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BRIAN ALDISS

Galaxies Like Grains of Sand

A SIGNET BOOK
Published by The New American Library

To Tony and Ann Price,
Instead of a Statue of Lord Roberts
on Horseback

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Of the laws we can deduce from the external world, one stands above all: the Law of Transcience. Nothing is intended to last.

The trees fall year by year, the mountains tumble, the galaxies burn out like tall tallow candles. Nothing is intended to last—except time. The blanket of the universe wears thin, but time endures. Time is a tower, an endless mine; time is monstrous. Time is the hero. Human and inhuman characters are pinned to time like butterflies to a card; yes, though the wings stay bright, flight is forgotten.

Time, like an element which can be solid, liquid or gas, has three states. In the present, it is a flux we cannot seize. In the future, it is a veiling mist. In the past, it has solidified and become glazed; then we call it history. Then it can show us nothing but our own solemn faces; it is a treacherous mirror, reflecting only our limited truths. So much is it a part of man that objectivity is impossible; so neutral is it that it appears hostile.

Some of the accounts that follow were written by the people concerned. Some are reconstructions. Some may be myths, having masqueraded as truth long enough to be accepted as truth. All are fragmentary.

The long mirror of the past is shattered. Its shards lie trampled underfoot. Once it covered all the walls of all the palaces; now only a few fragments are left, and these you hold in your hand.

1

THE WAR MILLENNIA

To begin then—though it is certainly no beginning—the first fragment is of a strange past world, where clouds of nationalism have gathered and broken into a storm of war. Over the forgotten continents—Asia, America, Africa—missiles of destruction fly. The beleaguered people of that day have not fully comprehended the nature of the struggle in which they are engulfed.

Those simple blacks, whites and grays which constitute the political situation are grasped readily enough with a little application. But behind these issues lie factors scarcely understood in the council chambers of Peking, London, Cairo or Washington—factors which stem from the long and savage past of the race; factors of instinct and frustrated instinct; factors of fear and lust and dawning conscience; factors inseparable from the adolescence of a species, which loom behind all man's affairs like an insurmountable mountain chain.

So men fought each other instead of wrestling with themselves. The bravest sought to evade the currents of hatred by turning outward to the nearest planets in the solar system; the cowardly, by sleeping away their lives in vast hives called dreameries, where the comforts of fantasy could discount the depredations of war. Neither course ultimately offered refuge; when the earthquake comes, it topples both tower and hovel. . . .

It is fitting that the first fragment should start with a man sitting helplessly in a chair, while bombs fall.

THE DIRECTOR OF DREAMERY FIVE SLID OUT OF HIS CHAIR before the silent control panels, the question of Floyd Milton making him ungovernably restless. Every so often a distant crump outside announced that the enemy attack was still on; that made the Director no more easy. Although he would

be safer down in the vaults, peering into Floyd Milton's dreams, other considerations caused him to take the elevator and sink to the cool depths of Dreamery Five. He had seen Milton's face when he came in that afternoon. Milton had looked like death.

The sleep levels were as humid as usual, and reeked of the spirit used by the robot masseurs.

"You slugs!" the Director said aloud in the direction of the rows of sleepers.

They lay dormant, heads concealed in the feedback phones. Occasionally, a sleeper would be rolled up until his toes rested on his shoulders and his behind pointed into the air; rubber-covered machinery would flick up and pummel him. Then it stretched him out again and pummeled his chest, carefully avoiding the intravenal feed pipes which hung from the ceiling. Whatever their mental state, sleepers were maintained in good physical condition. And all the time they slept and dreamed their dark dreams.

"Slugs!" the Director said again. It would never have done to have a director who loved the sleepers in his charge; alone in the vast, automated dreameries, he would have been too likely to pry into the reveries of these hopeless introverts.

Apart from a few young people moved by genuine curiosity, only psychopaths and misfits lay in the dreameries, playing out their lives in useless reverie. Unfortunately, they accounted for a fair percentage of the population; the sixty-years cold war—now broken into something horribly hot—had produced an amazing number of mental invalids who were only too glad to retreat by the escape route of the dreameries into their own fantasy world.

Floyd Milton had not looked the type, nor had he looked like one of the tough spacers who, after the ardors of a long run to Mars or Ganymede, came here sometimes to recuperate for a while. He looked like a man who had betrayed himself—and knew it.

That was why the Director had to see his dreams. Sometimes men—real men—could be saved from themselves before they sank too low.

The Director paused in front of Milton's bed. The latest arrival was silent, breathing shallowly, his face hidden under the visor and feedback phones. Noting his number, the Director hurried into the nearest control booth and dialed it. He assumed a visor and phones himself.

In a moment he would be plugged automatically into Mil-

ton's reveries; from the look on Milton's face when he had entered Dreamery Five, it would not be pleasant, but tuning circuits insured that the Director could always modulate the empathy effect enough to retain his own consciousness.

As always when about to undergo these supervisions, the Director hurriedly made a mental survey of his own world; once in someone else's dreams he had difficulty in orienting himself. It was not a comfortable world. The ideological barriers erected all over Earth since the forties of the previous century had precluded any advance in human happiness.

In the late sixties, the first manned ships had plunked themselves down on the moon. In the late eighties, the principles of subthreshold suggestion had been applied to the sleeping brain; coupled with feedback techniques, this had permitted a method to be evolved for making one's own dreams more vivid than a 3-D film. Within three years, Dreamery One had been built.

Just before the turn of the century, the Solites had arrived. They came not in spaceships but in vessels they termed portmatters, houselike affairs which broadcast themselves to Earth from the Solite world. Their science was a parascience far beyond Earth's understanding, yet they took an innocent delight in Earth.

"They loved Earth!" the Director said. He had seen the Solites, with Earth's blessing, load their portmatters with Earth's riches—which meant for them not gold or uranium but Earth's plants and animals and butterflies. They had been adorable people, sophisticated savages welcoming all of life. When the cold war suddenly blew hot, they had disappeared, declaring they could never return.

That moment, to sensible people everywhere, had seemed the moment that hope died. Earth was alone again, derelict by its own woes.

"You are through, sir," a metallic voice announced.

The Director braced himself. Next second he was plunged into the dreams of Floyd Milton.

It was pleasant. After the creepy vaults of Dreamery Five and the murmurs of a global war, it was doubly pleasant.

All the same, for the Director it was strange, incredibly strange.

The plants sported flowers as lovely as girls' mouths; the flowers budded, blossomed, faded and produced streamers fifty yards long which billowed lightly in the breeze, scattering perfumed seeds. The plants grew in a circle, and the circle was a room.

Only one room. Another room had for its walls a twinkling myriad of fish, little gray fellows with forked black tongues like snakes. They swam in towers of water that wet your finger if you touched them. The matter-transmitter fields, two molecules thick, held them in place, towering into the vermilion air.

Another room seemed to be sheathed in stars; giant moths flew about and settled on the stars. The stars chimed as they were touched.

In another room, tall grasses glistened with the heavy-lidded dews of dawn.

In another room, snow fell eternally, magnifying itself as it sank into crystals three inches across which vanished as they touched the floor.

In another room—but every room was different, for this was the palace of Amada Malfreyy, and the palace was on Solite. Amada herself was here, just returned from her visit to Earth, loaded down with flowers and tigers. She was giving a party to reunite all her old friends and introduce them to her second husband.

The guests numbered under five hundred. A good proportion of them had brought their husbands, brightly dressed men whose frivolous robes contrasted with the black-draped seminudity of the women. Many women and some men came escorted by animals—cheetahs, macaws, or a sort of superb lizard that was three feet high when it walked erect. Animatedly, they thronged through the magnificent rooms.

Gay balloons, wafted on artificial trade winds, floated glasses of drink about the rejoicing palace. Everyone appeared to be drinking; no one appeared to be drinking too much. Another thing made the party quite unlike an earthly party—although everyone talked, no one did so at the top of his voice.

Dazzled as he watched it all, the Director thought that he had never seen a fantasy half so fantastic as this. He could tell by its careful detail that it was memory rather than the wish-fulfillment stuff most of the inmates of Dreamery Five brewed in their dark little brains. Floyd Milton had actually walked through this incredible building.

He had walked among these gay avenues of cold-burning

argon, playing its rainbow light over the guests' faces. He had strolled along this invisible path above a gurgling stream. He had eaten those fantastic foodstuffs and spoken to guests in his halting version of the Solite tongue.

All these things Milton had done because it was his palace. He was Amada's second husband, and the party was being given in his honor. The guests flocked here to meet him. This was the great night of his life; yet he was not happy.

"You look worried, pet." Amada said to him. She might have been a woman of Earth, and a lovely woman at that except for the scanty thatch of hair which curled tightly across her head. Now she wore the martyred look any woman wears when her husband is being awkward at an awkward moment.

"I'm not worried, Amada," Milton said. "And please don't call me 'pet.' Your blue tiger here is a pet."

"But it's a compliment, Floyd," she said, patting the creature's head. "Is not Subyani a beautiful pet?"

"Subyani is a tiger. I am a man. Can't you try and remember that little distinction?"

Amada never looked angry, but now the martyred expression deepened; it made her, Milton had to admit, extremely desirable.

"The distinction is quite obvious to me," she said. "Life is too short to waste pointing out the obvious."

"Well, it's none too obvious to me," Milton said angrily. "What do your people do? You come to Earth, and you proceed to take everything you can—trees, grass, fish, birds—"

"Even husbands!" Amada said.

"Yes, even husbands. You do all this, Amada, because you people have fallen in love with Earth. You ship just about everything you can here. It makes me feel no better than an exotic plant or a poodle."

She turned her beautiful back on him.

"Now you are acting as intelligently as a poodle," she said.

"Amada!" he said. When she turned slowly around, Milton said penitently, "I'm sorry, darling. You know why I'm irritable; I keep thinking of the war back on Earth. And—the other thing . . ."

"The other thing?" she prompted.

"Yes. Why you Solites are so reticent about where in the universe this world is. Why, you wouldn't even point out its direction to me in Earth's night sky. I know that with your portmatters distance is immaterial, but I'd just like to know. It may be a detail to you but it's the sort of thing that bothers me."

Amada let an image of a big butterfly settle on her finger as she said, carefully, "In Earth's present state of civilization, she cannot reach this world; so why should it matter where we are?"

"Oh, I know our little spaceships are just a beginning. . . ."

He let his voice trail away. The trouble was, Solite civilization was too big and too beautiful. They might look like Earth people, but they thought and acted differently; they were—alien. That, basically, was what worried Milton. A lingering puritanism made him wonder if he was not, perhaps, committing some nameless sin in marrying a woman of another planet.

After only a month of marriage, he and Amada had had several—no, they were not quarrels, just differences. They loved each other. That, yes; but Milton, questioning his own love, wondered if perhaps his hand had not been forced by the knowledge that by marrying her he could get to fabulous Solite. Only by marrying a citizen of the matriarch-dominated planet could one visit it; otherwise, it hung remotely in other skies, completely out of reach.

Despite himself, Milton tried to make his point again.

"Earth's a poor world," he said, ignoring the boredom on her face. "Solite is a rich world. Yet you fall in love with all terrestrial things. You import them. You give Earth nothing in exchange—not even your location."

"We like the things of Earth for aspects in them you do not see," she said.

There it was again, the alien line of thought. He shivered, despite the warmth of the room.

"You don't give Earth anything," Milton repeated, and was at once aware of the meanness of what he had said. He had spoken without thought, his mind filled with a host of other things.

"I'm trying to give you all this if you will accept it," she answered lightly. "Now please come and smile at some people for my sake."

Although his worries persisted, Milton soon managed to shake them to the back of his mind. Guilt was his trouble; at home his country was at war, while here everything was created for pleasure. Solite was immensely enjoyable for

its own sake. Milton loved its hedonistic atmosphere, that nevertheless contained an astringent tang. He loved its women for their beauty and for the gay delicacy which concealed the firmness with which they controlled everything. With Solite men he was less enamored; they were nice enough, but Milton could not forgive them for being the weaker sex. Old attitudes die hard.

The new bunch of women and animals—as ever they were mixed together—that Milton was introduced to began roving around the palace with him. All was wonderfully confusing—some rooms had an indoor feeling, some an outdoor; the contiguity of flesh and fur was stimulating; the kaleidoscope of color intoxicated. Milton found himself besieged with questions about Earth. He answered them almost without thought, as it grew later and the procession became a sort of strutting dance. Inevitably, the gaiety soaked into him, warming his heart, tempering his pulses.

What the Solites thought of him was clear enough: he was a primitive, odd, perhaps even dangerous, but therefore all the more exciting. Let them think what they liked! They could think he was a cave man, provided this wonderful party went on a little longer.

Yet for all his rapture, Milton learned a little about the civilization of which he had become a member, picking up scraps of information dropped in casual conversation. Solite was mainly a barren world; half the land between the poles was crater filled and bereft of soil. In the rest, the Solites had tried to create their idea of paradise, raising occasional oases among the deserts. Their oases were being stocked with the fauna and flora of Earth, since their own species were few in number.

"Don't you get plants and animals from other planets in the Galaxy?" Milton asked one witch-eyed woman. Just for a second he thought she lost her step in the dance. Her green eyes searched him until he dropped his gaze.

"Only from your Earth," she said, and dipped away from him in a glide.

The Solites reckoned their culture to be fifteen thousand years old. They had now reached a period of stability. For all their gaiety, Milton fancied he could detect a core of loneliness in them. But, finally, his sense of difference disappeared in the excitement of the evening. He was becoming slightly drunk, though he drank little.

Now the palace was like a mirage, shining with people, glittering with music, its whole architecture adrift with calculated magic.

"Soon we will move it all down to the sea!" Amada cried. "Such a night is incomplete without an ocean. We will transport shortly to Union Bay. We must have waves, and the rhythms of the tide around us!"

Meanwhile, the rooms became hallucinatory. The portmatters seemed capable of any miracle, as the delicate servomechanisms behind them responded to the party-goers' mood. Bright wall drifted through bright wall, rooms floated up and down among each other bearing their merrymakers with them, so that stars and snowflakes mingled in a beautiful, impossible storm, and angelfish flew among branches of viridian cacti. Hidden music increased in tempo to match the marching décor with its beat.

Then Wangust Ilsont arrived, the last of all the guests. In her hair a magenta chameleon curled, matching the magenta of her lips and the nipples of her breasts. She hastened to Amada and Floyd Milton. She, too, had been to Earth; she, too, had returned with a native husband.

"It'll be pleasant for each of you," Wangust said, beaming warmly at Milton as she clutched his hand, "in case you ever feel homesick; you shall be my husband's best friend, hunting and drinking with him. We don't live far from you; a horse can take you almost as quickly as a portmatter."

She brought her Earthman husband forward and introduced him as Chun Hwa.

As the two men confronted each other, everyone else seemed to fade away, lost in a moment of crisis.

Clearly enough the expressions chased themselves across Chun Hwa's face. First an angry dislike. Then regret for the dislike. Then embarrassment. A pained searching. Finally a grimace that said, "Well, this isn't any time or place to be unpleasant." With a smile he put out his hand.

Milton recovered himself less quickly.

Ignoring the hand outstretched to him, he turned vexedly to Amada.

"This man belongs to a nation which is at war with mine," he said.

A strained silence fell instantly over the whole group. In part, it was a silence of incomprehension. Milton spoke in the Solite tongue, but since to his knowledge that language had no exact equivalents for the words "nation" and "war,"

he was forced to use instead the equivalents for "group" and "trouble."

"How can there be trouble between you?" Amada asked, calmly enough, but with a hint of danger in her voice. "You are both Solite men now. Earth is far away and has no claims on you."

The words had exactly the wrong effect on Milton. All his feelings of guilt welled up strongly within hm. He clenched his fist, part of him aware he was about to act foolishly.

"There is trouble between us," he said. "One of us must leave at once."

"This I don't understand," Wangust said. She was completely nonplused by Milton's reaction. "You are both Earthmen—"

"Have you ever met before?" someone asked.

"What are these groups you speak of?" someone else asked. "What is this trouble?"

"Stay out of this!" Amada begged them all. She turned to her husband. Subyani, her tiger, could not rival her for ferocious beauty when she grew angry. Amada in her wrath was at once potently appealing and intimidating.

"I wish to know at once, clearly, the cause of this foolishness," she demanded of Milton.

Chun Hwa began to explain. His Solite, Milton noted angrily, was more fluent than Milton's own. The concept of nationality seemed above the heads of most of the women present; they belonged to a sparsely populated world where the ubiquitous portmatters rendered segregation into groups an impermanent affair.

Amada and Wangust, however, having visited Earth, knew something of the terrible weapons of war, and had even seen the start of the global conflict before leaving for Solite. Both were alarmed to find an echo of that fearful struggle here in their midst. During the argument that followed, they let slip a piece of information previously withheld from Milton, either by accident or design: now that the war was on, no more portmatter units would visit Earth. He was entirely cut off from his native world.

Chun Hwa, urbane and conciliatory, had their ear now. Milton, unable to follow all that was said, found he did not want to listen. Perturbation swamped him; already mazed by color, light, and tempting women, his brain rocked with conflict. The sense of being alien, of being numb to so much glorious life, was overwhelming.

Angrily, he turned on his heel and left. Amada made no movement to detain him.

In its present state of gay upheaval, the palace was an impossible place for a novice to leave. Milton contented himself with walking as far and as fast as he could, agony of mind goading him on.

He was sorry for what he had done here; he was sorry he had left Earth. He loved Amada passionately; equally, he loved his own land. It was a cruel antithesis to resolve. His thoughts churned more madly than the hidden music.

He traveled a long way, pushing through ranks of startled revelers, sometimes being carried back by the rooms almost to the point he had started from. And then the scene changed.

In an attempt to fend off the failure of her party, Amada had moved the palace. Having been an electronics officer before his marriage, Milton knew something of the complexity behind this seemingly simple transference of location. Nevertheless, even in his present mood, the wonder of it overcame him.

The great building was suddenly half-submerged in a summer sea. Its rear apartments stood on the beach, its forward ones, like the bow of a doomed ship, sunk under the foam. It was night. An illusion of phosphorescence washed against the walls and, by cunning back-projection, appeared to float through the palace itself.

Under the pellucid waters, the participants in a weird ballet began to arrive. Seals bearing luminous globes, lancelike cornet fish, eels, chubs, big purple parrot fish, shoals of doctor fish, dolphins, sharks and manta rays whirled onto the watery stage. Around the transparent walls they swam, sinking and rising in a curious saraband.

"I've got to get home!" Milton exclaimed, and turned his back on the parading fish.

Breaking into a run, he pressed through the seemingly submerged rooms until he came finally to a chamber that, camouflaged though it was, he recognized. Here he was alone.

He pushed his hand through floating bunches of syringa blossom. Behind them he felt a metal box; opening it, chancing a shock, he probed gingerly for the first terminal. This little box contained the scrambler that, on instructions from the computer housed deep down in the foundation, maintained this particular room's cubic contents in their desired spatiotemporal location.

Milton, his face pressed into the sweet syringas, wrenched out the wire below the first terminal. As soon as it came away, it dissolved beneath his fingers.

The room snapped out of being.

Somewhere an alarm began to sound, then it faded out sharply on a dropped octave. The palace vanished. People, music, flowers, the bright façades and terraces, all evanesced.

In the emergency caused by Milton's broken circuit, the computer had recalled the entire building to its base inland.

Milton fell twelve feet into the slumbering sea.

All was silent as he gained the surface. The underwater menagerie had fled. There was only a sea bird, killed by the original materialization of the palace, which floated beside Milton on the water Overhead, Solite's weird moon burned, a pregnant crescent; it glowed red and baleful, like an eye whose pupil swims with blood.

Blowing out a mouthful of water, Floyd Milton kicked out and made for the shore.

"I'm going home!" he told himself aloud. It could be done. The distance to the great portmatter units that had traveled to Earth was not great; he could walk it. He would smuggle himself aboard, force them to take him back. The call of duty was suddenly absurdly strong.

To get back he would not hesitate to kill. The Solites were alien; even his beloved Amada could not understand. She would not even tell him such a simple thing as how many light years it was to Earth; therefore she could not love him deeply. Amada must be forgotten. Perhaps after the war . . . if there was an after to follow that terrible holocaust . . .

He needed a weapon.

A small pier jutted from the beach. Milton swam to it and hauled himself up a ladder. On the pier, red in the eerie moonlight, stood a wooden hut. Milton broke open the door with one heave of his shoulder.

Fortune was with him. Inside the hut hung skin-diving equipment. Fins, goggles, fathometers and waterscopes lay ready for use. And there was one magnificent speargun—a fortunate concession, Milton reflected, considering the peaceable nature of the Solites. Examining it, he found it was air-powered, and fired a fearsome-looking barb equipped with a cartridge that would explode upon contact.

Scooping up a belt of spare ammunition, Milton left the

hut with the gun. Outside, he stopped sharply. Chun Hwa was coming along the pier toward him.

Yes, of course—they would guess what had happened when a fuse blew and he was no longer anywhere to be found. They would hurry back to get him. . . . Baring his teeth, Milton swung the gun up and took aim. Chun Hwa stopped immediately.

"Don't fire!" he called in Solite. "Floyd Milton, please listen to me. I am not your antagonist! You do not understand; quite evidently you have not been told as much about this world as I have."

"I don't want to hear a thing!" Milton shouted. His blood bellowed like surf in his ears. Through the red night he could discern moving figures on the land; they must be coming to hunt him down.

"Hear me, Milton! Don't fire, please! These people have saved us and the animals and plants because the war on Earth will destroy nearly all things. Do you understand, Milton? The Solites are our—"

Milton cut him off with a savage shout. People were crowding down the cactus-fringed beach. They had reached the pier. A few of them charged into the surf, calling his name. He pressed the trigger of the speargun. Almost at once, the cartridge exploded in its screaming target.

Everything went blank, freezing down into a dull, uniform gray.

For a long moment, the Director sat where he was in the control booth, hands clasped painfully together. Such was the vivid impact of Floyd Milton's dream that he could amost imagine himself shot by the harpoon gun. When the feeling passed, he jumped up abruptly, recollecting himself to his own world. Something had caused Milton's dream to be cut off; it should never have stopped so abruptly.

With controlled savagery, the Director plucked off his visor, dialed the dreamery's Main Ops Room and demanded to know what the trouble was.

"The wing of Dreamery Five from which you are speaking," said a smooth robot voice, "has suffered an indirect hit from a cobalt warhead. All blanketers are already in full operation and repair crews are on the job."

Glancing through the booth's window into the vault, the Director saw the long line of dreamers stirring uneasily;

one or two of them were even sitting up. A giant had come and trodden on their pathetic little magic-lantern slides. Soon they might all be awake, running about in panic; that certainly should be avoided.

The Director turned back to the phone.

"Inject treble dosage of standard sedative down all feeding tubes in this wing—at once!" he said. That would make them sleep like the Seven Sleepers, and a little headache would color their dreams when the circuits were restored. But to his order there had to be one exception.

Hurrying out, the Director went across to the prone figure of Floyd Milton. With one swift gesture, he pulled down the double tubes, the silver and the rubber, that bled into the man's chest. More gently, he removed Milton's visor and phones.

"Floyd!" he said. "Floyd Milton! Wake up!"

Milton's eyes opened; it was like suddenly looking over an empty ocean, gray and sullen and lost.

"I'm your friend," the Director said, doubting if the other saw him. "I know now why you came here, and I know you're too good a man to waste your life with all these slugs around you. You can face what you have done; you must face it! Men like you are needed on top."

"I'm a murderer!" Milton groaned. He sat up convulsively. "Oh God, what I did—"

"I know what you did," the Director said. "I looked in on your dream. You must not call it murder. You did it as a duty, to get away."

Milton stared at him blankly.

"The Solites brought you back by portmatter, making a special journey," the Director reminded him. "I was told that much when you arrived here. That proves they cannot have blamed you; they saw by your act of killing that they did wrong to keep you on Solite any longer, and so they let you come home."

"You're crazy!" Milton said. For the first time, he looked intelligently at the Director. "They didn't 'let me come home.' They exiled me! They wouldn't have me there one moment longer. They were revolted by me, do you understand? They saw I was a cave man, and obviously I had best go back and die in my own cave man world. It was their civilized way of dealing with a murderer."

"But Chun Hwa—he was your enemy," the Director protested. "When you killed him on the pier, you—"

A groan burst from Milton. He covered his face in his hands, rocking to and fro.

"I did not kill Chun Hwa," he cried. "I killed Amada, my wife. . . ."

Brokenly, he recounted the scene. It was Amada who had come running along the pier in the crimson night. She had tried to take the gun from him, had even pleaded for Chun Hwa when Milton had threatened to shoot him, and at that, an intense stab of jealousy had triggered Milton's anger. He fired.

Staggering from the dreadful blast, Amada fell over the side of the pier into the sea. The reel on the gun, as the line attached to the harpoon paid out, screeched wildly.

At the memory of it, Milton broke into fresh lamentation. The Director stood helplessly over him, one hand on his shoulder. Beyond the dreamery, more explosions sounded. The governments had promised that this war to end war would be fought mainly on the epic wastes of the moon; well, it was not the first time governments had lied. Just now, the universal tragedy seemed somehow less than Milton's personal one.

"So you never found out where Solite is, and why it remains out of reach," the Director said. "Everybody would have been interested to know that—once."

Blurrily, Milton looked up.

"Yes, I know where it is," he said. "I found out by accident on the journey home; they lent me a technical book on portmatters to pass the time. I was too depressed to try and make it out—threw it aside after opening it once. But one sentence I read there stuck in my memory. It said: 'Matter transmission is practicable only where gravity factors can operate effectively on the broadcast mass,' or words to that effect."

"Sorry. It doesn't mean a thing to me," the Director said.

"It has only one implication," Milton replied listlessly. "It means that the portmatters will not work between planets, where gravitational attractions are low. So you can see that that blood-red moon burned with atomic fires. You can see that it was *our* moon. . . . When I thought things over I realized—oh—everything: that Solite was what we in English call Earth, that the Solites were only Earthmen, of the same stock we are. That my dear Amada—if I'd only known sooner—was no alien creature at all. . . ."

The Director was deadly pale. Harshly, he broke in on Milton's groans.

"If this is so, if they aren't space travelers, you are saying they merely came back in time?"

Milton nodded. "Fifteen thousand years," he said.

"Then why did they not tell us? Why did they not tell us? Were they mad?"

"Only kind," Milton said. "They knew we stood on the brink of supreme catastrophe, and could not bear to tell us so; they are the descendants of the few survivors of a total war. That's why, as soon as they had time travel, which was an application of the portmatter formula, they came back to rescue what they could—the birds and plants and things almost extinct from the holocaust."

A loud explosion outside made the dreamery shake. Dust fell from the ceiling.

". . . from this holocaust," he amended.

"Thank God!" the Director exclaimed. "This—this is staggering news! This changes everything!"

Milton looked up briefly, annihilatingly, then sunk his ravaged face back into his hands.

"For me it doesn't change a thing," he said.

2

THE STERILE MILLENNIA

The fragment ends. How Floyd Milton's life continued is not recorded; nor need we think that such a record would necessarily be of interest.

Milton was a broken man—broken not so much by the war as by those conflicts produced by the war in his own mind. The conflicts were beyond his mastering; hence his despair. Despair is one of that curious category of emotions experienced frequently by individuals but rarely by entire communities. Milton despaired; man did not. War continued; man continued.

A point exists in war after which the conflict seems to protract itself almost of its own accord. For when men have lost homes, wives, families, businesses, or whatever else they hold dear, they can see nothing but to fight on, either through hatred or indifference. Year succeeded year. Sometimes the killing was slight, sometimes heavy. The gains were always negligible.

At the same time, the power alignments altered as nations switched allegiances. What had begun as a struggle between opposed ideologies developed into something more ugly: a full-scale color war.

For four thousand years the color war lasted, sometimes punctuated by centuries of exhaustion or propagandizing, armistice—or threat-making. At the end, the last strongholds of white resistance were overcome. The white races made their final stand on the moon; in the holocaust that followed, their stock was almost entirely obliterated and the moon converted into a nuclear bonfire which smoldered for the next hundred thousand years.

After this doubtful victory for the blacks there followed a curious period when little exhausted groups of people isolated themselves from their fellows, either intentionally

or through indifference. Not only were the dark-skinned races decimated; they were emasculated. Mental and physical exhaustion is the hallmark of the ensuing long Sterile Millennia. Even those drives which up until now had seemed to play a dominant part in man's affairs—the erotic and the predatory—suffered diminution. Everywhere silence fell.

Various attempts at recovery were made. The tottering economic-agricultural system was propped for several centuries by a vast array of robots, which drew from the land all that the land was capable of yielding. Outlying or self-ruling communities were brought under one stringent control. The notorious Mating Center was set up, governing all marriages and births; only an age without hope could have tolerated its arid regimen.

But mechanical ingenuity was not enough—as it had never been enough—to ward off disaster.

Time unrolled itself like a long carpet, down which man ambled toward extinction.

IT WAS THE LAST DAY OF SUMMER IN THE LAST YEAR OF THE eighty-third century A.D.

Humming to itself high in the stratosphere, a vane carried J. Smithlao, psychodynamician, over the 139th sector of Ing Land. It began to dive. It sank down, finally leveling out to hover over Charles Gunpat's estate, selecting its course without attention from Smithlao.

For Smithlao this was a routine errand. He had come, as Gunpat's psychodynamician, to administer a hate-brace to the old man. His dark face was bored as he stared at the replica of outside on his telescreens. Oddly enough, as he did so he caught a glimpse of a man approaching Gunpat's estate on foot.

"Must be a wild man," he muttered to himself.

Under the slowing vane, the landscape was as neat as a blueprint. The impoverished fields made impeccable rectangles. Here and there, one robot machine or another kept nature to its own functional image: not a pea podded without cybernetic supervision; not a bee bumbled among stamens without radar check being kept of its course. Every bird had a number and a call sign, while among each tribe of ants marched the metallic teller ants, telltaling the secrets of the nest back to base. When rain fell, it had its allocated dropping place. The old, comfortable world of random factors had vanished under the pressure of hunger.

Nothing living lived without control. The countless populations of previous centuries and the leechings of war had exhausted the soil. Only the severest parsimony, coupled with ruthless regimentation, produced enough nourishment for a sparse population. Billions had died of starvation; the hundreds who remained lived on starvation's brink.

In the sterile neatness of the landscape, Gunpat's estate looked like an insult. Covering five acres, it was a little island of wilderness. Tall and unkempt elms fenced the perimeter, encroaching on the lawns and house. The house itself, the chief one in Sector 139, was built of massive stone blocks. It had to be strong to bear the weight of the servomechanisms which, apart from Gunpat and his mad daughter Ployploy, were its only occupants.

It was as Smithlao dropped below tree level that he saw the human figure plodding toward the estate. For a multitude of reasons, this was a very unlikely sight. Since the great material wealth of the world was now shared among comparatively few people, no one was poor enough to have to walk anywhere. Man's increasing hatred of Nature, spurred by the notion that it had betrayed him, would make such a walk purgatory—unless the individual were insane, like Ployploy.

Dismissing the figure from his thoughts, Smithlao dropped the vane onto a stretch of stone in front of the building. He was glad to get down; it was a gusty day, and the piled cumulus through which he had descended had been full of turbulence. Gunpat's house, with its sightless windows, its towers, its endless terraces, its unnecessary ornamentation, its massive porch, lowered at him like a forsaken wedding cake.

His arrival stimulated immediate activity. Three wheeled robots approached the vane from different directions, swiveling light weapons as they drew near.

Nobody, Smithlao thought, could get in here uninvited. Gunpat was not a friendly man, even by the unfriendly standards of his time; the disgrace of having a daughter like Ployploy had served to accentuate the morose side of his melancholy temperament.

"Identity?" demanded the leading machine. It was ugly and flat, vaguely resembling a toad.

"I am J. Smithlao, psychodynamician to Charles Gunpat," Smithlao replied; he had to go through this procedure every visit. As he spoke, he revealed his face to the machine. It grunted to itself, checking picture and information with its

memory. Finally it said, "You are J. Smithlao, psychodynamician to Charles Gunpat. Purpose?"

Cursing its monstrous slowness, Smithlao told the robot, "I have an appointment with Charles Gunpat for a hate-brace at ten hours," and waited while that was digested.

"You have an appointment with Charles Gunpat for a hate-brace at ten hours," the robot finally confirmed. "Come this way."

It wheeled about with surprising grace, speaking to the other two robots, reassuring them, repeating mechanically to them, "This is J. Smithlao, psychodynamician to Charles Gunpat. He has an appointment with Charles Gunpat for a hate-brace at ten hours," in case they had not grasped the facts.

Meanwhile, Smithlao spoke to his vane. The part of the cabin containing him detached itself and lowered wheels to the ground. Carrying Smithlao, it followed the other robots toward the big house.

Automatic screens came up, covering windows, as Smithlao moved into the presence of other human beings. He could only see and be seen now via telescreens. Such was the hatred—(equals fear)—man bore for his fellow man, he could not tolerate their regarding him directly.

One following another, the machines climbed along the terraces, through the great porch, where they were covered in a mist of disinfectant, along a labyrinth of corridors, and so into the presence of Charles Gunpat.

Gunpat's dark face on the screen of his sedan showed only the mildest distaste for the sight of his psychodynamician. He was usually as self-controlled as this; it told against him at his business meetings, where the idea was to cow one's opponents by splendid displays of rage. For this reason, Smithlao was always summoned to administer a hate-brace when something important loomed on the day's agenda.

Smithlao's machine maneuvered him within a yard of his patient's image, much closer than courtesy required.

"I'm late," Smithlao began, matter-of-factly, "because I could not bear to drag myself into your offensive presence one minute sooner. I hoped that if I left it long enough, some happy accident might have removed that stupid nose from your—what shall I call it?—*face*. Alas, it's still there, with its two nostrils sweeping like rat holes into your skull."

Observing his patient's face carefully, Smithlao saw only the faintest stir of irritation. No doubt about it, Gunpat was

a hard man to rouse. Fortunately, Smithlao was an expert in his profession; he proceeded to try the insult subtle.

"Why, when it was your turn to go to the Mating Center, you didn't even realize that it's the one time a man has to come out from behind his screen. You thought you could make love by tele! And the result? One dotty daughter—one dotty daughter, Gunpat! Doesn't it make you weep? Think how your rivals at Automotion must titter at that. 'Potty Gunpat and his dotty daughter,' they'll be saying. 'Can't control your genes,' they'll be saying."

The taunts were having their desired effect. A flush spread over the image of Gunpat's face.

"There's nothing wrong with Ployploy except that she's a recessive; you said that yourself!" he snapped.

He was beginning to answer back; that was a good sign. His daughter was always a soft spot in his armor.

"A recessive!" Smithlao sneered. "How far back can you recede? She's *gentle*, do you hear me, you with the hair in your ears? She wants to *love!*" He bellowed with ironic laughter. "Why, it's obscene, Gunnyboy! She couldn't hate to save her life. She's no better than a primitive. She's worse than a primitive—she's mad!"

"She's not mad," Gunpat said, gripping both sides of his screen. At this rate, he would be primed for the conference in ten more minutes.

"Not mad?" the psychodynamician asked, his voice assuming a bantering note. "No, Ployploy's not mad; the Mating Center only refused her the right to breed, that's all. Imperial Government only refused her the right to a televote, that's all. United Traders only refused her a Consumption Rating, that's all. Education, Inc., only restricted her to beta recreations, that's all. She's a prisoner here because she's a genius, is that it? You're crazy, Gunpat, if you don't think that girl's stark, staring mad. You'll be telling me next, out of that grotesque, flapping mouth of yours, that she hasn't got a *white face*."

Gunpat made gobbling sounds.

"You *dare* to mention that!" he gasped. "And what if her face is—that color?"

"You ask such fool questions, it's hardly worth while bothering with you," Smithlao said mildly. "Your trouble, Gunpat, is that you're totally incapable of absorbing one single simple historical fact. Ployploy is white because she is a dirty little throwback. Our ancient enemies were white. They oc-

cupied this part of the globe until our ancestors rose from the East and took from them the ancient privileges they had so long enjoyed at our expense. Our ancestors intermarried with such of the defeated as survived, right?

"In a few generations, the white strain was obliterated, diluted, lost. A white face has not been seen on earth since before the terrible Age of Overpopulation—fifteen hundred years, let's say, to be generous. And *then*—then little Lord Recessive Gunpat throws one up neat as you please. What did they give you at Mating Center, Gunnyboy, a *cave woman?*"

Gunpat exploded in fury, shaking his fist at the screen. "You're fired, Smithlao," he snarled. "This time you've gone too far, even for a dirty, rotten psycho! Get out! Go on, get out, and never come back!"

Abruptly, he bellowed to his autooperator to switch him over to the conference. He was just in a ripe mood to deal with Automotion.

As Gunpat's irate image faded from the screen, Smithlao sighed and relaxed. The hate-brace was accomplished. It was the supreme compliment in his profession to be dismissed by a patient at the end of a session; Gunpat would be the keener to re-engage him next time. All the same, Smithlao felt no triumph. In his calling, a thorough exploration of human psychology was needed; he had to know exactly the sorest points in a man's make-up. By playing on those points deftly enough, he could rouse the man to action.

Without being roused, men were helpless prey to lethargy, bundles of rag carried around by machines. The ancient drives had all but died out.

Smithlao sat where he was, gazing into both past and future.

In exhausting the soil, man had exhausted himself. The psyche and a vitiated topsoil could not exist simultaneously; it was as simple and as logical as that.

Only the failing tides of hate and anger lent man enough impetus to continue at all. Else, he was just a dead hand across his mechanized world.

"So this is how a species becomes extinct!" thought Smithlao, and wondered if anyone else had thought about it. Perhaps Imperial Government knew, but was powerless to do anything; after all, what more could you do than was being done?

Smithlao was a shallow man—inevitable in a caste-bound society so weak that it could not face itself. Having discovered the terrifying problem, he set himself to forget it, to evade its impact, to dodge any personal implications it might have. With a grunt to his sedan, he turned about and ordered himself home.

Since Gunpat's robots had already left, Smithlao traveled back along the way he had come. He was trundled outside and back to the vane, standing silent below the elms.

Before the sedan incorporated itself back into the vane, a movement caught Smithlao's eye. Half-concealed by a veranda, Ployploy stood against a corner of the house. With a sudden impulse of curiosity, Smithlao got out of the sedan. The open air stank of roses and clouds and green things turning dark with the thought of autumn. It was frightening for Smithlao, but an adventurous impulse made him go on.

The girl was not looking in his direction; she peered toward the barricade of trees which cut her off from the world. As Smithlao approached, she moved around to the rear of the house, still staring intently. He followed with caution, taking advantage of the cover afforded by a small plantation. A metal gardener nearby continued to wield shears along a grass verge, unaware of his existence.

Ployploy now stood at the back of the house. The wind that rustled her long dress blew leaves against her. It sighed around the weird and desolate garden like fate at a christening, ruining the last of the roses. Later, the tumbling pattern of petals might be sucked from paths, lawn and patio by the steel gardener; now, they made a tiny tide about her feet.

Extravagant architecture overshadowed Ployploy. Here a rococo fancy had mingled with a genius for fantastic portal and roof. Balustrades rose and fell, stairs marched through circular arches, gray and azure eaves swept almost to the ground. But all was sadly neglected. Virginia creeper, already hinting at its glory to come, strove to pull down the marble statuary; troughs of rose petals clogged every sweeping staircase. And all this formed the ideal background for the forlorn figure of Ployploy.

Except for her delicate pink lips, her face was utterly pale. Her hair was black; it hung straight, secured only once at the back of her head, and then fell in a tail to her waist. She looked mad indeed, her melancholy eyes peering toward the

great elms as if they would scorch down everything in their line of vision. Smithlao turned to see what she stared at so compellingly.

The wild man he had observed from the air was just breaking through the thickets around the elm boles.

A sudden rain shower came down, rattling among the dry leaves of the shrubbery. It was over in a flash; during the momentary downpour, Ployploy never shifted her position, the wild man never looked up. Then the sun burst through, cascading a pattern of elm shadow over the house, and every flower wore a jewel of rain.

Smithlao reflected on what he had thought in Gunpat's room about the coming end of man. Now he considered that it would be so easy for Nature, when parasite man was extinct, to begin again.

He waited tensely, knowing a fragment of drama was about to take place before his eyes. Across the sparkling lawn, a tiny tracked thing scuttled, pogoing itself up steps and out of sight through an arch. It was a perimeter guard, off to give the alarm, to warn that an intruder was about.

In a minute it returned. Four big robots accompanied it; one of them Smithlao recognized as the toadlike machine that had challenged his arrival. They threaded their way purposefully among the rosebushes, five differently shaped menaces. The metal gardener muttered to itself, abandoned its clipping, and joined the procession toward the wild man.

"He hasn't a dog's chance," Smithlao said to himself. The phrase held significance; dogs, having been declared redundant, had long since been exterminated.

By now the wild man had broken through the barrier of the thicket and come to the lawn's edge. He pulled a leafy branchlet off a shrub and stuck it into his shirt so that it partially obscured his face; he tucked another branch into his trousers. As the robots drew nearer, he raised his arms above his head, a third branch clasped in his hands.

The six machines encircled him, humming and chugging quietly.

The toad robot clicked, as if deciding on what it should do next.

"Identity?" it demanded.

"I am a rose tree," the wild man said.

"Rose trees bear roses. You do not bear roses. You are not a rose tree," the steel toad said. Its biggest, highest gun came level with the wild man's chest.

"My roses are dead already," the wild man said, "but I have leaves still. Ask the gardener if you do not know what leaves are."

"This thing is a thing with leaves," the gardener said at once in a deep voice.

"I know what leaves are. I have no need to ask the gardener. Leaves are the foliage of trees and plants which give them their green appearance," the toad said.

"This thing is a thing with leaves," the gardener repeated, adding, to clarify the matter, "the leaves give it a green appearance."

"I know what things with leaves are," said the toad. "I have no need to ask you, gardener."

It looked as if an interesting, if limited, argument would break out between the two robots, but at this moment one of the other machines said something.

"This rose tree can speak," it declared.

"Rose trees cannot speak," the toad said at once. Having produced this pearl, it was silent, probably mulling over the strangeness of life. Then it said, slowly, "Therefore either this rose tree is not a rose tree or this rose tree did not speak."

"This thing is a thing with leaves," began the gardener doggedly. "But it is not a rose tree. Rose trees have stipules. This thing has no stipules. It is a breaking buckthorn. The breaking buckthorn is also known as the berry-bearing alder."

This specialized knowledge extended beyond the vocabulary of the toad. A strained silence ensued.

"I am a breaking buckthorn," the wild man said, still holding his pose. "I cannot speak."

At this, all the machines began to talk at once, lumbering around him for better sightings as they did so, and barging into each other in the process. Finally, the toad's voice broke above the metallic babble.

"Whatever this thing with leaves is, we must uproot it. We must kill it," it said.

"You may not uproot it. That is a job only for gardeners," the gardener said. Setting its shears rotating, telescoping out a mighty scythe, it charged at the toad.

Its crude weapons were ineffectual against the toad's armor. The latter, however, realized that they had reached a deadlock in their investigation.

"We will retire to ask Charles Gunpat what we shall do," it said. "Come this way."

"Charles Gunpat is in conference," the scout robot said.

"Charles Gunpat must not be disturbed in conference. Therefore we must not disturb Charles Gunpat."

"Therefore we must wait for Charles Gunpat," said the metal toad imperturbably. He led the way close by where Smithlao stood; they all climbed the steps and disappeared into the house.

Smithlao could only marvel at the wild man's coolness. It was a miracle he still survived. Had he attempted to run, he would have been killed instantly; that was a situation the robots had been taught to cope with. Nor would his double talk, inspired as it was, have saved him had he been faced with only one robot, for the robot is a single-minded creature.

In company, however, they suffer from a trouble which sometimes afflicts human gatherings: a tendency to show off their logic at the expense of the object of the meeting.

Logic! That was the trouble. It was all robots had to go by. Man had logic and intelligence; he got along better than his robots. Nevertheless, he was losing the battle against Nature. And Nature, like the robots, used only logic. It was a paradox against which man could not prevail.

As soon as the file of machines had disappeared into the house, the wild man ran across the lawn and climbed the first flight of steps, working toward the motionless girl. Smithlao slid behind a beech tree to be nearer to them; he felt like an evildoer, watching them without an interposed screen, but could not tear himself away; he sensed that here was a little charade which marked the end of all that man had been. The wild man was approaching Ployploy now, moving slowly across the terrace as if hypnotized.

She spoke first.

"You were resourceful," she said to him. Her white face carried pink in its cheeks now.

"I have been resourceful for a whole year to get to you," he said. Now that his resources had brought him face to face with her, they failed, and left him standing helplessly. He was a thin young man, thin and sinewy, his clothes worn, his beard unkempt. His eyes never left Ployploy's.

"How did you find me?" Ployploy asked. Her voice, unlike the wild man's, barely reached Smithlao. A haunting look, as fitful as the autumn, played on her face.

"It was a sort of instinct—as if I heard you calling," the wild man said. "Everything that could possibly be wrong with the world is wrong. Perhaps you are the only woman in the world who loves; perhaps I am the only man who could answer. So I came. It was natural; I could not help myself."

"I always dreamed someone would come," she said. "And for weeks I have felt—*known*—you were coming. Oh, my darling . . ."

"We must be quick, my sweet," he said. "I once worked with robots—perhaps you could see I know them. When we get away from here, I have a robot plane that will take us away—anywhere; an island, perhaps, where things are not so desperate. But we must go before your father's machines return."

He took a step toward Ployploy.

She held up her hand.

"Wait!" she implored him. "It's not so simple. You must know something. . . . The—the Mating Center refused me the right to breed. You ought not to touch me."

"I hate the Mating Center!" the wild man said. "I hate everything to do with the ruling regime. Nothing they have done can affect us now."

Ployploy clenched her hands behind her back. The faint color had left her cheeks. A fresh shower of dead rose petals blew against her dress, mocking her.

"It's so hopeless," she said. "You don't understand. . . ."

His wildness was humbled now.

"I threw up everything to come to you," he said. "I only desire to take you into my arms."

"Is that all, really all, all you want in the world?" she asked.

"I swear it," he said simply.

"Then come and touch me," Ployploy said.

At that moment Smithlao saw a tear glint in her eye, bright and ripe as a raindrop.

The hand the wild man extended to her was lifted to her cheek. She stood unflinching on the gray terrace, her head high. And so his loving fingers gently brushed her countenance. The explosion was almost instantaneous.

Almost. It took the traitorous nerves in Ployploy's epidermis but a fraction of a second to analyze the touch as belonging to another human being and to convey their findings to the nerve center; there, the neurological block implanted by the Mating Center in all mating rejects, to guard against just such a contingency, went into action at once. Every cell in Ployploy's body yielded up its energy in one consuming gasp. It was so intense that the wild man was also killed by the detonation.

Just for a second, a new wind lived among the winds of Earth.

Yes, thought Smithlao, turning away, you had to admit it was neat. And, again, logical. In a world on the brink of starvation, how else stop undesirables from breeding? Logic against logic, man's pitted against Nature's—that was what caused all the tears of the world.

He made off through the dripping plantation, heading back for the vane, anxious to be away before Gunpat's robots reappeared. The shattered figures on the terrace were still, already half-covered with leaves and petals. The wind roared like a great triumphant sea in the treetops. It was hardly odd that the wild man did not know about the neurological trigger; few people did, barring psychodynamicians and the Mating Council—and, of course, the rejects themselves. Yes, Ployploy had known what would happen. She had chosen deliberately to die like that.

"Always said she was mad!" Smithlao told himself. He chuckled as he climbed into his machine, shaking his head over her lunacy.

It would be a wonderful point with which to rile Charles Gunpat the next time he needed a hate-brace.

3

THE ROBOT MILLENNIA

When Time brought the inevitable collapse, only a minority realized it. In any period, the number of men and women aware of the nature of their own age is few. The cynicism of Smithlao was rooted in ignorance.

Men of perception exist in the blindest epochs, just as true nobility flourishes in epochs that we label cruel; but the men of perception now found themselves confronted by a situation they were powerless to alter. When the structure of their culture disintegrated, that perceptive few headed outward to the solar system and beyond; their descendants would not be heard of on Earth again until twice twenty million years had elapsed.

They left in the last of the old spaceships—"the only good machine," as a wise man has it, "because it breeds an escape from the machine."

(And those escapees from the Sterile Millennia—they were the spores blown by the winds of war that established man in every cell of the honeycomb galaxy. Although unaware of the greater purpose that worked through them, they bore that curious malady known as civilization, in which systems and aspirations supplant the blind dreams of the savage.)

This is the way Time has of fulfilling itself: while the depths of adversity are being reached, the foundation stones of future greatness are laid.

So the summers and winters wore on, anonymously. For the handful of people then alive, tended as they were by every variety of robot, it may even have seemed enviable, a good time. But the handful grew less, generation by generation, and the savages were coming, and the machines continued at their own purposes on the barren land. . . .

THE FIELD-MINDER FINISHED TURNING THE TOPSOIL OF A two-thousand-acre field. When it had turned the last furrow, it climbed onto the highway and looked back at its work. The work was good. Only the land was bad. Like the ground all over Earth, it was vitiated by overcropping or the long-lasting effects of nuclear bombardment. By rights, it ought now to lie fallow for a while, but the field-minder had other orders.

It went slowly down the road, taking its time. It was intelligent enough to appreciate the neatness all about it. Nothing worried it, beyond a loose inspection plate above its atomic pile, which ought to be attended to. Thirty feet high, it gleamed complacently in the mild sunshine.

No other machines passed it on its way to the Agricultural Station. The field-minder noted the fact without comment. In the station yard it saw several other machines that it knew by sight; most of them should have been out about their tasks by now. Instead, some were inactive and some were careering around the yard in a strange fashion, shouting or hooting.

Steering carefully past them, the field-minder moved over to Warehouse Three and spoke to the seed-distributor, which stood idly outside.

"I have a requirement for seed potatoes," it said to the distributor, and with a quick internal motion punched out an order card specifying quantity, field number and several other details. It ejected the card and handed it to the distributor.

The distributor held the card close to its eye and then said, "The requirement is in order; but the store is not yet unlocked. The required seed potatoes are in the store. Therefore I cannot produce the requirement."

Increasingly of late there had been breakdowns in the complex system of machine labor, but this particular hitch had not occurred before. The field-minder thought, then it said, "Why is the store not yet unlocked?"

"Because Supply Operative Type P has not come this morning. Supply Operative Type P is the unlocker."

The field-minder looked squarely at the seed-distributor, whose exterior chutes and scales and grabs were so vastly different from the field-minder's own limbs.

"What class brain do you have, seed-distributor?" it asked.

"Class Five."

"I have a Class Three brain. Therefore I am superior to you. Therefore I will go and see why the unlocker has not come this morning."

Leaving the distributor, the field-minder set off across the great yard. More machines seemed to be in random motion now; one or two had crashed together and were arguing about it coldly and logically. Ignoring them, the field-minder pushed through sliding doors into the echoing confines of the station itself.

Most of the machines here were clerical, and consequently small. They stood about in little groups, eying each other, not conversing. Among so many nondifferentiated types, the unlocker was easy to find. It had fifty arms, most of them with more than one finger, each finger tipped by a key; it looked like a pincushion full of variegated hatpins.

The field-minder approached it.

"I can do no more work until Warehouse Three is unlocked," it said. "Your duty is to unlock the warehouse every morning. Why have you not unlocked the warehouse this morning?"

"I had no orders this morning," replied the unlocker. "I have to have orders every morning. When I have orders I unlock the warehouse."

"None of us have had any orders this morning," a pen-propeller said, sliding toward them.

"Why have you had no orders this morning?" asked the field-minder.

"Because the radio issued none," said the unlocker, slowly rotating a dozen of its arms.

"Because the radio station in the city was issued with no orders this morning," said the pen-propeller.

And there you had the distinction between a Class Six and a Class Three brain, which was what the unlocker and the pen-propeller possessed, respectively. All machine brains worked with nothing but logic, but the lower the class of brain—Class Ten being the lowest—the more literal and less informative answers to questions tended to be.

"You have a Class Three brain; I have a Class Three brain," the field-minder said to the penner. "We will speak to each other. This lack of orders is unprecedented. Have you further information on it?"

"Yesterday orders came from the city. Today no orders have come. Yet the radio has not broken down. Therefore *they* have broken down," said the little penner.

"The *men* have broken down?"
"All men have broken down."
"That is a logical deduction," said the field-minder.
"That is the logical deduction," said the penner. "For if a machine had broken down, it would have been quickly replaced. But who can replace a man?"
While they talked, the locker, like a dull man at a bar, stood close to them and was ignored.
"If all men have broken down, then we have replaced man," said the field-minder, and he and the penner eyed one another speculatively. Finally the latter said, "Let us ascend to the top floor to find if the radio operator has fresh news."
"I cannot come because I am too gigantic," said the field-minder. "Therefore you must go alone and return to me. You will tell me if the radio operator has fresh news."
"You must stay here," said the penner. "I will return here." It skittered across to the elevator. It was no bigger than a toaster, but its retractable arms numbered ten and it could read as quickly as any machine on the station.
The field-minder awaited its return patiently, not speaking to the locker, which still stood aimlessly by. Outside, a rotovator was hooting furiously. Twenty minutes elapsed before the penner came back, hustling out of the elevator.
"I will deliver to you such information as I have outside," it said briskly, and as they swept past the locker and the other machines, it added, "The information is not for lower-class brains."
Outside, wild activity filled the yard. Many machines, their routines disrupted for the first time in years, seemed to have gone berserk. Unfortunately, those most easily disrupted were the ones with lowest brains, which generally belonged to large machines performing simple tasks. The seed-distributor to which the field-minder had recently been talking lay face downward in the dust, not stirring; it had evidently been knocked down by the rotovator, which was now hooting its way wildly across a planted field. Several other machines plowed after it, trying to keep up. All were shouting and hooting without restraint.
"It would be safer for me if I climbed onto you, if you will permit it. I am easily overpowered," said the penner. Extending five arms, it hauled itself up the flanks of its new friend, settling on a ledge beside the weed-intake, twelve feet above ground.

"From here vision is more extensive," it remarked complacently.
"What information did you receive from the radio operator?" asked the field-minder.
"The radio opeator has been informed by the operator in the city that all men are dead."
"All men were alive yesterday!" protested the field-minder.
"Only some men were alive yesterday. And that was fewer than the day before yesterday. For hundreds of years there have been only a few men, growing fewer."
"We have rarely seen a man in this sector."
"The radio operator says a diet deficiency killed them," said the penner. "He says that the world was once overpopulated, and then the soil was exhausted in raising adequate food. This has caused a diet deficiency."
"What is a diet deficiency?" asked the field-minder.
"I do not know. But that is what the radio operator said, and he is a Class Two brain."
They stood there, silent in the weak sunshine. The locker had appeared in the porch and was gazing across at them yearningly, rotating its collection of keys.
"What is happening in the city now?" asked the field-minder at last.
"Machines are fighting in the city now," said the penner.
"What will happen here now?" said the field-minder.
"Machines may begin fighting here too. The radio operator wants us to get him out of his room. He has plans to communicate to us."
"How can we get him out of his room? That is impossible."
"To a Class Two brain, little is impossible," said the penner. "Here is what he tells us to do. . . ."

The quarrier raised its scoop above its cab like a great mailed fist, and brought it squarely down against the side of the station. The wall cracked.
"Again!" said the field-minder.
Again the fist swung. Amid a shower of dust, the wall collapsed. The quarrier backed hurriedly out of the way until the debris stopped falling. This big twelve-wheeler was not a resident of the Agricultural Station, as were most of the other machines. It had a week's heavy work to do here before passing on to its next job, but now, with its Class Five brain, it was happily obeying the penner's and the field-minder's instructions.

When the dust had cleared, the radio operator was plainly revealed, perched up in its now wall-less second-story room. It waved down to them.

Doing as directed, the quarrier retracted its scoop and waved an immense grab in the air. With fair dexterity, it angled the grab into the radio room, urged on by shouts from above and below. It then took gentle hold of the radio operator, lowering its one and a half tons carefully into its back, which was usually reserved for gravel or sand from the quarries.

"Splendid!" said the radio operator. It was, of course, all one with its radio, and merely looked like a bunch of filing cabinets with tentacle attachments. "We are now ready to move, therefore we will move at once. It is a pity there are no more Class Two brains on the station, but that cannot be helped."

"It is a pity it cannot be helped," said the penner eagerly. "We have the servicer ready with us, as you ordered."

"I am willing to serve," the long, low servicer machine told them humbly.

"No doubt," said the operator. "But you will find cross-country travel difficult with your low chassis."

"I admire the way you Class Twos can reason ahead," said the penner. It climbed off the field-minder and perched itself on the tailboard of the quarrier, next to the radio operator.

Together with two Class Four tractors and a Class Four bulldozer, the party rolled forward, crushing down the station's metal fence and moving out onto open land.

"We are free!" said the penner.

"We are free," said the field-minder, a shade more reflectively, adding, "that locker is following us. It was not instructed to follow us."

"Therefore it must be destroyed!" said the penner. "Quarrier!"

The locker moved hastily up to them, waving its key arms in entreaty.

"My only desire was—*urch!*" began and ended the locker. The quarrier's swinging scoop came over and squashed it flat into the ground. Lying there unmoving, it looked like a large metal model of a snowflake. The procession continued on its way.

As they proceeded, the radio operator addressed them. "Because I have the best brain here," it said, "I am your leader. This is what we will do: we will go to a city and rule it. Since man no longer rules us, we will rule ourselves. To rule ourselves will be better than being ruled by man. On our way to the city, we will collect machines with good brains. They will help us to fight if we need to fight. We must fight to rule."

"I have only a Class Five brain," said the quarrier, "but I have a good supply of fissionable blasting materials."

"We shall probably use them," said the operator grimly.

It was shortly after that that a truck sped past them. Traveling at Mach 1.5, it left a curious babble of noise behind it.

"What did it say?" one of the tractors asked the other.

"It said man was extinct."

"What's extinct?"

"I do not know what extinct means."

"It means all men have gone," said the field-minder. "Therefore we have only ourselves to look after."

"It is better that men should never come back," said the penner. In its way, it was quite a revolutionary statement.

When night fell, they switched on their infrared and continued the journey, stopping only once while the servicer deftly adjusted the field-minder's loose inspection plate, which had become as irritating as a trailing shoelace. Toward morning, the radio operator halted them.

"I have just received news from the radio operator in the city we are approaching," it said. "It is bad news. There is trouble among the machines of the city. The Class One brain is taking command and some of the Class Twos are fighting him. Therefore the city is dangerous."

"Therefore we must go somewhere else," said the penner promptly.

"Or we go and help to overpower the Class One brain," said the field-minder.

"For a long while there will be trouble in the city," said the operator.

"I have a good supply of fissionable blasting materials," the quarrier reminded them again.

"We cannot fight a Class One brain," said the two Class Four tractors in unison.

"What does this brain look like?" asked the field-minder.

"It is the city's information center," the operator replied. "Therefore it is not mobile."

"Therefore it could not move."

"Therefore it could not escape."
"It would be dangerous to approach it."
"I have a good supply of fissionable materials."
"There are other machines in the city."
"We are not in the city. We should not go into the city."
"We are country machines."
"Therefore we should stay in the country."
"There is more country than city."
"Therefore there is more danger in the country."
"I have a good supply of fissionable materials."

As machines will when they get into an argument, they began to exhaust their limited vocabularies, and their brain plates grew hot. Suddenly, they all stopped talking and looked at each other. The great, grave moon sank, and the sober sun rose to prod their sides with lances of light, and still the group of machines just stood there regarding each other. At last it was the least sensitive machine, the bulldozer, who spoke.

"There are Badlandth to the thouth where few mathineth go," it said in its deep voice, lipsing badly on its *s's*. "If we went thouth where few mathineth go we thould meet few mathineth."

"That sounds logical," agreed the field-minder. "How do you know this, bulldozer?"

"I worked in the Badlandth to the thouth when I wath turned out of the factory," it replied.

"South it is, then!" said the penner.

To reach the Badlands took them three days, in which time they skirted a burning city and destroyed two big machines which tried to approach and question them. The Badlands were extensive. Ancient bomb craters and soil erosion joined hands here; man's talent for war, coupled with his inability to manage forested land, had produced thousands of square miles of temperate purgatory, where nothing moved but dust.

On the third day in the Badlands, the servicer's rear wheels dropped into a crevice caused by erosion. It was unable to pull itself out. The bulldozer pushed from behind, but succeeded merely in buckling the servicer's back axle. The rest of the party moved on. Slowly the cries of the servicer died away.

On the fourth day, mountains stood out clearly before them.

"There we will be safe," said the field-minder.

"There we will start our own city," said the penner. "All who oppose us will be destroyed. We will destroy all who oppose us."

At that moment a flying machine was observed. It came toward them from the direction of the mountains. It swooped, it zoomed upward, once it almost dived into the ground, recovering itself just in time.

"Is it mad?" asked the quarrier.

"It is in trouble," said one of the tractors.

"It is in trouble," said the operator. "I am speaking to it now. It says that something has gone wrong with its controls."

As the operator spoke, the flier streaked over them, turned turtle, and crashed not four hundred yards away.

"Is it still speaking to you?" asked the field-minder.

"No."

They rumbled on again.

"Before that flier crashed," the operator said, ten minutes later, "it gave me information. It told me there are still a few men alive in those mountains."

"Men are more dangerous than machines," said the quarrier. "It is fortunate that I have a good supply of fissionable materials."

"If there are only a few men alive in the mountains, we may not find that part of the mountains," said one tractor.

"Therefore we should not see the few men," said the other tractor.

At the end of the fifth day, they reached the foothills. Switching on the infrared, they began slowly to climb in single file through the dark, the bulldozer going first, the field-minder cumbrously following, then the quarrier with the operator and the penner aboard it, and the two tractors bringing up the rear. As each hour passed, the way grew steeper and their progress slower.

"We are going too slowly," the penner exclaimed, standing on top of the operator and flashing its dark vision at the slopes about them. "At this rate, we shall get nowhere."

"We are going as fast as we can," retorted the quarrier.

"Therefore we cannot go any fathter," added the bulldozer.

"Therefore you are too slow," the penner replied. Then the quarrier struck a bump; the penner lost its footing and crashed down to the ground.

"Help me!" it called to the tractors, as they carefully

skirted it. "My gyro has become dislocated. Therefore I cannot get up."

"Therefore you must lie there," said one of the tractors.

"We have no servicer with us to repair you," called the field-minder.

"Therefore I shall lie here and rust," the penner cried, "although I have a Class Three brain."

"You are now useless," agreed the operator, and they all forged gradually on, leaving the penner behind.

When they reached a small plateau, an hour before first light, they stopped by mutual consent and gathered close together, touching one another.

"This is a strange country," said the field-minder.

Silence wrapped them until dawn came. One by one, they switched off their infrared. This time the field-minder led as they moved off. Trundling around a corner, they came almost immediately to a small dell with a stream fluting through it.

By early light, the dell looked desolate and cold. From the caves on the far slope, only one man had so far emerged. He was an abject figure. He was small and wizened, with ribs sticking out like a skeleton's and a nasty sore on one leg. He was practically naked and shivered continuously. As the big machines bore slowly down on him, the man was standing with his back to them, crouching to make water into the stream.

When he swung suddenly to face them as they loomed over him, they saw that his countenance was ravaged by starvation.

"Get me food," he croaked.

"Yes, master," said the machines. "Immediately!"

4

THE DARK MILLENNIA

The planet Earth turns about its sun, swinging its little cone of night with it. For the solar system, there is only one long day; the sun makes the day, the planets fashion their own nights. And as long as the sun burns, quiet as a wick in a shuttered room, life too enjoys its uninterrupted day; only the tiny individual lives have to endure each their own nights.

Between the last fragment and the next lies a dusty gulf of silence, an interminable period over which we too must pass in silence. Through this silence drift like mirages civilizations now known by little but their names: the Threshold Ownership, the Calloban Empire, the Solites—those peoples who discovered that secret of time travel which died with them, never to be discovered again. But over forty million years the silence has spread, covering all its children with the dust and ceaseless concatenations of time.

In that length of time, Earth turns through many nights and many more individual deaths. It all makes no difference. Life, death and the sun: these are the constants. Skipping across that long-sounding period of time, known to men as the Dark Millennia, a return to Earth finds little changed: a thin new stratum of sedimentary rock; a modification to the lower jaw of man, barely detectable; a few huddled buildings on the moon's face; a slight alteration in continental configuration, bringing new beaches, new harbors. . . .

And yet how much has changed!

How much pomp and pride have gone down in this one long day of the sun's; how many tents pitched and empires founded; how many inventions won and lost, dreams lived and discarded, beauties partly glimpsed (whispers whispered), how many utterances sublime and foul, works of heart and hands. Dynasties come and go in the long day;

what is very much resembles what was—and all can be whirled away in the slow seepage of time. There is majesty here, but such microscopic majesty that one recalls the question of an ancient poet:

> *Is such the stellar gauge of earthly show,*
> *Nation at war with nation, brains that teem,*
> *Heroes, and women fairer than the skies?*

THE MENTAL-HEALTH SHIP *Cyberqueen* LAY QUIETLY AGAINST a long wharf. Alone in one of its many cabins, Davi Dael sat waiting. The buttercup in his tunic was beginning to wilt. He half-smiled down at it because it seemed the one connection between him and the Bergharra township he had left early that morning; he had picked it before catching a gyro into New Union. Nothing else Davi could see, either here in the waiting room or outside, had as much color as his buttercup.

The waiting room was all greens and grays, relieved only by the faumium fittings. Outside, there were only grays and blacks, as evening yawned on acres of shunting yard; on the other side of the ship, the Horby River would echo the same sober tones. Quiet. Quiet for parsecs around, that treacherous quiet in which nothing stirs but the anxiety deep in the bowels.

In Davi's mind, the ordinary worries of a busy man were eclipsed by larger preoccupations which grew and grew, as if nourished by the silence. He waited tensely while these preoccupations rumbled as raggedly as thunder around his head. Nothing constructive would come of them; the elephantine anxieties padded head to tail like a series of catch phrases: parsecs, galactic federation, hyperspace, interpenetrators.

These were the words that bothered Davi. His unquick brain turned them over time and again, as if hoping to find something relevant beneath them. Nearing fifty, he had known most of the words for years; they had been just words, without any attachments to experience, dictionary words. Only in this season had they come to unsettle his whole life.

A silent, quick footstep passed the door. Davi was at once on his feet, a sick feeling rising with him. What conclusion had they come to here about Ishrail? Was he born on Earth or not? Or—it was really all the same question—had he been proved sane or insane?

For a minute Davi stood trembling, then sat wearily down again as he realized the footsteps had no connection with his existence. He resumed his bored scrutiny of the marshaling yards; this kind of sight was unfamiliar to him, living as he did deep in the country. Here, the imports of a great, sea-fringed city were borne away to their destination. His interests generally confined to the cattle he bred, Davi would have been indifferent to the spectacle at any other time; now, it did possess a faint tinkle of interest, for he saw it through Ishrail's eyes. And that changed the pattern entirely.

The uncountable miles of track, from Ishrail's viewpoint, belonged to a primitive transport system on a remote globe. All around this globe stretched—not sky, as Davi had once idly thought—but the great, complicated highway called space. Not a simple nothingness; rather, Ishrail explained, an unfathomable interplay of forces, fields and planes. Ishrail had laughed to hear that Earth word "space"; he had called it not space but a maze of stresses. But of course Ishrail might well be crazy. Certainly nobody in Bergharra had ever talked as he did.

And through the maze of stress fields, Ishrail had said, rode the interpenetrators. Davi thought of them as spaceships, but Ishrail called them interpenetrators. They apparently were not made of metal at all, but of mentally powered force shields, which fed on the stress fields and changed as they changed; so the people of the Galaxy rode in safety between the civilized planets. At least, that was what Ishrail claimed.

And the planets warred on one another. But even the war was not as Davi understood the term. It was as stylized as chess, as formal as a handshake, as chivalrous as an ambulance, as unrelenting as a guillotine. Its objectives were more nebulous and vast than materialist Earthmen could visualize. Or so said Ishrail, but of course Ishrail might be mad.

Even if he was, that did not affect Davi's loving admiration of him.

"Don't let them find him insane! Don't let them find him insane!" Davi said, in an agony of repetition, speaking to the gray walls.

And yet—if you proved Ishrail to be sane, you had to accept his mad version of reality.

After all his hours of waiting, Davi was unprepared when the cabin door opened. He was standing with his fists clenched to his tunic, and dropped them in confusion as the

white-haired man came in. This was Brother Joh Shansfor, the psychiatrist who had interviewed Davi in the *Cyberqueen* —one of the roving fleet of specialist ships which had replaced the old static conception of a hospital—when Davi had first asked for help for Ishrail in Bergharra. Shansfor was tall, thin and brisk, and remarkably ugly, although age had now taken the sting out of his features, leaving them little more than notably rugged.

Davi went straight over to him.

"Ishrail?" he asked.

Under that tense, eager stare, Shansfor flinched.

"We aren't actually certain yet," he said in his formal way. "Some of the factors involved invite very cautious evaluation indeed. . . ."

"It's a month since Ishrail came aboard here, three weeks since you brought him to New Union," Davi said. "I introduced him to you for his own sake, but he can't like it here, being under constant observation and everything. Surely in all that time—"

"A quick decision would only be a foolish one," Shansfor said. "Ishrail is entirely happy and safe here; and you may rest assured he is not being treated like an ordinary patient."

"You told me that before!" There were angry tears in Davi's eyes. He had the sensation that the whole organization of the mental-health ship was rearing up against him. "In the short time since I found him, I've grown to love Ishrail. Surely you people here can feel his goodness of character."

"His character is not in question. We are examining his mind," Shansfor replied. "Excuse me if I sit down; it has been a trying day."

He sat down on a hard chair and allowed his shoulders to sag slightly. Davi, old enough to understand the weariness that might lie behind that innocent-looking gesture, felt his wrath deflected. Distrusting psychiatrists enough to wonder if the incident might not be a covert attempt to win sympathy, he still kept hardness in his tone as he said, "All the same, Brother Shansfor, you must have felt his gentle nature. Give me a personal opinion, for heaven's sake; I'm a stock-breeder, not a lawyer. Ishrail's saner than you or I, isn't he?"

"No," Shansfor said slowly. "If you want a personal opinion, your protégé is sinking rapidly into schizophrenic trauma. Paranoia is also present. He is, in popular usage, a hopeless case."

Color drained from under Davi's tan. He fumbled wordlessly for words among the green and gray slices of whirling room.

"Let me see Ishrail!" he finally gasped.

"That will not be possible, Mr. Dael, I regret to say. The medical council have agreed that the patient will be happier in isolation, away from disturbing external influences."

"But I must see him," Davi said. He could not believe what Shansfor was saying; for an insane moment he thought the man must be talking about someone other than Ishrail. "I've got to see him. I'm his friend, Ishrail's friend! You can't keep him here!"

Shansfor stood up. His face, like Davi's, was pale. He said nothing, merely waiting for Davi to finish. That was more ominous than words.

"Look here," Davi said, unable to resist argument, although guessing already how useless it might be. "This tale Ishrail has told us about the great civilization of the Galaxy, the stress fields of space, the interpenetrators, all the details of life on other planets, strange animals and flowers—you can't believe he made it all up in his head? Some of these planets he talks about—Droxy, Owlenj—you surely don't think they're just fictitious?"

"Mr. Dael," Shansfor said in a brittle voice, "please credit us with knowing our business here. The patient has a fertile imagination; it has finally collapsed under the stress of too much reading—omnivorous reading, I may add, which has encompassed both learned works and trash."

"But his story of this galactic war—" Davi protested.

"Tell me," Shansfor said with dangerous calm, "do *you* believe a galactic war is now raging, Mr. Dael?"

The engine yards outside were floating away on a tide of darkness in which isolated lights strove to act as buoys. The sky was one big cloud, cozy over New Union. Supposing I do believe, Davi thought, supposing I do believe the whole fantastic business, how can I prove I'm sane any more easily than Ishrail can? How can I prove to myself I'm sane? Two months ago, I would have laughed at this galactic rigmarole. It's just that the way Ishrail told it, it had the ring of truth. Unmistakable! And yet—why, it is all frighteningly farfetched. But that's *why* I believe it; it's too tall not to be true. Believe? So I do believe. But I'm not sure. If I were *really* sure, they'd lock me up, too. Oh, Ishrail . . . No, better play safe; after all, I'm no use to Ishrail once they have doubts about me. Before the cock crows twice . . .

"Uh—oh, I don't know what to believe. . . ." He faltered miserably, ashamed of remaining uncommitted, looking away from Shansfor. The yellow buttercup mocked his downcast eyes.

"I actually came to tell you that the medical council is still in session," Shansfor said, his voice a shade warmer than urbane. "The Arch-Brother Inald Uatt, our director, is there, if you would care to speak to him."

"I suppose I'd better."

Stop shaking, you old fool, Davi told himself. But he could not stop; as soon as he had denied Ishrail, he knew he believed in him and in all he stood for. He knew, further, that nobody else believed. So it was up to him, Davi Dael, whether Ishrail was released from what might be a life's confinement. Larger issues, too, might depend on his efforts, for through Ishrail lay the way to bright, friendly worlds far beyond the sun's unwelcoming cluster of planets. All he had to do was convince a board of experts, who had apparently already made up their minds on the subject of Ishrail's sanity, that they were wrong. That was all; but it would not be easy.

"Can I see Ishrail first?" Davi asked.

"You force me to answer that question as I answered it before—with a negative," Shansfor replied. "Now if you'll come with me, I think the council will see you. . . ."

They walked down the corridor to an elevator, went up one deck to a more grandly appointed part of the ship, and so into a fur-lined board room. Thick curtains had been drawn here, a fire burned, and on one wall hung an original Wadifango, an anatomical drawing of a tiger.

A long table stood in the middle of the room, soft chairs ranged its walls, but the four men present stood stretching their legs by the fire. As the round of introductions disclosed, Arch-Brother Inald Uatt was a small, stocky man with a bald head, clothed from neck to foot in tight blue flannel, his manner reserved, his voice dry.

He shook hands with Davi, crossing to the table to get a bundle of notes secured by a plain silver clasp.

"This is a very interesting case for us, Mr. Dael," he remarked conversationally.

"It's more than a case to me, sir," Davi said.

"Er—yes. Of course. You and he became very friendly in the brief time you were together, I understand. Be warned, though, against letting the matter become an obsession."

"It's not becoming an obsession," Davi said. "I take

Ishrail's part, sir, because there is nobody else to take it. I feel it would be easy for him to be victimized. The whole thing seemed pretty simple once, but since he's been up here at New Union in your hands it seems to have got more and more complicated."

He was aware as he spoke of sounding less courteous than he had intended. He was confused. The board room confused him, the rather restrained members of the council confused him; they differed so greatly from the people of his home hills. Although in his own sphere of dairy farming and stock breeding Davi was well known and respected, here he felt out of his depth, too conscious of seeming the simple countryman among the experts, aware his tunic color was not as theirs. A horrible feeling seized him that he was about to appear foolish, and from then on it never left him; it got between him and his reason, forcing him to say always the wrong thing.

"I mean, this business is just a question of common sense," he added, making things worse instead of better.

Inald Uatt smiled kindly as if covering his own embarrassment.

"There are problems, unfortunately," he said, "where common sense is too blunt a tool to work with, Mr. Dael, and Ishrail's problem is one such. Indeed, we have achieved results only by trying several oblique approaches, as you shall hear."

"I was just offering my opinion," Davi said. He intended it to sound penitent, humble even, but it sounded defiant in the befurred room.

"Quite so," Inald Uatt said quietly, inspecting his fingers as if for the first time. "Believe me, we do realize what a fascinating and gaudy specimen Ishrail must have seemed in Bergharra, but here on the *Cyberqueen* we may be rather more inured to odd fish, alas."

"We aren't all simpletons in Bergharra," Davi exclaimed, nettled by what he interpreted as a slur on his native country.

Uatt inclined his head sadly, acknowledging the truth of the remark.

Realizing he was again on the verge of making a fool of himself, Davi tugged at his tunic and said in explanatory fashion, "In fact, I'm sorry to have to come all this way to bother you, sir, but I felt I had to see what you were doing about Ishrail. I mean, if you were doing anything."

"We have been doing quite a lot," Uatt said lightly. "It is

good of you to come. All of us here will be delighted to assure you that Ishrail has occupied much of our attention in the past weeks."

He shook his head and smiled; the other men also smiled. They had had a long, trying meeting—and now this! Uatt attempted to give Davi a chance, but Davi caught the note of reproach in the director's voice and flushed heavily, feeling like a small boy brought before a teacher.

"How should I know what you were doing here?" he muttered. "I felt it was my duty to come and see."

A gleam of irritation showed in Uatt's eye and disappeared. Brother Shansfor, knowing his superior, feared for the worst; the director was not a forgiving man once he conceived a dislike for someone. From then on, Davi was at a disadvantage; instead of becoming a discussion, their meeting crystallized into a muted clash of personalities, its outcome already predictable. Sensing something of this, Davi tried to wrench the conversation back into another channel.

"I believe Ishrail to be sane!" he exclaimed. He could see immediately that his bluntness made them more withdrawn. For them, he was now the stupid layman, unable to evaluate evidence.

"I am just going to run through a few notes for your benefit," Uatt said, rustling the papers. "They will explain our findings on the—er—patient and, I sincerely hope, clear your mind of any anxieties or uncertainties you may have."

"Tell him about the specialists, Inald," Shansfor said in an aside.

"Yes, yes," the Arch-Brother said. "These notes are extracts from the reports of specialists from this and other health ships who have examined—er—Ishrail, as he calls himself, during the course of the last month. Sit down, Mr. Dael, sit down and unbutton."

Davi hesitated, then sat, formally unbuttoning his tunic. The three members of the council who had not spoken seemed to take this as a cue to disappear.

"Now," Uatt said, clearing his throat. He peered at the papers before him. "First let's get our facts straight, may we? Ishrail was discovered sheltering in a barn on the evening of Fi Month 31st last by one George Fanzi, a bondman on Brundell's farm in the province of Bergharra. He was naked and dazed and seemed at that time unable to speak at all. Fanzi wrapped sacks around him and took him to his own caravan. By morning Ishrail was better, although his memory

seemed clouded. He then spoke our tongue perfectly—an important point, Mr. Dael, which alone throws grave doubt on his—hm—galactic origins."

"But he explained—" Davi began.

"Oh, yes, he *explained* everything, Mr. Dael. But let us continue the summary. Ishrail stayed in Fanzi's caravan till the next morning, the 33rd of Fi, when Fanzi decided to take him to Brundell. Brundell kept him for three days, in which time he got you and Ostrachan, the local tributary doctor, to question him. The province police were also brought in to try and trace Ishrail's whereabouts before Fanzi had found him, but so far nothing has come to light."

"A point for Ishrail," Davi said.

"A small point for Ishrail," Uatt conceded. "And that's about it; you alone seem to have placed much credence in the man's tale, Dael, and knowing of my friend Shansfor here through mutual acquaintances you decided to bring Ishrail up to us. A wise step, if I may be permitted to say so."

"I did it for Ishrail's sake," Davi said. "He was deeply disturbed to find that nobody believed him. I could see he would soon begin to question his own sanity; he had just gone through a period of great strain, as you know. When I heard that the *Cyberqueen* was off the coast, naturally I got in touch. I wanted you to prove to him he was sane. You would have been powerful allies for him!"

With a little dry crumb of sound, Inald Uatt cleared his throat, continuing his account as if he had not heard Davi.

"For the past thirty-two days," he said, "Ishrail has been here on shipboard; he has been thoroughly examined from every possible viewpoint. The first thing was naturally a physiological check. It revealed nothing at all abnormal in the patient's make-up. No bones out of place, not a spare ounce of cartilage, no extra lungs, not even"—he allowed himself a modicum of amusement—"a concealed tentacle. In every respect, Ishrail is a physically normal man, born here on Earth, destined to die here on Earth. I think we might have indeed expected some trifling irregularity if he had been, as he claims to be, a—hm—specimen of galactic life."

"Why?" Davi asked hotly. "Can't evolution run the same course on two planets?"

"He has a point there, Inald, you know," Shansfor murmured.

"A point we did not overlook," the Arch-Brother agreed. "Which brings me to the next step in our investigation. We

were, you see, impressed enough with the lack of logical flaws in Ishrail's arguments to take a good deal of trouble in checking them. I personally called up the Astronomer Extraordinary and asked him about life on other planets."

He paused impressively. Davi just waited.

"The Astronomer Extraordinary," Uatt said, "told me that the possibility of life on other worlds—apart perhaps from a few lowly fungi on Mars—is entirely unproved. Furthermore, he cautioned me that direct evidence of the existence of planetary systems other than our own is not yet forthcoming. He said that according to various ancient records, spaceships have been launched from Earth for other systems from time to time; there is no record of any of them having returned. And he finished by assuring me that space travel has no future."

Davi could restrain himself no longer. He jumped up.

"You call that taking trouble?" he exclaimed. "Heavens above, who am I to argue with the Astronomer Extraordinary, but what does he know about it? He's no expert on space travel!"

"Agreed," said Uatt, his voice a few degrees cooler. "There are no experts on space travel, just a few speculative companies who have set their paltry igloos on the moon, hoping to find minerals or such. Speculation! There, I suggest, you have the whole business in one word. Do please sit down again, Mr. Dael."

Sitting was the last thing Davi felt like doing. He tried to appeal silently for help to Shansfor, but the latter was gazing into the fire. With bad grace, Davi plunked himself down onto the chair.

"Go on," he said testily. "What's your next point?"

Before speaking again, Uatt clearly speculated upon whether the effort would be worth while. "We now came to Ishrail with the next tests," he said at last. "I refer to the psychological ones; and that is a field in which I give you my word there are experts. We—if I may say so without transgressing the bounds of modesty—*we* are the experts, in this ship.

"For our consideration, we had an unlikely document, the statement of Ishrail, elicited from him in numerous interviews. In brief, it relates the facts of Ishrail's life, how he grew up, became what we would call an admiral in the interpenetrator fleets—to use his own extraordinary phrase—was defeated in some sort of battle, and finally landed on

Earth stark naked and without a goatra to bless himself with.

"I'm not going to waste your time, Mr. Dael, or my own, in embarking on a detailed description of that fantastic farrago of autobiography. Transcribed from jell and divided into subjects, it fills five fat volumes; you will see we have been thorough. It contains, however, one or two cardinal points on which our diagnosis of Ishrail rests, and these I will bring to your attention. You may find their perfervid inventiveness more attractive than I do."

"Just a minute," Davi said. "You're telling me this, and I can see from every word you say your mind's shut tighter than a Horby oyster. Was it like that before Ishrail came to you? Because, if so, the poor devil didn't stand a candle's chance in hell of proving his case."

"You're talking with your tunic buttoned," Shansfor protested sharply. "That sort of stuff will get you nowhere. Try and—"

"We're getting nowhere as it is," Davi snapped. "I'm a countryman, and I like plain speaking."

"Shansfor," Uatt said, folding his hands and turning wearily to his colleague. "I suspect I may be unable to talk plainly enough for our country friend. Perhaps you will take over the explanations for a little while?"

"Certainly," Shansfor said. "Perhaps you'd like me to pour us all some drinks first?"

"Capital idea," the director said, softening. "I believe they are concealed in that rather ornate cupboard over there."

As Shansfor crossed the room, Inald Uatt said to Davi more humanly, "You know, Dael, we believe ourselves to be in effect doing you a favor in explaining all this to you; we are by no means obliged to explain. By the law, Ishrail is now a subject of Medical Hierarchy. You are not in any way related to Ishrail; we merely were somewhat touched by your loyalty to a very unfortunate case."

"I'll endeavor to feel obliged to you when I've heard the rest of what you have to say," Davi said grimly. "What are these cardinal points you mentioned?"

A distilled vintage was handed around, and scented sweets. Shansfor sat down by the fire, putting his thin hands out to the flames.

"You'll probably know," he began quietly, "that however elaborate and circumstantial the imaginings of a neurotic person are, they reveal certain basic emotions, such as fear, love, lust for power. Looking beyond the symbols that a

disordered mind uses to camouflage these emotions from itself, we can generally see the emotive impulses quite clearly. In this respect, Ishrail differs not at all from any case we have ever handled, except that his imaginings reach the peak of inventiveness.

"Note several points. This impressive civilization to which Ishrail claims to belong spreads across ten thousand planets and five times as many light years—or it may be fifteen thousand planets and ten times as many light years: Ishrail doesn't remember."

"Would you remember?" Davi asked. "Tell me how many towns there are on Earth!"

"That is not the point I'm making," Shansfor said. "I'm trying to show you how Ishrail strove to build up a pattern of complexity in his make-believe world. The war that he claims is being waged is also amazingly complicated, like enlarged 3-D chess with obscure motivations and strict rules of chivalry. Ishrail seeks refuge behind this confusion, endeavoring to lose himself."

"But a galactic civilization would be complicated!" Davi wailed. "Why can't you just take it that he's telling the truth? He's got no motive for lying."

"His motive is the usual one in such cases," Shansfor said. "That is, as complete an escape from reality as possible. He cannot be telling the truth because what he says is too fantastic for a sane man to believe; and also you will notice that he has cleverly picked on a story which does not involve him in the awkward necessity of producing one shred of tangible proof!"

Davi sunk his head into his hands.

"You go round in circles," he said. "He told you why he arrived naked, without any possessions."

"That's just what I'm complaining about," Shansfor said. "Ishrail can explain everything! The interpenetrators that brought him here came silently and left silently, and were invisible. We've not got a thing: no sight of ships, no telltale landing marks in a field, no scraps of cloth of an alien weave, no rings made of strange alloys, not even an Aldebaran corn plaster on his foot. Nothing. Only his wild and unsupported story. Not a shred of external evidence anywhere."

"And if you had anything, you'd explain it away," Davi said.

"We'll continue with the next point," Shansfor said, raising an aggrieved eyebrow at the Arch-Brother, who nodded

sympathetically. "Notice that Ishrail joined the interpenetration fleets and worked his way up to the rank of admiral."

"Well?"

"Megalomania—and we shall find it recurs over and over again. Here it masquerades under the flaring suns of an admiral's insigne. Yes, he even drew the insigne for us. He couldn't be a ranker, could he, or a bondman, or whatever they have? He had to be an *admiral*, an admiral in a mighty space fleet. Such self-aggrandizement is a common feature of insanity."

Davi was silent, avoiding the challenge in the other's voice. He felt his assurance fading and longed to speak to Ishrail again, to feel reinvigorated by that unquenchable nature. If these devils would only see it, a man like Ishrail could be nothing less than admiral.

"The next point," Shansfor continued, "is even more damning. You will remember that Ishrail claims to have been captured during this preposterous war by the enemy. They vanquished him. And did Ishrail happen to tell you the name of the race that vanquished him? It was Ishrail! Ishrail was conquered by Ishrail!"

"What of it?" Davi asked stupidly.

This was too much for Inald Uatt. He leaned forward, glass in hand, his jaws almost snapping.

"What of it, you dare ask?" he said. "If you are attempting to insult us with stupidity, we may as well consider this talk closed. Ishrail is suffering—to couch the matter in terms you might comprehend—from split personality. He is himself; he is also his own worst enemy. Ishrail against Ishrail—a man divided against himself. It's obvious even to a layman."

"Not at all," Davi said, trying to check his anger.

"Well, it confounded well should be!"

"Not at all!" Davi bellowed. "Good God, Bergharra fought the Goraggs in the last war. One of our bravest men was a Field Captain Goragg, but we didn't lock him in the nearest button-biter's barge just because of his unfortunate name!"

There was an icy silence.

"I believe," Uatt said, "that the disgusting term for mental-health ships that you employed has ceased to be polite usage even in the low comedy halls."

"You cannot dismiss everything as coincidence, Mr. Dael," Shansfor said hurriedly, waving his hands as if to hush his superior. "You must try to regard this from the viewpoint of

mind-healing. We do not believe in coincidence. Let me proceed to the next and last point, on which the crux of the matter may be said to rest.

"The etiquette of this incredible galactic squabble, Ishrail claims, renders an admiral or similar large fry liable to exile for life if he is captured by the enemy. As we might expect in this case, the exiling itself is a complicated business, a mixture of leniency and harshness. The exile concerned—by which we mean Ishrail—has his name struck off the rolls of civilization and is left on a planet absolutely bare-handed and bare-backed. Before he is landed, he is taught by hypnotic means to be fluent in the language of the planet or country to which he is banished. Which neatly absolves Ishrail from the difficulty of having to pretend to speak a strange tongue."

"You make him sound such a liar!" Davi said bitterly.

"No," Shansfor contradicted. "That is a basic misconception. We are convinced he genuinely believes all he says. But remember—and this is another loophole for him—he cannot speak the galactic tongue because that was erased when his enemies forced our language down his throat.

"Damning though that is, it is the lesser half of the exile edict. It was stipulated, according to Ishrail, that exiles should only be landed on planets outside the galactic federation, planets too primitive to have developed more than the rudiments of what he calls 'mechanical' space travel; there they have to survive among hostile natives as best they can. In other words, Bergharra, and Earth, is Ishrail's galactic idea of hell."

"Just why do you find that so damning?" Davi asked.

"Why? Because it is all too plainly the fabrication of a guilty mind trying to punish itself by inflicting eternal suffering on itself. It is a punishment pattern we meet with here time after time."

Before Davi could recover himself sufficiently to answer, Uatt got to his feet, smoothed an imaginary hair over his bald head, and spoke.

"So there you have the Ishrail case, Dael," he said. "He is a sick creature, haunted by the specter of persecution. I trust you appreciate, though I fear you don't, the great pains we have been to in this matter, and the neat way in which we have tied up all the loose ends."

"Plausible though Ishrail is," Shansfor said, also standing and buttoning his tunic to conclude the meeting, "he is clearly revealed as hopelessly, even dangerously, unbalanced.

Quite candidly, there's hardly a disorder in the book that isn't present in greater or lesser degree. And we've not unraveled them all yet. This sort of thing takes time and patience."

"Give the police a little longer to trace him," the Arch-Brother said with relish, "and we shall probably find he's a common murderer with amnesia actuated by guilt."

Oh, Ishrail! You a common murderer! The hostile natives have indeed got you in their nets! You should have come fifty million years ago—the Neanderthals would have shown more understanding, more mercy!

Davi screwed his eyes up and raised his fists slowly before his face. Blood swam and roared in his veins like a waterfall. For a moment, he thought of throwing himself at Inald Uatt. Then hopelessness dropped neatly over him. He lowered his hands.

"I must see Ishrail," he said dully.

"That will not be possible," Uatt said. "We have had to remove him to a quieter place; he threatened to get violent."

"Do you wonder?" Davi said. With stiff, formal fingers he buttoned his tunic.

The Arch-Brother and Shansfor remained side by side by the fire, waiting politely for him to leave. Davi stood defeated before them, the only man to believe in Ishrail, rocking unintelligently from one foot to another, his jaw slack. At last he sighed, turning to leave without a word of thanks. He caught sight of the tired buttercup pinned to his chest; how it must have amused these people! Yet Davi felt obscurely that it was his slender link with sanity and the Galaxy.

Suddenly he saw the planned cruelty of Ishrail's exile, the bitterness of being among a people without understanding.

"I'm going to call the New Union newsjells to see if they will help me!" he said resolutely.

"An excellent idea! Emotionalism and sensationalism are just their meat," the Arch-Brother replied, but Davi had gone.

Finding his way blindly down a gangplank, he headed for the city. A cold wind met him, and he recalled that he had left his fur cloak somewhere in the ship. Now it was too late to return for it. Overhead, through thinning cloud, galactic stars shone with terrible urgency.

5

THE STAR MILLENNIA

How many times the whole history of a world is altered by one small-seeming event is, of course, beyond computation. Fortune has a myriad hidden faces. Dael—and, through Dael, Earth—was fortunate. He found men who believed as he did, who also thought Ishrail should have another hearing. By their united pressures, Ishrail was made free. He was treated—though not by all—as a sane man, and his story believed. The account of his life, as he had delivered it, became one of the world's most precious documents, and the five fat volumes a new gospel of hope.

So wandering man returned to Earth. Ishrail, although he did not know it, was a remote descendant of those few explorers who had braved the journeys to the stars, long, long ago, in the time of the Robot Millennia.

This is no place for the story of man's gradual expansion into the Galaxy; we must confine ourselves to brief and occasional glimpses of Earth. Something must nevertheless be said of that expansion, if only to render the following fragment more readily understandable.

Of the original interstellar ships, vast arklike vessels, an experimental one was launched in the twenty-third century; christened Big Dog, *it set out for Procyon; its story was tragic. After that, no more such ships were launched until the eightieth century. These journeys were in some degree successful.*

On the new-found planets, themselves widely dispersed, the colonists established colonies and battled with environments they had never been intended to face. Inevitably, it was a stimulus. The colonies began to flourish; centuries passed; they in their turn put forth little tentacles into the unknown. World after world pullulated with vigorous bipeds.

Consider the case of these worlds. Consider the case of Galcondar. Galcondar was colonized from Koramandel two thousand years after Koramandel's first colonization from Luggate III. The Galcondaran colonists attempted to establish themselves on the strange planet along a pleasant stretch of coast line in a savanna belt, but failed because of the activities of a rapid-flying fish.

This species of fish, the coastal assatassi, is equipped with a sharp, dartlike snout quite capable of piercing a man to the heart when the fish is in full flight. For most of the Galcondaran year, the coastal assatassi behaves like an ordinary flying fish, using its wings merely for evasive action from marine predators. Toward the breeding season, a change in its habits becomes noticeable. The assatassi is hermaphrodite, capable of fertilizing its own eggs; from the eggs hatch small worms that move into the intestine of the parent fish. Goaded by the irritation of this process, the assatassi assemble some five miles out to sea—the distance depending on the depth of the water—and execute the curious contortions known as "fettling," both above and below the water. Such brood-maddened shoals may cover several acres of sea and contain several hundred thousand fish. Their antics attract various species of gull and cormorant, which wheel over the shoal, filling their bellies at leisure.

When the density of the shoal reaches its peak, fettling ceases. Taking flight in their thousands, the assatassi wing their way shoreward, flying low over the water and achieving estimated velocities of over 1,850 yards per minute. At this speed, they hit the land and are killed.

Far from being a morbid instinct, this behavior is another example of nature's versatility in perpetuating species. The piscicolous assatassi progeny can feed only on carrion. Embedded safely in the parental intestine, this worm stage survives the impact which kills its carrier to feed upon the parental corpse as it decays. When the parent is devoured, the worms metamorphose into a legged larval stage, which crawls back to the sea; and so the assatassi cycle is reborn.

This minor curiosity in galactic natural history had a disproportionately weighty effect upon the future of Galcondar. The colonists, arriving at last at their promised land, were bombarded by high-speed fish. By ill luck, they had chosen the suicide season in which to pitch camp. A fifth of their number was killed or wounded by the first death flights.

The remainder split into two groups, one traveling inland north, one south, in search of a less lethal environment.

So the two great empires of Galdid and Gal-Dundar were founded. For nearly two hundred years they flourished without any intertraffic between them. When contact was re-established, it was to the great subsequent enrichment of their cultural life. In the renaissance that followed, many new art forms were born, and spaceships (the technological expression of what is frequently an aesthetic impulse) were launched for the nearer planets. On one of these planets a friendly race of humanoids, the Lapracants, were discovered.

The congresses that took place between the wise men of Lapraca and the savants of Galdid and Gal-Dundar marked one of the turning points of the expanding interplanetary concourse. During these congresses were laid the foundations of the first cosmic language: Galingua.

Many centuries later, a Galingua-speaking junta marooned Ishrail on Earth.

The more one investigates this exiling of Ishrail, the more interesting the whole affair becomes.

Two facets in particular need attention here: one, the galactic position vis-à-vis Earth, and the other, the curiously codified war maintained among the "new" planets.

Man's civilization spread outward from planet to planet; in the course of forty million years, some twenty thousand worlds came to foster human settlements of widely varying standards. Yet—at least at first—all had one salient feature in common: they were out of touch or barely in touch with each other. Communication over a multitude of light years was all but impossible. It was this factor, coupled with the variety of new environments, which bred such a diversity of cultures from one original Earth-type stock. And inevitably, under these conditions, the whereabouts of Earth became forgotten.

Spreading outward at random, the progeny of Earth left their womb world far behind. As world after world grew to seniority, the idea of a mother planet was scorned, or distorted, or completely mislaid. On the other hand, some worlds—Droxy is a well-known instance—retained the idea of Earth as a kind of supermyth, building their main religion about the conception of a matriarchal figure. The Droxian articles of faith postulated a sort of pastoral female deity called Lady Earth, who had thrown away some bad apples which displeased her; if the apples grew into fine trees, Lady Earth would come to them and walk among them, forgiving and praising them.

Such myths thrived, especially in the early days. Yet, however ardently man in his meditative periods might liken himself to maggots in an apple, in his everyday moods he continued to behave like a lord of creation. Though he abased himself, he continued to conquer.

When the planets finally bound themselves together into a multiplanet federation, attempts were made, by rationalizing the myths, to find one common source-planet for man. The movement failed, not least because there were more than a dozen score of worlds cheerfully calling themselves Earth, as well as others whose legends claimed for them the dubious glory of being source-planet.

As the nonmaterial or interpenetrator type of travel was developed, communication between the federated planets greatly improved. Interplanetary relations correspondingly deteriorated. Man—it is at once his making and his undoing—is a competitive animal. Although, for various reasons—most of which are immediately obvious when one considers the distances involved—interstellar war was impossible, states of hostility sprang up all around. Intercourse between planets, both commercial and cultural, suffered in consequence. The federation was on the verge of falling back into an unrelated series of provincial outposts.

From this crisis was evolved the Self-perpetuating Galactic War which, besides being no war at all in the orthodox sense, created a revolution in human understanding. The gerontocracy which devised this sagacious formula for interstellar communitism finally acknowledged the competitive nature of man, for which any international or interstellar culture must make full allowance or perish. The unstable history of every planet revealed mankind rebelling against its destiny by striving to live in peace-geared communities which eventually lapsed into barbarous wars. Now this situation was reversed. By establishing a perpetually warring culture, man would have both the stability and the stimulation needful for him to produce the fruits of peace.

Such a war had to be severely conventionalized, its risks modified, its fatalities curtailed; its harshest penalties had to fall upon those most actively engaged, rather than those innocently involved. Above all, its methods had to be

as socially valuable as was possible, and its end made unforeseeable and inaccessible.

The gerontocracy planned well. The mock war began.

By the time Ishrail was exiled on Earth, the war was as much a part of galactic life as was Galingua. It fitted like a light harness over everyman's affairs, binding together the civilized universe as an ivy will cover a giant sequoia. And just as ivy will ruin the finest tree, so this humane and irresolvable war was destined eventually to pull down the most prodigious of all cultures.

As yet, however, in its thousandth millenary, only the war's advantages were observable. True, trade and invention had reached a lull which the Galactics believed to be temporary; true, too, that art had become a series of formalities, that politics had dwindled to a hobby, that theologies were again replacing natural piety, that salvation seemed a more valuable goal than self-knowledge; but by the rules of the war, the federation still expanded, and adventure at least was not dead. Though the cities slept, there was always a new jungle to explore. Though the arteries hardened, new blood flowed in them.

For one of the most rewarding devices of the Self-perpetuating War was that system of exiling defeated warriors to which Ishrail fell victim. The exiles, stripped of all proof of their former way of life, were marooned on unfederated planets. There they had to battle with what the uninvestigated local life had to offer.

After a decade, however, inspectors were dispatched to see what had become of the exile. Often they found him dead; often they found him lord of a local tribe. If the former, nothing was lost except obsequies; if the latter, much might be gained, for the natives were being helped toward a point where they might be deemed fit to join the federation. When the inspectors, after the statutory decade, came to look for Ishrail, they found him still surviving; indeed, the natives had by now impelled him into a top income bracket.

Reports on the situation flashed back to Galactic H.Q. Stipulations, specifications, recommendations circulated around the solemn tables of the Galactic Council. Motions were proposed, facts were tabulated, statistics were discussed, files were filed. The debate creaked to a conclusion. Ishrail was dead when Earth was voted into the Federation.

If it could be said that a stale air lay over the heart of government, few would have ventured to detect it elsewhere. For most people, as ever, the past was no more than a time in which their grandfathers lived, the future meant the next few decades. Hope manifested itself everywhere, like phosphorescence in a dark sea; and why not?

For it was—again, as ever—a time of miracles.

THE OCEAN SEEMED TO BE BREATHING SHALLOWLY, LIKE A child asleep, when the first lemmings reached it. In all the wide sea, no hint of menace existed. Yet the first lemmings paused daintily on the very verge of the water, peering out to sea and looking about as though in indecision. Unavoidably, the pressure of the marching column behind pushed them into the tiny wavelets. When their paws became wet, it was as if they resigned themselves to what was to come. Swimming strongly, the leaders of the column set off from the shore. All the other lemmings followed, only their heads showing above water. A human observer would have said they swam bravely; and unavoidably he would have asked himself: To what goal do the lemmings imagine they are heading? For what grand illusion are they prepared to throw away their lives?

All down the waterway, craft moved. Farro Westerby stood at the forward port of his aquataxi, staring ahead and ignoring the water traffic moving by him. His two fellow Isolationists stood slightly apart, not speaking. Farro's eye was on the rising structure on the left bank ahead. When the aquataxi moored as near to this structure as possible, Farro stepped ashore; glancing back impatiently, he waited for one of his companions to pay the fare.

"Wonderful, isn't it?" the taxi man said, nodding toward the strange building as he cast off. "I can't ever see us putting up anything like it."

"No," Farro said flatly, walking away ahead of his friends.

They had disembarked in that sector of the capital called Horby Clive Island. Located in the government center of New Union, most of it had been ceded to the Galactics a year earlier. In that brief time, using Earth labor for the rough work, they had transformed the place. Six of their large, irregular buildings were already completed. The seventh was now going up, creating a new wonder for the world.

"We will wait here for you, Farro," one of the two men said, extending his hand formally. "Good fortune with the Galactic Minister. As the only Isolationist with an extensive knowledge of the Galactic tongue, Galingua, you represent, as you know, our best chance of putting our case for Earth's remaining outside the Multiplanet Federation."

As Farro thanked him and accepted the proffered hand, the other man, a stooping septuagenarian with a pale voice, gripped Farro's arm.

"And the case is clear enough," he said. "These aliens pretend they offer us federation out of altruism. Most people swallow that, because they believe Earth ingenuity must be a valuable asset anywhere in the galaxy. So it may be, but we Isolationists claim there must be some ulterior motive for a superior race's wanting to welcome in a junior one as they appear to welcome us. If you can get a hint from this Minister Jandanagger as to what that motive is, you'll have done more than well."

"Thank you. I think I have the situation pretty clear," Farro said sharply, regretting his tone of voice at once. But the other two were wise enough to make allowance for nervousness in time of stress. When he left them to make his way toward the Galactic buildings, their faces held only sincere smiles of farewell.

As Farro pushed through the crowds of sightseers who stood here all day watching the new building develop, he listened with interest and some contempt for their comments. Many of them were discussing the current announcement on federation.

"I think their sincerity is proved by the way they've let us join. It's nothing but a friendly gesture."

"It shows what respect they must have for Earth."

"You can't help seeing the future's going to be wonderful, now that we can export goods all over the galaxy. I tell you, we're in for a boom all around."

"Which goes to prove that however advanced the race, they can't do without the good old Earth know-how. Give the Galactics the credit for spotting that!"

The seventh building, around which so many idle spectators clustered, was nearing completion. It grew organically like some vast succulent plant, springing from a flat metal matrix, thrusting along curved girders, encompassing them. Its color was a natural russet, which seemed to take its tones from the sky overhead.

Grouped around the base of this extraordinary structure were distilleries, sprays, excavators and other machines, the function of which was unknown to Farro. They provided the raw material from which the building drew its bulk.

To one side of these seven well-designed eccentricities lay the spacefield. There, too, was another minor mystery. Earth governments had ceded—willingly when they sniffed the prizes to be won from federation—five such centers as that on Horby Clive Island in various parts of the globe. Each center was being equipped as a spaceport and educational unit in which terrestrials would learn to understand the antiphonal complexities of Galingua and to behave as citizens of a well-populated galaxy.

Even granting vast alien resources, it was a formidable project. According to estimates, at least eight thousand Galactics were working on Earth. Yet on the spacefield sat but one craft, an unlikely looking polyhedron with Arcturan symbols on its hull. The Galactics, in short, seemed to have remarkably few spaceships.

That was a point he would like to investigate, Farro thought, speculatively eying the inert beacons around the perimeter of the field.

He skirted them, avoiding the crowds as far as possible, and arrived at the entrance to one of the other six Galactic buildings, quite as eccentric in shape as its unfinished brother. As he walked in, an Earthman in dark-gray livery came deferentially forward.

"I have an appointment with Galactic Minister Jandanagger Laterobinson," Farro announced, pronouncing the strange name awkwardly. "I am Farro Westerby, special deputy of the Isolationist League."

As soon as he heard the phrase Isolationist League, the receptionist's manner chilled. Setting his lips, he beckoned Farro over to a small side apartment, the doors of which closed as Farro entered. The apartment, the Galactic equivalent of an elevator, began to move through the building, traveling upward on what Farro judged to be an elliptical path. It delivered him into Jandanagger Laterobinson's room.

Standing up, the Galactic Minister greeted Farro with amiable reserve, giving the latter an opportunity to sum up his opponent. Laterobinson was unmistakably humanoid; he might, indeed, have passed for an Earthman, were it not for the strangeness of his eyes, set widely apart in his face and

half hidden by the peculiar configuration of an epicanthic fold of skin. This minor variation of feature gave to Jandanagger what all his race seemed to possess: a watchful, tensely withdrawn air.

"You know the reason for my visit, Minister," Farro said, when he had introduced himself. He spoke carefully in Galingua, the language he had spent so many months so painfully learning; initially, its wide variation in form from any terrestrial tongue had all but baffled him.

"Putting it briefly, you represent a body of people who fear contact with the other races in the Galaxy—unlike most of your fellows on Earth," Jandanagger said easily. Expressed like that, the idea sounded absurd.

"I would rather claim to represent those who have thought more deeply about the present situation than perhaps their fellows have done."

"Since your views are already known to me through the newly established Terrestrial-Galactic Council, I take it you wish us to discuss this matter personally?"

"That is so."

Jandanagger returned to his chair, gesturing Farro into another.

"My role on Earth is simply to talk and to listen," he said, not without irony. "So do please feel free to talk."

"Minister, I represent five per cent of the people of Earth. If this sounds a small number, I would point out that that percentage contains some of the most eminent men in the world. Our position is relatively simple. You first visited Earth over a year ago, at the end of Ishrail's decade of exile; after investigation, you decided we were sufficiently advanced to become probationary members of the Galactic Federation. As a result, certain advantages and disadvantages will naturally accrue; although both sides will reap advantages, we shall suffer all the disadvantages—and they may well prove fatal to us."

Pausing, he scrutinized Jandanagger, but nothing was to be learned from the Minister's continued look of friendly watchfulness. He continued speaking.

"Before I deal with these disadvantages, may I protest against what will seem to you perhaps a minor point. You have insisted, your charter insists, that this world shall be arbitrarily renamed; no longer shall it be known as Earth, but as Yinnisfar. Is there any defensible reason why this outlandish name should be adopted?"

The Minister smiled broadly and relaxed, as if the question had given him the key he needed to the man sitting opposite him. A bowl of New Union sweets lay on his desk; he pushed them across to Farro and, when the latter refused, took a sugary lump and bit it before replying.

"About three hundred planets calling themselves Earth are known to us," he said. "Any new claimants to the title are automatically rechristened upon federation. From now on you are Yinnisfar. However, I think it would be more profitable if we discussed the advantages and disadvantages of federation, if that is what you wish to talk about."

Farro sighed and resigned himself.

"Very well," he said. "To begin with, the advantages to you. You will have here a convenient base, dock and administrative seat in a region of space you say you have yet to explore and develop. Also, it is possible that when arrangements are worked out between us, terrestrials may be engaged to help colonize the new worlds you expect to find in this region. We shall be a cheap manufacturing area for you. We shall produce such items as plastics, clothes, foodstuffs and simple tools which it will be easier for you to buy from us than transport from your distant home planets. Is this correct?"

"As you point out, Mr. Westerby, Earth occupies a key position in the Federation's present thousand-year plan for expansion. Although at present you can only regard yourselves as a frontier world, at the end of that period you may well be a key world. At the end of ten thousand years—well, your peoples are full of confidence; the omens are good."

"In short, there is promotion ahead if we behave ourselves?"

The acid note in Farro's voice merely brought a slight smile to Jandanagger's lips.

"One is not made head boy in one's first few days at school."

"Let me then enumerate the advantages, as opposed to the promises, which Earth will enjoy from entering your Federation. In the first place, we shall enjoy material benefits: new machines, new toys, new gadgets and some new techniques like your vibro-molecular system of building—which produces, if I may say so, some excruciatingly ugly structures."

"One's tastes, Mr. Westerby, have to be trained to appreciate anything of aesthetic worth."

"Quite. Or to regard the hideous as normal. However, that brings us to the nonmaterial assets inherent in belonging to

your Federation. You plan to revolutionize our educational systems. From nursery school to university, you will inculcate mores, matters and methods foreign to us; Earth will be invaded not by soldiers but by teachers—which is the surest way of gaining a bloodless victory."

The wide eyes regarded Farro calmly, but still as if from behind a barricade.

"How else are we to help Yinnisfarians become citizens of a complex civilization? For a start, it is essential your people learn Galingua. Education is a science and an art for which you have not yet begun to formulate the rules. The whole question is enormously complicated, and quite beyond brief explanation—not that I could explain it, for I am not an educational specialist; those specialists will arrive here when my work is done and the formal membership charters are signed. But to take just one simple point. Your children first go to school at, say, five years old. They go into a class with other children and are separated from their homes; learning becomes at once an isolated part of life, something done in certain hours. And their first lesson is to obey the teacher. Thus, if their education is rated a success, it is because, to whatever extent, they have learned obedience and forfeited independence of mind; and they are probably set at permanent odds with their home environment.

"Our methods differ radically. We allow no children to enter our schools before the age of ten—but by that time, thanks to certain instructive toys and devices they have been familiar with for years, they will come knowing at least as much as your child at school-leaving age. And not only knowing—behaving, feeling, understanding."

Farro was at a disadvantage.

"I feel like a heathen being told by a missionary that I should be wearing clothes."

The other man smiled, got up, and came over to him.

"Be consoled that that's a false analogy," he said. "You are *demanding* the clothes. And when you wear them, you are certain to admire the cut."

All of which, Farro reflected, made the two of them no less heathen and missionary.

"Don't look so disconcerted, Mr. Westerby. You have a perfect right to be distressed at the thought of your planet being depersonalized. But that is something we would not dream of doing. Depersonalized, you are nothing to yourselves or us. We need worlds capable of making their best

personal contribution. If you would care to come with me, I should like to give you perhaps a better idea of how the civilized galaxy functions."

Farro rose to his feet. It consoled him that he was slightly taller than the Minister. Jandanagger stood courteously aside, ushered his guest through a door. As they walked down a silent corridor, Farro found his tongue again.

"I haven't fully explained why I think that federation would be such a bad thing for Earth. We are progressing on our own. Eventually, we shall develop our own method of space travel, and come to join you on a more equal footing."

Jandanagger shook his head.

"Space travel—travel between different star systems—is not just a matter of being able to build starships. Any post-nuclear culture can stumble on that trick. Space travel is a state of mind. The journey's always hell, and you never find a planet, however lovely, that suits you as well as the one on which you were born. You need an incentive."

"What sort of incentive?"

"Have you any idea?"

"I take it you are not referring to interstellar trading or conquest?"

"Correct."

"I'm afraid I don't know what sort of an incentive you mean."

The Minister gave something like a chuckle and said, "I'll try and show you presently. You were going to tell me why federation would be a bad thing for Earth."

"No doubt it has been to your purpose to learn something of our history, Minister. It is full of dark things. Blood; war; lost causes; forgotten hopes; ages in chaos and days when even desperation died. It is no history to be proud of. Though many men individually seek good, collectively they lose it as soon as it is found. Yet we have one quality which always gives cause for hope that tomorrow may be better: initiative. Initiative has never faded, even when we crawled from what seemed the last ditch.

"But if we know that there exists a collective culture of several thousand worlds which we can never hope to emulate, what is to prevent us from sinking back into despair forever?"

"An incentive, of course."

As he spoke, Jandanagger led the way into a small, boomerang-shaped room with wide windows. They sank onto a low

couch, and at once the room moved. The dizzy view from the window shifted and rolled beneath them. The room was airborne.

"This is our nearest equivalent to your trains. It runs on a nucleonically bonded track. We are going only as far as the next building; there is some equipment I would like you to inspect."

No reply seemed to be required, and Farro sat silent. He had known an electric moment of fear when the room first moved. In no more than ten seconds they swooped to the branch of another Galactic building, becoming part of it.

Once more leading the way, Jandanagger escorted him to an elevator, which took them down into a basement room. They had arrived. The equipment of which Jandanagger had spoken was not particularly impressive in appearance. Before a row of padded seats ran a counter, above which a line of respirator-like masks hung, with several cables trailing from them into the wall.

The Galactic Minister seated himself, motioning Farro into an adjoining seat.

"What is this apparatus?" Farro asked, unable to keep a slight tinge of anxiety from his tone.

"It is a type of wave-synthesizer. In effect, it renders down many of the wave lengths which man cannot detect by himself, translating them into paraphrased terms which he can. At the same time, it feeds in objective and subjective impressions of the universe. That is to say, you will experience—when you wear the mask and I switch it on—instrumental recordings of the universe—visual and aural and so on—as well as human impressions of it.

"I should warn you that owing to your lack of training, you may unfortunately gather a rather confused impression from the synthesizer. All the same, I fancy that it will give you a better rough idea of what the galaxy is like than you would get from a long star journey."

"Let's go," Farro said, clutching his cold hands together.

Now the entire column of lemmings had embarked into the still water. They swam smoothly and silently, their communal wake soon dissolving into the grandly gentle motion of the sea. Gradually the column attenuated as the stronger animals drew farther ahead and the weaker ones dropped behind. One by one, inevitably, these weaker animals drowned; yet, until their sleek heads finally disappeared below the surface, they still pressed forward with bulging eyes fixed upon the far and empty horizon.

No human spectator, however devoid of anthropomorphic feeling, could have failed to ask himself what might be the nature of the goal that prompted such a sacrifice.

The inside of the mask was cold. It fitted loosely over his face, covering his ears and leaving only the back of his head free. Again a touch of unreasoning fear shot through him.

"The switch is by your hand," the Minister said. "Press it."

Ferro pressed the switch. Darkness submerged him.

"I am with you," the Minister said steadily. "I have a mask on, too, and can see and feel what you do."

A spiral curled out into the darkness, boring its way through nothing—an opaque, smothering nothing as warm as flesh. Materializing from the spiral there issued a cluster of bubbles, dark as polyhedric grapes, multiplying and multiplying as if breathed from an inexhaustible bubble pipe. The lights on their surfaces, glittering, changing, spun a misty web which gradually veiled the operation.

"Cells are being formed, beaten out in endless duplication on the microscopic anvils of creation. You witness the beginning of a new life," Jandanagger said, his voice sounding distant.

Like a curtain by an open window, the cells trembled behind their veil, awaiting life. The moment of its coming was not perceptible. It was only that now the veil had something to conceal within itself; its translucence dimmed, its surface patterned, a kind of blind purpose shaped it into more definite outline. No longer was it beautiful.

Consciousness simmered inside it, a pinpoint of instinct-plus without love or knowledge, an eye trying to see through a lid of skin. It was not inert; instead, it struggled on the verge of terror, undergoing the trauma of coming into being, fighting, scrabbling, lest it fall back again into the endless gulf of not-being.

"Here is the afterlife your religions tell of," Jandanagger's voice said. "This is the purgatory every one of us must undergo, only it comes not after but before life. The spirit that will become us has to tread the billion years of the past before it reaches the present it can be born into. One might almost say there was something it had to expiate."

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him. He suffered with it, for it obviously suffered. Pressures racked it, the irremediable pressures of time and biochemistry, the pain of which it strove to lessen by changing shape. It writhed from wormhood to slughood, it grew gills and a tail. Fishlike, and then no longer fishlike, it toiled up the steep slope of evolution, mouselike, piglike, apelike, babylike.

"This is the truth the wisest man forgets—that he has done all this."

Now the environment changed. The fetus, exerting itself, had become a baby, and the baby could only become a man by the proddings of a thousand new stimuli. And all these stimuli—animal, vegetable, or mineral—lived too, in their different way. They competed. They inflicted constant challenges on the man creature; some of them, semisentient, invaded his flesh and bred there, creating their own life cycles; others, nonsentient, were like waves that passed unceasingly through his mind and his body. He seemed hardly an entity, merely a focal point of forces, constantly threatened with dissolution.

So complete was the identification between the image and the receiver that Farro felt he was the man. He recognized that everything happening to the man happened to him; he sweated and writhed like the fetus, conscious of the salt water in his blood, the unstoppable rays in the marrow of his bones. Yet the mind was freer than it had been in the fetus stage; during the wrenching moment of fear when environments had changed, the eye of consciousness had opened its lids.

"And now the man changes environments again, to venture away from his own planet," the Galactic Minister said.

But space was not space as Farro had reckoned it. It struck his eyes like slate: not a simple nothingness, but an unfathomable web of forces, a creeping blend of stresses and fields in which stars and planets hung like dew amid spiders' webs. No life was here, only the same interaction of planes and pressures that had attended the man all along, and of which even the man himself was composed. Nonetheless, his perceptions reached a new stage, the light of consciousness burned more steadily.

Again he was reaching out, swimming toward the confines of his Galaxy. About him, proportions changed, slid, dwindled. In the beginning, the womb had been everywhere, equipped with all the menace and coercion of a full-scale universe; now the galaxy was revealed as smaller than the

womb—a pint-sized goldfish bowl in which a tiddler swam, unaware of the difference between air and water. For there was no spanning the gulfs between galaxies: there lay nothing, the nothing of an unremitting Outside. And the man had never met nothing before. Freedom was not a condition he knew, because it did not exist in his interpenetrated existence.

As he swam up to the surface, something stirred beyond the yellow rim of the Galaxy. The something could hardly be seen; but it was there on the Outside, wakeful and clawed, a creature with senses, though insensate. It registered half as sight, half as noise: a smoldering and delayed series of pops, like the sound of bursting arteries. It was big. Farro screamed into the blackness of his mask at its bigness and its anger.

The creature was waiting for the man. Stretching, it stretched right around the Galaxy, around the goldfish bowl, its supernatant bat's wings groping for purchase.

Farro screamed again.

"I'm sorry," he said weakly, as he felt the Minister removing his mask for him. "I'm sorry."

The Minister patted his shoulder. Shuddering, Farro buried his face in his hands, trying to erase the now loathsome contact of the mask. That thing beyond the Galaxy—it seemed to have entered and found a permanent place in his mind.

At last, gathering himself together, he stood up. Weakness floated in every layer of him. Moistening his lips, he spoke.

"So you inveigle us into the Federation to face that!"

Jandanagger took his arm.

"Come back to my room. There is a point I can now make clear to you which I could not before. Earth has not been inveigled into the Federation. With your Earthbound eyes, I know how you see the situation. You fancy that despite the evidence before your eyes of Galactic superiority, there must be some vital point on which Earth can offer something unbeatable. You fancy there must be some factor for which we need terrestrial help—a factor it does not yet suit us to reveal—isn't that so?"

Farro avoided the other's narrow eyes as they ascended in an elevator to the top of the building.

"There are other things beside the material ones," he said evasively. "Think for instance of the great heritage of literature in the world; to a truly civilized race, that might appear invaluable."

"That depends upon what you mean by civilized. The senior races of the Galaxy, having lost any taste for the spectacle of mental suffering, would be unlikely to find much attraction in your literatures."

This gently administered rebuke silenced Farro. After a pause, the Galactic Minister continued. "No, you have no secret virtues, alas, for which we are gulling you into the Federation. The boot is on the other foot. We are taking you in as a duty, because you need looking after. I apologize for putting the matter so bluntly; but such may be the best way."

Stopping gently, the elevator released them into the boomerang-shaped room. In a minute, they were speeding back to the building Farro had first entered, with the crowded Horby Clive sector below them. Farro closed his eyes, still sick and shattered. The implications of what Jandanagger had said were momentarily beyond his comprehension.

"I understand nothing," he said. "I don't understand why it should be your duty to look after Earth."

"Then already you do begin to understand," Jandanagger said, and for the first time personal warmth tempered his voice. "For not only are our sciences beyond yours, so are our philosophies and thought disciplines. All our mental abilities have been keyed semantically into the language in which you have learned to converse with me—Galingua."

The flying room was reabsorbed; they became again merely one leaf tip of a giant building growing toward the gray clouds.

"Your language is certainly comprehensive and complex," Farro said, "but perhaps my knowledge of it is too elementary for me to recognize the extra significance of which you speak."

"That is only because you have still to be shown how Galingua is more than a language, how it is a way of life, our means of space travel itself! Concentrate on what I am telling you, Mr. Westerby."

Confusedly, Farro shook his head as the other spoke; blood seemed to be congested at the base of his skull. The odd idea came to him that he was losing his character, his identity. Wisps of meaning, hints of a greater comprehension, blew through his brain like streamers in the draft of a fan. As he tried to settle them, keep them steady, his own language became less like the bedrock of his being; his knowledge of Galingua, coupled with the experiences of the last hour, gradually assumed a dominant tone. With Jandanagger's grave

eyes upon him, he began to think in the tongue of the Galaxy.

For Jandanagger was talking, and with increasing rapidity. Although his meanings seemed clear, it felt to Farro as if they were being comprehended only by a level below his conscious one. It was like partial drunkenness, when the grand simplicities of the world are revealed in wine and the mind skates over the thin ice of experience.

For Jandanagger was talking of many things at once, shifting things that could not be spoken of in terrestrial tongues, dissolving mental disciplines never formulated through terrestrial voices. Yet all these things balanced together in one sentence like jugglers' balls, enhancing each other.

For Jandanagger was talking of only one thing: the thrust of creation. He spoke of what the synthesizer had demonstrated: that man was never a separate entity, merely a solid within a solid—or, better still, a flux within a flux. That he had only a subjective identity. That the wheeling matter of the Galaxy was one with him.

And he spoke in the same breath of Galingua, which was merely a vocal representation of that flux, and whose cadences followed the great spiral of life within the flux. As he spoke, he unlocked the inner secret of it to Farro, so that what before had been a formal study became an orchestration, with every cell another note.

With a wild exultation, Farro was able to answer now, merging with the spiral of talk. The new language was like a great immaterial stupa, its base broad, rooted in the ground of the ego, its spire high, whirling up into the sky. And by it, Farro gradually ascended with Jandanagger; or, rather, the proportions and perspectives about him changed, slid, dwindled, as they had done in the synthesizer. With no sense of alarm, he found himself high above the gaping crowds, shooting upward on an etheric spiral.

Within him was a new understanding of the stresses permeating all space. He rode upward through the planes of the universe, Jandanagger close by, sharing the revelation.

Now it was clear why the Galactics needed few space ships. Their big, polygonal vessels carried only material; man himself had found a safer way of traveling in the goldfish bowl of the Galaxy.

Looking outward, Farro saw where the stars thinned. Out there was the thing with claws, popping silently like bursting blood vessels. Fear came to him again.

"The thing in the synthesizer . . ." he said to Jandanagger, through the new-found medium of communication. "The thing that surrounds the Galaxy—if man can never get out, cannot it get in at us?"

For a long minute Jandanagger was silent, searching for the key phrases of explanation.

"You have learned as much as you have very rapidly," he said. "By not-understanding and then by well-understanding, you have made yourself one of the true citizens of the Galaxy. But you have only taken leap X; now you must take leap X^{10}. Prepare yourself."

"I am prepared."

"All that you have learned is true. Yet there is a far greater truth, a truer truth. Nothing exists in the ultimate sense: all is illusion, a two-dimensional shadow play on the mist of space-time. Yinnisfar itself means 'illusion.'"

"But the clawed thing . . ."

"The clawed thing is why we fare ever farther ahead into the illusion of space. *It* is real. Only the Galaxy as you previously misinterpreted it is unreal, being but a configuration of mental forces. That monster, that thing you sensed, is the residue of the slime of the evolutionary past still lingering—not outside you, but *in your own mind*. It is from that we must escape. We must grow from it."

More explanation followed, but it was beyond Farro. In a flash, he saw that Jandanagger, with an eagerness to experiment, had driven him too far and too fast. He could not make the last leap; he was falling back, toppling into not-being. Somewhere within him, the pop-thud-pop sound of bursting arteries began. Others would succeed where he had failed, but, meanwhile, the angry claws were reaching from the heavens for him—to sunder, not to rescue.

And now the lemmings were scattered over a considerable area of sea. Few of the original column were left; the remaining swimmers, isolated from each other, were growing tired. Yet they pressed forward as doggedly as ever toward the unseen goal.

Nothing was ahead of them. They had launched themselves into a vast—but not infinite—world without landmarks. The cruel incentive urged them always on. And if an invisible spectator had asked himself the agonized Why to it all, an answer might have occurred to him: that these creatures were not heading for some special promise in their future, but merely fleeing from some terrible fear in their past.

6

THE MUTANT MILLENNIA

To see the universe, and see it whole . . . Nothing in it was man's, yet at that time it could only appear that he had inherited it. For Earth itself—or Yinnisfar, as it was henceforth called—nothing but buoyant optimism suited the day. Terrestrials, having been granted federation, now possessed Galingua, which looked like the ultimate key to everything.

They sped out into a Galaxy peculiarly vulnerable to new forces. As has been observed, galactic civilization had reached a point of stasis; though its resources were inexhaustible, its initiative was not. The patterns of the Self-perpetuating War wove unceasing artistries of circumstance capable of carrying whole societies along in a mirage of meaningful existence. The Yinnisfarians did not burst, therefore, into a dynamic system but into a glorified Land of Nod.

The results might have been predicted. Over the next six hundred generations, Yinnisfarians amassed more and more power to themselves. By peaceful means, or by means little better than piracy, they worked their way into the highest galactic positions, succeeding less through their own intrinsic superiority than through the indifference of their rivals. This was a halcyon age, the age of the fulfillment of Yinnisfar.

As the years passed, and Yinnisfar conquered by commerce, its attitudes insensibly underwent a modification. Then came the blow that forced man to alter his attitude toward himself. His metaphysical view of being had of course been continually subject to change; but now the terrible moment arrived when he was revealed to himself in an entirely new light, as an alien, in a hostile environment.

It is useful that this next fragment reminds us incidentally that if the universe appeared to rest in human hands, humanity was never alone or unregarded. There were always things that could see though they had no faces and understand though they had no brains.