought. Your species doesn't think about what it does any more. It just acts, like a single-celled animal, engulfing everything it can reach. You say that you are a conscious species, but that isn't true. Your every action is ... instinct. Or reflex."

"I don't understand," said Drill.

Gram's body trembled. "That is the tragedy of it," she said.

An hour later Ship rose from the field. Shars laughed their defiance from below, dancing in crazed abandon.

I have failed Drill told Memory.

You knew the odds were long, Memory said. You knew that in negotiations with species this backward there have only been a handful of successes, and hundreds of failures.

Yes, Drill acknowledged. *It's a shame, though. To have spent all these months away from home.*

Eat! Eat! said Lowbrain.

Far away, in their forty-mile-long Ships, the human soldiers were already on their way.