GREAT SCIENCE FICTION

FROM *Amazing* stories

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★ LESTER DEL REY

★ PHILIP JOSE FARMER

★ POUL ANDERSON

★ CORDWAINER SMITH

★ RANDALL GARRETT

★ KEITH LAUMER

★ ROGER ZELAZNY

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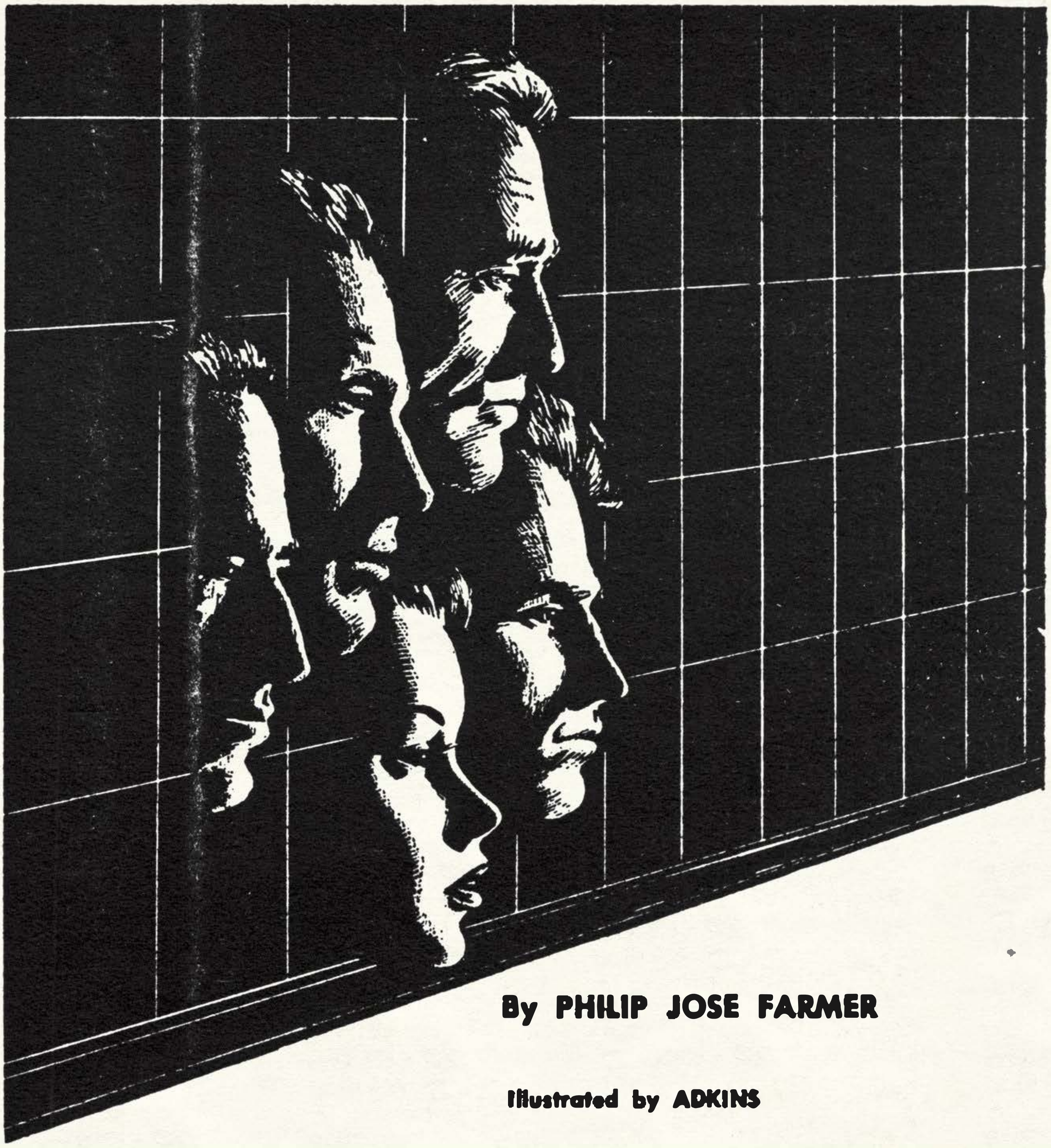


By PHILIP JOSE FARMER

Illustrated by ADKINS

HOW DEEP THE GROOVES

Until James Carrod performed his experiment, there was one voice inside of each of us that always told the truth. But after Cervus III, there were suddenly two voices. And only one was the voice of conscience.

ALWAYS in control of himself, Doctor James Carroad lowered his voice.

He said, "You will submit to this test. We must impress the Secretary. The fact that we're willing to use our own unborn baby in the experiment will make that impression a deeper one."

Doctor Jane Carroad, his wife, looked up from the chair in which she sat. Her gaze swept over the tall lean figure in the white scientist's uniform and the two rows of resplendent ribbons and medals on his left chest. She glared into the eyes of her husband.

Scornfully, she said, "You did not want this baby. I did, though now I wonder why. Perhaps, because I wanted to be a mother, no matter what the price. Not to give the State another citizen. But, now we're going to have it, you want to exploit it even before it's born, just as . . ."

Harshly, he said, "Don't you know what such talk can lead to?"

"Don't worry! I won't tell anyone you didn't desire to add to the State. Nor will I tell anybody how I induced you to have it!"

His face became red, and he said, "You will never again mention that to me! Never again! Understand?"

Jane's neck muscles trembled, but her face was composed. She said, "I'll speak of that, to you,

whenever I feel like it. Though, God knows, I'm thoroughly ashamed of it. But I do get a certain sour satisfaction out of knowing that, once in my life, I managed to break down that rigid self-control. I made you act like a normal man, one able to forget himself in his passion for a woman. Doctor Carroad, the great scientist of the State, really forgot himself then."

She gave a short brittle laugh and then settled back in the chair as if she would no longer discuss the matter.

But he would not, could not, let her have the last word. He said, "I only wanted to see how it felt to throw off all restraints. That was all—an experiment. I didn't care for it; it was disgusting. It'll never happen again."

He looked at his wristwatch and said, "Let's go. We must not make the Secretary wait."

She rose slowly, as if the eight months' burden was at last beginning to drain her strength.

"All right. But I'm submitting our baby to this experiment only under protest. If anything happens to it, a potential citizen . . ."

He spun around. "A written protest?"

"I've already sent it in."

"You little fool! Do you want to wreck everything I've worked for?"

Tears filled her eyes.

"James! Does the possible harm to our baby mean nothing to you? Only the medals, the promotions, the power?"

"Nonsense! There's no danger! If there were, wouldn't I know it? Come along now!"

But she did not follow him through the door. Instead, she stood with her face against the wall, her shoulders shaking.

A MOMENT later, Jason Cramer entered. The young man closed the door behind him and put his arm around her. Without protest, she turned and buried her face in his chest. For a while, she could not talk but could only weep.

Finally, she released herself from his embrace and said, "Why is it, Jason, that every time I need a man to cry against, James is not with me but you are?"

"Because he is the one who makes you cry," he said. "And I love you."

"And James," she said, "loves only himself."

"You didn't give me the proper response, Jane. I said I loved you."

She kissed him, though lightly, and murmured, "I think I love you. But I'm not allowed to. Please forget what I said. I mean it."

She walked away from him. Jason Cramer, after making sure that he had no lipstick on his

face or uniform, followed her.

Entering the laboratory, Jane Carroad ignored her husband's glare and sat down in the chair in the middle of the room. Immediately thereafter, the Secretary of Science and two Security bodyguards entered.

The Secretary was a stocky dark man of about fifty. He had very thick black eyebrows that looked like pieces of fur pasted above his eyes. He radiated the assurance that he was master, in control of all in the room. Yet, he did not, as was nervously expected by James Carroad and Jason Cramer, take offense because Jane did not rise from the chair to greet him. He gave her a smile, patted her hand, and said, "Is it true you will bear a male baby?"

"That is what the tests indicate," she said.

"Good. Another valuable citizen. A scientist, perhaps. With its genetic background . . ."

Annoyed because his wife had occupied the center of the stage for too long, Doctor James Carroad loudly cleared his throat. He said, "Citizens, honored Secretary, I've asked you here for a demonstration because I believe that what I have to show you is of utmost importance to the State's future. I have here the secret of what constitutes a good, or bad, citizen of the State."

He paused for effect, which he was getting, and then continued, "As you know, I—and my associates, of course—have perfected an infallible and swift method whereby an enemy spy or deviationist citizen may be unmasked. This method has been in use for three years. During that time, it has exposed many thousands as espionage agents, as traitors, as potential traitors."

The Secretary looked interested. He also looked at his wristwatch. Doctor Carroad refused to notice; he talked on at the same pace. He could justify any amount of time he took, and he intended to use as much as possible.

MY Department of Electroencephalographic Research first produced the devices delicate enough to detect the so-called rho waves emanated by the human brain. The rho or semantic waves. After ten years of hard work, I correlated the action of the rho waves in a particular human brain with the action of the individual's voice mechanisms. That meant, of course, that we had a device which mankind has long dreamed of. A—pardon the term—mind-reading machine."

Carroad purposely avoided scientific terminology. The Secretary did have a Ph.D. in political science, but he knew very little of any biological science.

Jason Cramer, at a snap of the

fingers by Carroad, wheeled a large round shining machine to a spot about two feet in front of Jane. It resembled a weird metallic antelope, for it had a long flexible neck at the end of which was an oval and eyeless head with two prongs like horns. These pointed at Jane's skull. On the side of the machine—Cervus III—was a round glass tube. The oscilloscope.

Carroad said, "We no longer have to attach electrodes to the subject's head. We've made that method obsolete. Cervus' prongs pick up rho waves without direct contact. It is also able to cut out 99.99% of the 'noise' that had hampered us in previous research."

Yes, thought Jane, and why don't you tell them that it was Jason Cramer who made that possible, instead of allowing them to think it was you?

At that moment, she reached the peak of her hate for him. She wished that the swelling sleeper within her was not Carroad's but Cramer's. And, wishing that, she knew that she must be falling in love with Cramer.

Carroad's voice slashed into her thoughts.

"And so, using the detected rho waves, which can be matched against definite objective words, we get a verbal picture of what is going in the subject's mind at the conscious level."

He gave an order to Cramer, and Cramer twisted a dial on the small control board on the side of Cervus.

"The machine is now set for semantic relations," Carroad said.

"Jane!" he added so sharply that she was startled. "Repeat this sentence after me! Silently!"

He then gave her a much-quoted phrase from one of the speeches of the Secretary himself. She repressed her scorn of him because of his flattery and dutifully concentrated on thinking the phrase. At the same time, she was aware that her tongue was moving in a noiseless lockstep with the thoughts.

The round tube on the side of Cervus glowed and then began flashing with many twisting threads of light.

"The trained eye," said Carroad, "can interpret those waveforms. But we have a surprise for you to whom the patterns are meaningless. We have perfected a means whereby a technician with a minimum of training may operate Cervus."

HE snapped his fingers. Cramer shot him a look; his face was expressionless, but Jane knew that Cramer resented Carroad's arrogance.

Nevertheless, Cramer obeyed; he adjusted a dial, pushed down

on a toggle switch, rotated another dial.

A voice, tonelessly and tinnily mechanical, issued from a loudspeaker beneath the tube. It repeated the phrase that Carroad had given and that Jane was thinking. It continued the repetition until Cramer, at another fingersnap from Carroad, flicked the toggle switch upward.

"As you have just heard," said Carroad triumphantly, "we have converted the waveforms into audible representations of what the subject is thinking."

The Secretary's brows rose like two caterpillars facing each other, and he said, "Very impressive."

But he managed to give the impression that he was thinking, Is that all?

Carroad smiled. He said, "I have much more. Something that, I'm sure, will please you very much. Now, as you know, this machine—my Cervus—is exposing hundreds of deviationists and enemy agents every year.

"Yet, this is *nothing!*"

He stared fiercely at them, but he had a slight smile on the corners of his lips. Jane, knowing him so well, could feel the radiance of his pride at the fact that the Secretary was leaning forward and his mouth was open.

"I say this is nothing! Catching traitors after they have become deviationist is locking the garage after the car has been stolen. What if we had a system of control whereby our citizens would be *unable* to be anything but unquestioningly loyal to the State?"

The Secretary said, "Aah!"

"I knew you would be far from indifferent," said Carroad.

CARROAD pointed a finger downwards. Cramer, slowly, his jaws set, twisted the flexible neck of Cervus so that the pronged head pointed directly at Jane's distended stomach. He adjusted controls on the board. Immediately the oscilloscope danced with many intricate figures that were so different from the previous forms that even the untutored eyes of the Secretary could perceive the change.

"Citizens," said Carroad, "for some time after we'd discovered the rho waves in the adult and infant, we searched for their presence in the brain of the unborn child. We had no success for a long time. But that was not because the rho waves did not exist in the embryo. No, it was because we did not have delicate enough instruments. However, a few weeks ago, we succeeded in building one. I experimented upon my unborn child, and I detected weak traces of the rho waves. Thus, I demonstrated that the ability to form words is present,

though in undeveloped form, even in the eight-month embryo.

"You're probably wondering what this means. This knowledge does not enable us to make the infant or the unborn speak any sooner. True. But what it does allow us to do is . . ."

Jane, who had been getting more tense with every word, became rigid. Would he allow this to be done to his own son, his own flesh and blood? Would he permit his child to become a half-robot, an obedient slave to the State, incapable in certain fields of wielding the power of free will? The factor that most marked men from the beasts and the machine?

Numbly, she knew he would.

". . . to probe well-defined areas in the undeveloped mind and there to stamp into it certain inhibitory paths. These inhibitions, preconditioned reflexes, as it were, will not, of course, take effect until the child has learned a language. And developed the concepts of citizen and State.

"But, once that is done, the correlation between the semantic waves and the inhibitions is such that the subject is unable to harbor any doubts about the teachings of the State. Or those who interpret the will of the State for its citizens.

"It is not necessary to perform any direct or physical surgery upon the unborn. The reflexes will be installed by Cervus III within a few minutes. As you see, Cervus cannot only receive; it can also transmit. Place a recording inside that receptacle beneath the 'speaker, actuate it, and, in a short time, you have traced in the grooves of the brain —if you will pardon an unscientific comparison—the voice of the State."

There was a silence. Jane and Cramer were unsuccessful in hiding their repulsion, but the others did not notice them. The Secretary and his bodyguards were staring at Carroad.

AFTER several minutes, the Secretary broke the silence.

"Doctor Carroad, are you sure that this treatment will not harm the creative abilities of the child? After all, we might make a first-class citizen, in the political sense, out of your child. Yet, we might wreck his potentialities as a first-class scientist. If we do that to our children, we lose out in the technological race. Not to mention the military. We need great generals, too."

"Absolutely not!" replied Carroad, so loudly and flatly that the Secretary was taken aback. "My computations, rechecked at least a dozen times, show there is no danger whatsoever. The only part of the brain affected, a very

small area, has nothing to do with the creative functions. To convince you, I am going to perform the first operation upon my own son. Surely, I could do nothing more persuasive than that."

"Yes," said the Secretary, stroking his massive chin. "By the way, can this be done also to the adult?"

"Unfortunately, no," said Carroad.

"Then, we will have to wait a number of years to determine if your theory is correct. And, if we go ahead on the assumption that the theory is correct, and treat every unborn child in the country, we will have spent a tremendous amount of money and time. If you are not correct . . ."

"I can't be wrong!" said Carroad. His face began to flush, and he shook. Then, suddenly, his face was its normal color, and he was smiling.

Always in control, thought Jane. *Of himself and, if circumstances would allow, of everybody.*

"We don't have to build any extra machines," said Carroad. "A certain amount will be built, anyway, to detect traitors and enemies. These can be used in hospitals, when not in use elsewhere, to condition the unborn. Wait. I will show you how simple, inexpensive, and swift the operation is."

He gestured to Cramer. Cramer, the muscles twitching at the corners of his mouth, looked at Jane. His eyes tried desperately to tell her that he had to obey Carroad's orders. But, if he did, would he be understood, would he be forgiven?

Jane could only sit in the chair with a face as smooth and unmoving as a robot's and allow him to decide for himself without one sign of dissent or consent from her. What, after all, could either do unless they wished to die?

Cramer adjusted the controls.

Even though Jane knew she would feel nothing, she trembled as if a fist were poised to strike.

BRIGHT peaks and valleys danced on the face of the oscilloscope. Carroad, watching them, gave orders to Cramer to move the prongs in minute spirals. When he had located the area he wished, he told Cramer to stop.

"We have just located the exact chain of neurones which are to be altered. You will hear nothing from the speaker because the embryo, of course, has no language. However, to show you some slight portion of Cervus' capabilities, Cramer will stimulate the area responsible for the rho waves before we begin the so-called inhibiting. Watch the 'scope. You'll see the waves go from a regular pulse into a wild dance."

The cyclopean eye of the oscilloscope became a field of crazed lines, leaping like a horde of barefooted and wire-thin fakirs on a bed of hot coals.

And a voice boomed out, *"Nu'sey! Nu'sey! Wanna d'ink!"*

Jane cried out, "God, what was that?"

The Secretary was startled; Cramer's face paled; Carroad was frozen.

But he recovered quickly, and he spoke sharply. "Cramer, you must have shifted the prongs so they picked up Jane's thoughts."

"I—I never touched them."

"Those were not my thoughts," said Jane.

"Something's wrong," said Carroad, needlessly. "Here. I'll do the adjusting."

He bent the prongs a fraction, checked the controls, and then turned the power on again.

The mechanical voice of Cervus spoke again.

"What do you mean? What're you saying? My father is not crazy! He's a great scientist, a hero of the State. What do you mean? Not any more?"

The Secretary leaped up from the chair and shouted above Cervus' voice, "What is this?"

Carroad turned the machine off and said, "I—I don't know."

Jane had never seen him so shaken.

"Well, find out! That's your business!"

Carroad's hand shook; one eye began to twitch. But he bent again to the adjustment of the dials. He directed the exceedingly narrow beam along the area from which the semantic waves originated. Only a high-pitched gabble emerged from the speaker, for Carroad had increased the speed. It was as if he were afraid to hear the normal rate of speech.

Jane's eyes began to widen. A thought was dawning palely, but horribly, on the horizon of her mind. If, by some intuition, she was just beginning to see the truth . . . But no, that could not be.

BUT, as Carroad worked, as the beam moved, as the power was raised or lowered, so did the voice, though always the same in tone and speed, change in phrase. Carroad had slowed the speed of detection, and individual words could be heard. And it was obvious that the age level of the speaker was fluctuating. Yet, throughout the swiftly leaping sentences, there was a sameness, an identity of personality. Sometimes, it was a baby just learning the language. At other times, it was an adolescent or young boy.

"Well, man, what is it?" bellowed the Secretary.

The mysterious voice had struck sparks off even his iron nerves.

Jane answered for her husband.

"I'll tell you what it is. It's the voice of my unborn son."

"Jane, you're insane!" said Carroad.

"No, I'm not, though I wish I were."

"God, he's at the window!" boomed the voice. *"And he has a knife! What can I do? What can I do?"*

"Turn that off until I get through talking," said Jane. "Then, you can listen again and see if what I'm saying isn't true."

Carroad stood like a statue, his hand extended towards the toggle switch but not reaching it. Cramer reached past him and flicked the switch.

"James," she said, speaking slowly and with difficulty. "You want to make robots out of everyone. Except, of course, yourself and the State's leaders. But what if I told you that you don't have to do that? That Nature or God or whatever you care to call the Creator, has anticipated you? And done so by several billion years?

"No, don't look at me that way. You'll see what I mean. Now, look. The only one whose thoughts you could possible have tapped is our son. Yet, it's impossible for an unborn baby to have a knowledge of speech. Nevertheless, you heard thoughts, originated by a boy, seeming to run from the first years of speech up to those of an adolescent. You have to admit that, even if you don't know what it means.

"Well, I do."

Tears running down her cheeks, choking, she said, "Maybe I see the truth where you don't because I'm closer to my baby. It's part of me. Oh, I know you'll say I'm talking like a silly woman. Maybe. Anyway, I think that what we've heard means that we—all of humanity without exception—*are* machines. Not steel and electrical robots, no, but still machines of flesh, engines whose behavior, motives, and very thoughts, conscious or unconscious, spring from the playing of protein tapes in our brains."

"What the hell are you talking about?" said Carroad.

"If I'm right, we are in hell," she said. "Through no fault or choice of ours. Listen to me before you shut your ears because you don't want to hear, can't hear.

MEMORIES are not recordings of what has happened in our past. Nor do we act as we will. We speak and behave according to our 'memories,' which are not recorded *after* the fact. They're recorded *before* the fact. Our actions are such because our memories tell us to do such. Each

of us is set like a clockwork doll. Oh, not independently, but intermeshed, working together, synchronized as a masterclock or masterplan decrees.

"And, all this time, we think we are creatures of free will and chance. But we do not know there isn't such a thing as chance, that all is plotted and foretold, and we are sliding over the world, through time, in predetermined grooves. We, body and mind, are walking recordings. Deep within our cells, a molecular needle follows the grooves, and we follow the needle.

"Somehow, this experiment has ripped the cover from the machine, showed us the tape, stimulated it into working long before it was supposed to."

Suddenly, she began laughing. And, between laughing and gasping, she said, "What am I saying? It can't be an accident. If we have discovered that we're puppets, it's because we're supposed to do so."

"Jane, Jane!" said Carroad. "You're wild, wild! Foolish woman's intuition! You're supposed to be a scientist! Stop talking! Control yourself!"

The Secretary bellowed for silence, and, after a minute, succeeded. He said, "Mrs. Carroad, please continue. We'll get to the bottom of this."

He, too, was pale and wide-eyed. But he had not gotten to his position by refusing to attack.

She ordered Cramer to run the beam again over the previous areas. He was to speed up the process and slow down only when she so directed.

The result was a stream of unintelligibilities. Occasionally, when Cramer slowed Cervus at a gesture from Jane, it broke into a rate of speech they could understand. And, when it did, they trembled. They could not deny that they were speeding over the life thoughts of a growing male named James Carroad, Junior. Even at the velocity at which they traveled and the great jumps in time that the machine had to make in order to cover the track quickly, they could tell that.

AFTER an hour, Jane had Cramer cut off the voice. In the silence, looking at the white and sweating men, she said, "We are getting close to the end? Should we go on?"

Hoarsely, the Secretary shouted, "This is a hoax! I can prove it must be! It's impossible! If we carry the seeds of predeterminism within us, and yet, as now, we discover how to foresee what we shall do, why can't we change the future?"

"I don't know, Mr. Secretary," said Jane. "We'll find out—in

time. I can tell you this. If anyone is preset to foretell the future, he'll do so. If no one is, then the problem will go begging. It all depends on Whoever wound us up."

"That's blasphemy!" howled the Secretary, a man noted for his belligerent atheism. But he did not order the voice to stop after Jane told Cramer to start the machine up again.

Cramer ran Cervus at full speed. The words became a staccato of incomprehensibility; the oscilloscope, an almost solid blur. Flickers of blackness told of broad jumps forward, and then the wild intertwined lightning resumed.

Suddenly, the oscilloscope went blank, and the voice was silent.

Jane Carroad said, "Backtrack a little, Jason. And then run it forward at normal speed."

James Carroad had been standing before her, rigid, a figure seemingly made of white metal, his face almost as white as his uniform. Abruptly, he broke into fluidity and lurched out of the laboratory. His motions were broken; his shouts, broken also.

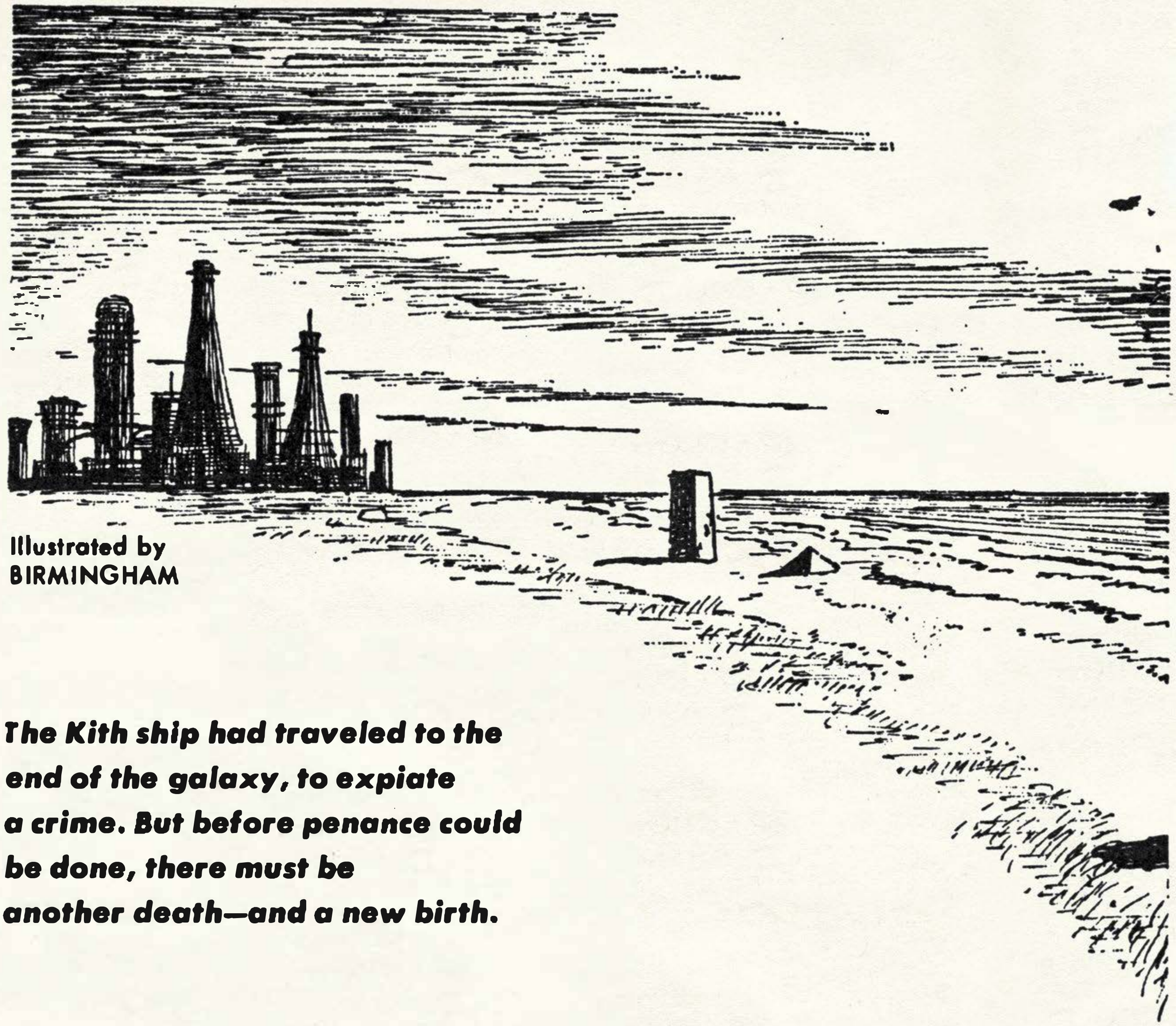
"Won't stay to listen . . . rot . . . mysticism . . . believe this . . . go insane! Mean . . . no control . . . no control . . ."

And his voice was lost as the door closed behind him.

Jane said, "I don't want to hear this, Jason. But . . ."

Instantly, the voice boomed, *"God, he's at the window! And he has a knife! What can I do? What can I do? Father, father, I'm your son! He knows it, he knows it, yet he's going to kill me. The window! He's breaking it! Oh, Lord, he's been locked up for nineteen years, ever since he shot and killed my mother and all those men and I was born a Caesarean and I didn't know he'd escape and still want to kill me, though they told me that's all he talked about, raving mad, and . . ."*

THE END



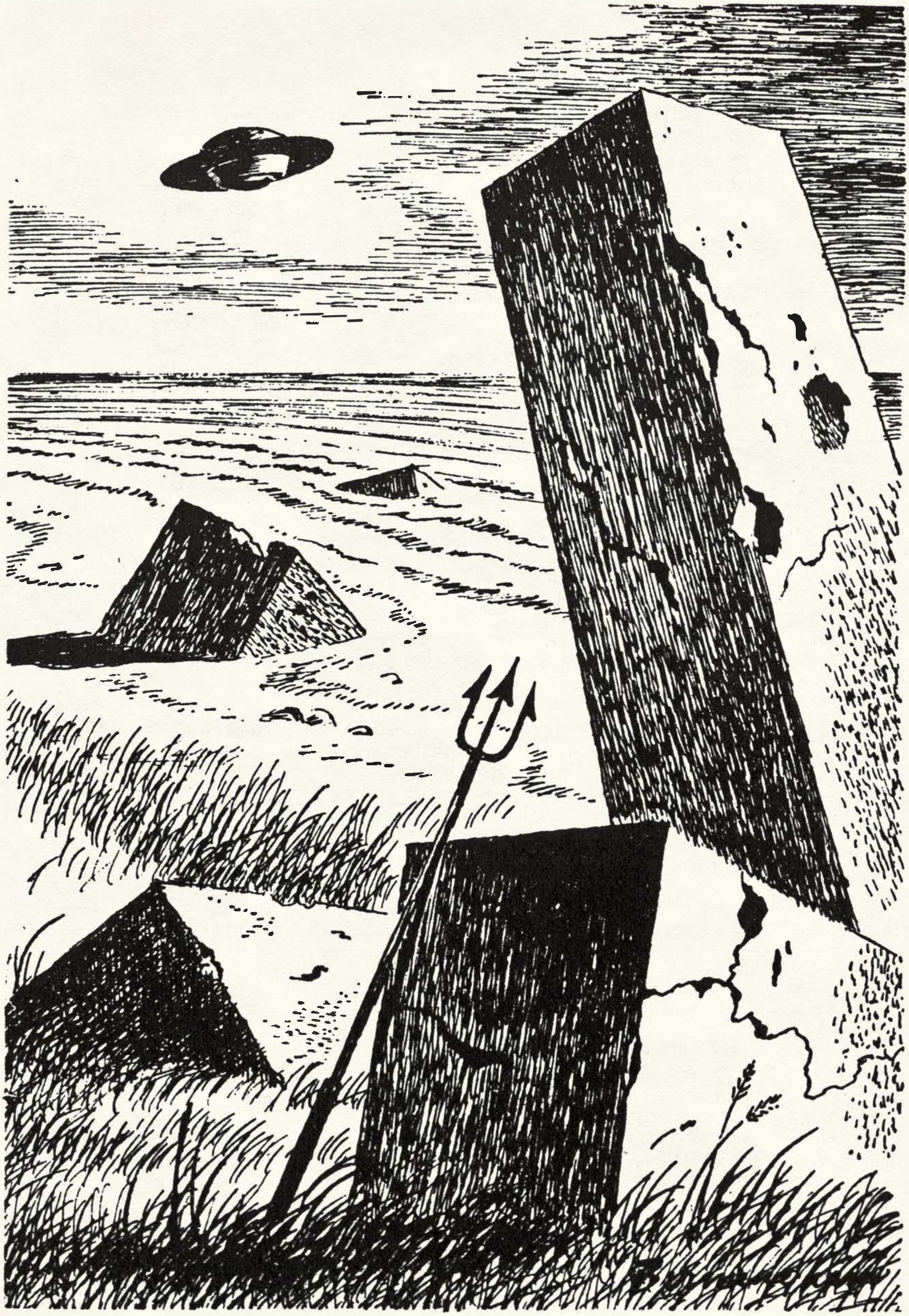
Illustrated by
BIRMINGHAM

The Kith ship had traveled to the end of the galaxy, to expiate a crime. But before penance could be done, there must be another death—and a new birth.

Homo Aquaticus

By POUL ANDERSON

NOW and then, on that planet, Jong Errifrans thought he heard the distant blowing of a horn. It would begin low, with a pulse that quickened as the notes waxed, until the snarl broke in a brazen scream and sank sobbing away. The first time he started and asked the others if they heard. But the sound was on the bare edge of audibility for him, whose ears were young and



sharp, and the men said no. "Some trick of the wind, off in the cliffs yonder," Mons Rainart suggested. He shivered. "The damned wind is always hunting here." Jong did not mention it again, but when he heard the noise thereafter a jag of cold went through him.

There was no reason for that. Nothing laired in the city but sea birds, whose wings made a white storm over the towertops and whose fiutings mingled with wind skirl and the drumroll of surf; nothing more sinister had appeared than a great tiger-striped fish which patrolled near the outer reefs. And perhaps that was why Jong feared the horn: it gave the emptiness a voice.

At night, rather than set up their glower, the four would gather wood and give themselves the primitive comfort of a fire. Their camping place was in what might once have been a forum. Blocks of polished stone thrust out of the sand and wiry grass which had occupied all streets; toppled colonnades demarked a square. More shelter was offered by the towers clustered in the city's heart, still piercing the sky, the glasit windows still unbroken. But no, those windows were too much like a dead man's eyes, the rooms within were too hushed, now that the machines which had been the city's life lay corroded beneath the dunes. It was better to raise a tent under the stars. Those, at least, were much the same, after twenty thousand years.

The men would eat, and then Regor Lannis, the leader, would lift his communicator bracelet near his mouth and report their day's ransacking. The spaceboat's radio caught the message and relayed it to the *Golden Flyer*, which orbited with the same period as the planet's twenty-one-hour rotation, so that she was always above this island. "Very little new," Regor typically said. "Remnants of tools and so on. We haven't found any bones yet for a radioactivity dating. I don't think we will, either. They probably cremated their dead, to the very end. Mons has estimated that engine block we found began rusting some ten thousand years ago. He's only guessing, though. It wouldn't have lasted at all if the sand hadn't buried it, and we don't know when that happened."

"But you say the furnishings inside the towers are mostly intact, age-proof alloys and synthetics," answered Captain Ilmaray's voice. "Can't you deduce anything from their, well, their arrangement or disarrangement? If the city was plundered—"

"No, sir, the signs are too hard to read. A lot of rooms have obviously been stripped. But we

don't know whether that happened in one day or over a period maybe of centuries, as the last colonnists mined their own homes for stuff they could no longer make. We can only be sure, from the dust, that no one's been inside for longer than I like to think about."

WHEN Regor had signed off, Jong would usually take out his guitar and chord the songs they sang, the immemorial songs of the Kith, many translated from languages spoken before ever men left Earth. It helped drown out the wind and the surf, booming down on the beach where once a harbor had stood. The fire flared high, picking their faces out of night, tinging plain work clothes with unrestful red and then guttering down so that shadows swallowed the bodies. They looked much alike, those four men, small, lithe, with dark sharp features; for the Kith were a folk apart, marrying between their own ships, that carried nearly all traffic among the stars. Since a vessel might be gone from Earth for a century or more, the planetbound civilizations, flaring and dying and reborn like the flames that warmed them now, could not be theirs. The men differed chiefly in age, from the sixty years that furrowed Regor Lannis' skin to the twenty of Jong Errifrans.

Ship's years, mostly, Jong remembered, and looked up to the Milky Way with a shudder. When you fled at almost the speed of light, time shrank for you, and in his own life he had seen the flower and the fall of an empire. He had not thought much about it then—it was the way of things, that the Kith should be quasi-immortal and the planetarians alien, transitory, not quite real. But a voyage of ten thousand light-years toward Galactic center, and back, was more than anyone had ventured before; more than anyone would ever have done, save to expiate the crime of crimes. Did the Kith still exist? Did Earth?

After some days, Regor decided: "We'd better take a look at the hinterland. We may improve our luck."

"Nothing in the interior but forest and savannah," Neri Avelair objected. "We saw that from above."

"On foot, though, you see things you miss from a boat," Regor said. "The colonists can't have lived exclusively in places like this. They'd need farms, mines, extractor plants, outlying settlements. If we could examine one of those, we might find clearer indications than in this damned huge warren."

"How much chance would we have, hacking our way through the brush?" Neri argued. "I say

let's investigate some of those other towns we spotted."

"They're more ruinous than this one," Mons Rainart reminded him. "Largely submerged." He need not have spoken; how could they forget? Land does not sink fast. The fact that the sea was eating the cities gave some idea of how long they had been abandoned.

"Just so," Regor nodded. "I don't propose plunging into the woods, either. That'd need more men and more time than we can spare. But there's an outsize beach about a hundred kilometers north of here, fronting on a narrow-mouthed bay, with fertile hills just behind—hills that look as if they ought to contain ores. I'd be surprised if the colonists did not exploit the area."

Neri's mouth twitched downward. His voice was not quite steady: "How long do we have to stay on this ghost planet, before we admit we'll never know what happened?"

"Not too much longer," Regor said. "But we've got to try our best before we do leave."

HE jerked a thumb at the city. Its towers soared above fallen walls and marching dunes, into a sky full of birds. The bright yellow sun had bleached out their pastel colors, leaving them bone-white. And yet the view behind them was beautiful, forest that stretched inland a hundred shades of shadow-rippled green, while in the opposite direction the land sloped down to a sea that glittered like emerald strewn with diamond dust, moving and shouting and hurling itself in foam against the reefs. The first generations here must have been very happy, Jong thought.

"Something destroyed them, and it wasn't simply a war," Regor said. "We need to know what. It may not have affected any other planet. But maybe it did."

Maybe Earth lay as empty, Jong thought, not for the first time.

The *Golden Flyer* had paused here to refit before venturing back into man's old domain. Captain Ilmaray had chosen a F9 star arbitrarily, three hundred light-years from Sol's calculated present position. They detected no whisper of the energies used by civilized races, who might have posed a threat. The planet seemed a paradise, Earth-mass but with its land scattered in islands around a worldwide ocean, warm from pole to pole. Mons Rainart was surprised that the carbon dioxide equilibrium was maintained with so little exposed rock. Then he observed weed mats everywhere on the water, many of them hundreds of square kilometers in area, and decided that their photosynthesis

was active enough to produce a Terrestrial-type atmosphere.

The real and terrible shock had been to observe from orbit the ruined cities. Not that colonization could not have reached this far, and beyond, during twenty thousand years. But the venture had been terminated; why?

That evening it was Jong's turn to hold a personal conversation with those in the mother ship. He got his parents, via intercom, to tell them how he fared. The heart jumped in his breast when Sorya Rainart's voice joined theirs. "Oh, yes," the girl said, with an uneven little laugh, "I'm right here in the apartment. Dropped in for a visit, by chance."

Her brother chuckled at Jong's back. The young man flushed and wished hotly for privacy. But of course Sorya would have known he'd call tonight. . . . If the Kith still lived, there could be nothing between him and her. You brought your wife home from another ship. It was spaceman's law, exogamy aiding a survival that was precarious at best. If, though, the last Kith ship but theirs drifted dead among the stars; or the few hundred aboard the *Golden Flyer* and the four on this world whose name was lost were the final remnants of the human race—she was bright and gentle and swayed sweetly when she walked.

"I—" He untangled his tongue. "I'm glad you did. How are you?"

"Lonely and frightened," she confided. Cosmic interference seethed around her words. The fire spat sparks, loudly, into the darkness overhead. "If you don't learn what happened here . . . I don't know if I can stand wondering, the rest of my life."

"Cut that!" he said sharply. The rusting of morale had destroyed more than one ship in the past. Although—"No, I'm sorry." He knew she did not lack courage. The fear was alive in him too, that he would be haunted forever by what he had seen here. Death in itself was an old familiar of the Kith. But this time they were returning from a past more ancient than the glaciers and the mammoths had been on Earth when they left. They needed knowledge as much as they needed air, to make sense of the universe. And their first stop in that spiral arm of the Galaxy which had once been home, had confronted them with a riddle that looked unanswerable. So deep in history were the roots of the Kith that Jong could recall the symbol of the Sphinx; and suddenly he saw how gruesome it was.

"We'll find out," he promised her. "If not here, then when we arrive at Earth." Inwardly, he was unsure. He made small talk

and even achieved a joke or two. But afterward, laid out in his sleeping bag, he thought he heard the horn winding in the north.

THE expedition rose at dawn, bolted breakfast, and stowed their gear in the spaceboat. It purred from the city on grav drive, leveled off, flew at low speed not far above ground. The sea tumbled and flashed on the right, the land climbed steeply on the left. No herds of large animals could be seen there. Probably none existed, with such scant space to develop in. But the ocean swarmed. From above Jong could look down into transparent waters, see shadows that were schools of fish numbering in the hundreds of thousands. Further off he observed a herd of grazers, piscine but big as whales, plowing slowly through a weed mat. The colonists must have gotten most of their living from the sea, he thought.

Regor set the boat down on a cliff overlooking the bay he had described. The escarpment ringed a curved beach of enormous length and breadth, its sands strewn with rocks and boulders. Kilometers away, the arc closed in on itself, leaving only a strait passage to the ocean. The bay was placid, clear bluish-green beneath the early sun, but not stagnant. The tides of the one big moon must raise and lower it two or three meters in a day, and a river ran into it from the southern highlands. Afar, Jong could see how shells littered the sand below high-water mark, proof of abundant life. It seemed bitterly unfair to him that the colonists had had to trade so much beauty for darkness.

Regor's gaunt face turned from one man to the next. "Equipment check," he said, and went down the list: fulgurator, communication bracelet, energy compass, medikit—"My God," said Neri, "you think we were going on a year's trek and separately at that."

"We'll disperse, looking for traces," Regor said, "and those rocks will often hide us from each other." He left the rest unspoken: that that which had been the death of the colony might still exist.

They emerged into cool, flowing air with the salt and iodine and clean decay smell of coasts on every Earthlike world, and made a slow way down the scarp. "Let's radiate from this point," Regor said, "and if nobody has found anything, we'll meet back here in four hours for lunch."

JONG'S path slanted farthest north. He walked briskly at first, his body enjoying the motion, scrunch of sand and rattle of pebbles beneath his boots,

whistle of the many birds overhead. But presently he must pick his way across drifts of stone and among dark boulders, some as big as houses, that cut him off from the wind and his fellows; and he remembered Sorya's aloneness.

Oh, not that. Haven't we paid enough? he thought. And, for a moment's defiance: *We didn't do the thing. We condemned the traitors ourselves, and threw them into space, as soon as we learned. Why should* we *be punished?*

But the Kith had been too long isolated, themselves against the universe, not to hold that the sin and sorrow of one belonged to all. And Tomakan and his fellow conspirators had done what they did unselfishly, to save the ship. In those last vicious years of the Star Empire, when Earthmen made the Kithfolk scapegoats for their freedom by betraying to the crew fled to await better times, the *Golden Flyer's* captured people would have died rather horribly—had Tomakan not bought their freedom by betraying to the persecutors that asteroid where two other Kith vessels lay, readying to leave the Solar System. How could they afterward meet the eyes of their kindred, in the Council that met at Tau Ceit?

The sentence was just: to go exploring to the fringes of the Galactic nucleus. Perhaps they would find the Elder Races who must dwell somewhere, perhaps they would bring back the knowledge and wisdom that could heal man's inborn lunacies. Well, they hadn't; but that was something in itself, enough to give the *Golden Flyer* back her honor. No doubt everyone who had sat in Council was long dead now. Still, their descendants—

Jong stopped in midstride. His shout went ringing among the rocks.

"What is it? Who called? Anything wrong?" The questions flew from his bracelet like anxious bees.

He stooped over the little heap and touched it with fingers that wouldn't hold steady. "Worked flints," he breathed. "Flakes, broken spearheads . . . shaped wood . . . something—" He scrabbled wildly in the sand. Sunlight struck off a piece of metal, rudely hammered into a dagger. It has been, it must have been fashioned from some of the ageless alloy in the city—long ago, for the blade was worn so thin that it had snapped across —He crouched over the shards and babbled.

And shortly Mons' deep tones cut through: "Here's another site! An animal skull, could only have been split with a sharp rock, a thong—wait, wait, there's something carved in this block, maybe a symbol—"

Then suddenly he roared, and made a queer choked gurgle, and his voice came to an end.

Jong leaped erect. The communicator jabbered with calls from Neri and Regor. He ignored them. There was no time for dismay, he was busy tuning his energy compass. Each bracelet emitted a characteristic frequency besides its carrier wave, for location purposes, and—The needle swung about. His free hand unholstered his fulgurator and he went bounding over the rocks.

As he broke out onto the open stretch of sand, the wind hit him full in the face. Momentarily through its shrillness he heard the horn, louder than before, off beyond the cliffs. A part of him remembered fleetingly how one day on a frontier world he had seen a band of huntsmen gallop in pursuit of a wounded animal that wept as it ran, and how the chief had raised a crooked bugle to his lips and blown just such a call.

THE note died away. Jong's eyes swept the beach. Far down its length he saw several figures emerge from a huddle of boulders. Two of them carried a human shape. He yelled and sprinted to intercept them. The compass dropped from his grasp.

They saw him and paused. When he neared, Jong made out that the form they bore was Mons Rainart's. He swung ghastly limp between his carriers. Blood dripped from his back and over his breast.

Jong's stare went to the six murderers. They were chillingly manlike, half a meter taller than him, superbly muscled beneath the naked white skin, but altogether hairless, with long webbed feet and fingers, a high dorsal fin and smaller fins at heels and elbows and on the domed heads. The features were bony, with great sunken eyes and no external ears. A cap of skin drooped from pinched nose to wide mouth. Two carried flint-tipped wooden spears, two had tridents hammered from metal—the tines of one were luridly red and wet—and those who bore the body had knives slung at their waists.

"Stop!" Jong shrieked. "Let him go!"

He plowed to a halt, a few meters off, and menaced them with his gun. The biggest uttered a gruff bark and advanced, trident poised. Jong retreated a step. Whatever they had done, he hated to—

An energy beam winked, followed by its thunderclap. The one that carried Mons' shoulders crumpled, first at the knees, then down into the sand. The blood from the hole burned through him mingled with the spaceman's, equally crimson.

They whirled. Neri Avelair pounded down the beach from the opposite side. His fulgurator spoke again. The shimmering wet sand reflected the blast. It missed, but quartz fused where it struck near the feet of the creatures and hot droplets spattered them.

The leader waved his trident and shouted. They ran toward the water. The one who had Mons' ankles did not let go. The body flapped arms and head as it dragged. Neri shot a third time. Jolted by his own speed, he missed anew. Jong's finger remained frozen on the trigger.

The five giants entered the bay. Its floor shelved rapidly. In a minute they were able to dive below the surface. Neri reached Jong's side and fired, bolt after bolt, till a steam cloud rose into the wind. Tears whipped down his cheeks. "Why didn't you kill them?" he screamed. "You could have gunned them down where you were!"

"I don't know." Jong stared at his weapon. It felt oddly heavy.

"They drowned Mons!"

"No . . . he was dead already. I could see. Must have been pierced through the heart. I suppose they ambushed him in those rocks—"

"M-m-maybe. But his body, damn you, we could'a saved that at least!" Senselessly, Neri put a blast through the finned corpse.

"Stop that!" commanded Regor. He threw himself down and gasped for breath. Dimly, Jong noticed that there were gray streaks in the leader's hair. It seemed a matter of pity and terror that Regor Lannis the unbendable should be whittled away by the years.

What am I thinking? Mons is killed—Sorya's brother!

Neri holstered his fulgurator, covered his face with both hands, and sobbed.

AFTER a long while Regor shook himself, rose, knelt again to examine the dead swimmer. "So there were natives here," he muttered tonelessly. "The colonists must not have known. Or maybe they underestimated what savages could do."

His hands ran over the glabrous hide. "Still warm," he said, mostly to himself. "Air-breathing; a true mammal, no doubt, though this male lacks vestigial nipples; real nails on the digits, even if they have grown as thick and sharp as claws." He peeled back the lips and examined the teeth. "Omnivore evolving toward carnivore, I'd guess. The molars are bigger than ours, and rather are still pretty flat, but the rest pointed." He peered into the dimmed eyes. "Human type vision, probably less acute. You can't see so far under water. We'll need extensive study to de-

termine what kind of color sensitivity there is—was—if any. Not to mention the other adaptations I daresay they can stay below for many minutes at a stretch. Doubtless not as long as cetaceans, however. They haven't evolved that far from their land ancestors. You can tell by the fins. Of some use in swimming, but not really an efficient size or shape asyet."

"You can wonder about that, while Mons is being carried away?" Neri choked.

Regor got up and tried in a bemused fashion to brush the sand off. "Oh, no," he said. His face worked, and he blinked several times. "We've got to do something about that, of course." He glanced skyward. The air was full of wings, as the sea birds sensed meat and wheeled insolently close. Their piping overrode the wind. "Let's get back to the boat. We'll take this carcass along for the scientists."

Neri cursed at the delay, but took one end of the object. Jong had the other. The weight felt monstrous, and seemed to grow as they stumbled towards the cliffs. Breath rasped in their throats. Their shirts clung to the sweat on them, which they could smell through every sea odor.

Jong looked down at the ugly face beneath his hands. In spite of everything, in spite of Mons being dead—oh, never to hear his big laugh again, never to move a chessman or hoist a glass or stand on the thrumming decks with him!—he wondered if there was a female somewhere out in the ocean who had thought the face beautiful.

"We weren't doing them any harm," said Neri between wheezes.

"You can't . . . blame a poison snake . . . or a carnivore . . . if you come too near," Jong said.

"But these aren't dumb animals! Look at that brain case. At that knife." Neri needed a space of time before he had the lungful to continue his fury: "We've dealt with nonhumans often enough. Fought them once in a while. But they had a reason to fight . . . mistaken or not, they did. I never saw or heard of anyone striking down utter strangers at first sight."

"We may not have been strangers," Regor said.

"What?" Neri's head twisted around to stare at the older man.

Regor shrugged. "There was a human colony here. The natives seem to have wiped it out. I imagine they had reasons then. And the tradition may have survived."

For ten thousand years or more? Jong thought, shocked. *What horor did our race visit on theirs, that they haven't been able to forget in so long?*

HE tried to picture what might have happened, but there was no reality to it, only a dry and somehow thin logic. Presumably this colony was planted by some civilization that followed the Star Empire. Presumably that civilization had crumbled in its turn. The settlers had most likely possessed no spaceships of their own; outposts worlds found it easiest to rely on the Kith for what few trade goods they wanted. Often their libraries did not even include the technical data for building a ship, and they lacked the economic surplus necessary to do that research over again.

So—the colony was orphaned. Later, if a period of especially virulent anti-Kithism had occurred here, the traders might have stopped coming; might even have lost any record of this world's existence. *Or the Kith might have become extinct, but that is not a possibility we will admit.* The planet was left isolated.

Without much dry land, it couldn't support a very big population, even if most of the food and industrial resources had been drawn from the sea. However, the people should have been able to maintain a machine culture. No doubt their society would ossify, but static civilizations can last indefinitely.

Unless they are faced by vigorous barbarians, organized into million-man hordes under the lash of outrage. . . . But was that the answer? Given atomic energy, how could a single city be overrun by any number of neolithic hunters?

Attack from within? A simultaneous revolt of every autochthonous slave? Jong looked back to the dead face. The teeth glinted at him. *Maybe I'm softheaded. Maybe these creatures simply take a weasel's pleasure in killing.*

They struggled up the scarp and into the boat. Jong was relieved to get the thing hidden in a cold storage locker. But then there came the moment when they called the *Golden Flyer* to report.

"I'll tell his family," said Captain Ilmaray, most quietly.

But still I'll have to tell Sorya how he looked, Jong thought. The resolution stiffened in him: *We're going to recover the body. Mons is going to have a Kithman's funeral; hands that loved him will start him on his orbit into the sun.*

He had no reason to voice it, even to himself. The oneness of the Kith reached beyond death. Ilmaray asked only if Regor believed there was a chance.

"Yes, provided we start soon," the leader replied. "The bottom slopes quickly here, but only to about thirty meters. Then it's al-

most flat to some distance beyond the gate, further than our sonoprobes reached when we flew over. I doubt the swimmers are fast enough to evade us till they reach too great a depth for a nucleoscope to detect Mons' electronic gear."

"Good. Don't take risks, though." Grimly: "We're short enough on future heredity as is." After a pause, Ilmaray added, "I'll order a boat with a high-powered magnascreen to the stratosphere, to keep your general area under observation. Luck ride with you."

"And with every ship of ours," Regor finished the formula.

As his hands moved across the pilot board, raising the vessel, he said over his shoulder, "One of you two get into a spacesuit and be prepared to go down. The other watch the 'scope, and lower him when we find what we're after."

"I'll go," said Jong and Neri into each other's mouths. They exchanged a look. Neri's glared.

"Please," Jong begged. "Maybe I ought to have shot them down, when I saw what they'd done to Mons. I don't know. But anyhow, I didn't. So let me bring him back, will you?"

Neri regarded him for nearly a minute more before he nodded.

THE boat cruised in slow zigzags, out across the bay, while Jong climbed into his spacesuit. It would serve as well under water as in the void. He knotted a line about his waist, adjusted the other end to the little winch by the main personnel lock. The metallic strand woven into its plastic would conduct phone messages. He draped a sack over one arm for that which he would find, and hoped there would be no call to use the slugthrower at his hip.

"There!"

Jong jerked at Neri's shout. Regor brought the craft to a halt, a couple of meters above the surface and three kilometers from shore. "You certain?" he asked.

"Absolutely. Not moving, either. I suppose they abandoned him so as to make a faster escape when they saw us coming through the air."

Jong clamped his helmet shut. External noises ceased. The stillness made him aware of his own breath and pulse and—some inner sound, a stray nerve current or mere imagination—the hunter's horn, remote and triumphant.

The lock opened, filling with sky. Jong walked to the rim and was nearly blinded by the sunlight off the wavelets. Radiance ran to the horizon. He eased himself over the lip. The rope payed out and the surface shut over him. He sank.

A cool green roofed with sunblaze enclosed him. Even through the amor, he felt multitudinous vibrations, the sea lived and moved, everywhere around. A pair of fish streaked by, unbelievably graceful. For a heretical instant he wondered if Mons would not rather stay here, lulled till the end of the world.

Cut that! he told himself, and peered downward. Darkness lurked below. He switched on the powerful flash at his belt, probing after his goal.

Particles in the water scattered the light, so that he fell as if through an illuminated cave. More fish passed near. Their scales reflected like jewels. He thought he could make out the bottom now, white sand and uplifted ranges of rock on which clustered many-colored coralloids, growing toward the sun. And then the swimmer appeared.

He moved slowly to the fringe of light and poised there. In his left hand he bore a trident, perhaps the one which had killed Mons. At first he squinted against the dazzle, then looked steadily at the radiant metal man. As Jong continued to descend, he followed, propelling himself with easy gestures of feet and free hand, a motion as lovely as a snake's.

Jong gasped and yanked out his slugthrower.

"What's the matter?" Neri's voice rattled in his earplugs.

He gulped. "Nothing," he said, without knowing why. "Lower away."

The swimmer came a little closer. His muscles were tense, mouth open as if to bite; but the deep-set eyes remained unwavering. 'Jong returned the gaze. They went down together, still considering each the other.

He's not afraid of me, Jong thought, *though he saw on the beach what we can do.*

Impact jarred through his soles. "I'm there," he called mechanically. "Give me a little slack and—Oh!"

The blood drained from his head as if an ax had split it. He swayed, supported only by the water. Thunders and winds went through him, and the roar of the horn.

"Jong!" Neri called, infinitely distant. "Something's the matter, I know there is, gimme an answer, for the love of Kith say something!"

THE swimmer touched bottom too. He stood across from that which had belonged to Mons Rainart, the trident upright in his hand.

Jong lifted the gun. "I can fill you with metal," he heard himself groan. "I can cut you to pieces, the way you—you—"

The swimmer shuddered, as if he had understood, but stayed

where he was. Slowly, he raised the trident toward the unseen sun. With a single gesture, he reversed it, thrust it into the sand, let go, and turned his back. A thrust of the great legs sent him arrowing off.

The knowledge exploded in Jong. For a century of seconds he stood alone with it.

Regor's voice pierced through: "Get my suit, I'm going after him."

"I'm all right," he managed to say. "I found Mons."

He gathered what he could. There wasn't much. "Bring me up," he said.

When he was lifted from the bay and climbed through the airlock, he felt how heavy was the weight upon him. He let fall the sack and trident and crouched beside them. Water ran off his gear.

The doors closed. The boat climbed. A kilometer high, Regor locked the controls and came aft to join the others. Jong bestirred himself enough to remove his helmet, just as Neri opened the sack.

Mons' head rolled out and bounced dreadfully across the deck. Neri strangled a yell.

Regor lurched back. "They ate him," he croaked. "They cut him to pieces for food."

He gathered his will, strode to the port and peered out. "I saw one of them break the surface, a short while before you came up," he said between his teeth. Sweat —or was it tears?—coursed down the gullies in his cheeks. "We can catch him. The boat has a gun turret."

"No—" Jong tried to rise, but hadn't the strength.

The radio buzzed. Regor ran to the pilot's chair forward, threw himself into it and slapped the receiver switch. Neri set lips together, picked up the head and laid it on the sack. "Mons, Mons, but they'll pay," he said.

Captain Ilmaray's tones filled the hull: "We just got word from the observer boat. It isn't there yet, but the magnascreen's already spotted a horde of swimmers . . . no, several different flocks, huge, must total tens of thousands . . . converging on the island where you are. At the rate they're going, they should arrive in a couple of days."

Regor shook his head, as if stunned. "How did they know?"

"They didn't," Jong mumbled.

"No matter." Neri leaped to his feet, a tiger movement. "That's exactly what we want. A couple of bombs dropped in the middle of 'em."

"You mustn't!" Jong cried. He became able to rise too. The trident was gripped in his hand. "He gave me this."

"What?" Regor swiveled around. Neri stiffened where he stood.

"Down below," Jong told them. "He saw me and followed me to the bottom. Realized what I was doing. Gave me this. His weapon."

"Whatever *for*?"

"A peace offering. What else?"

Neri spat on the deck. "Peace, with those filthy cannibals?"

JONG squared his shoulders. The armor enclosing him no longer seemed an insupportable burden. "You wouldn't be a cannibal if you ate a monkey, would you?"

Neri said an obscene word, but Regor suppressed him with a gesture. "Well, different species," the pilot admitted coldly. "By the dictionary you're right. But these killers are sentient. You don't eat another thinking being."

"It's been done," Jong answered. "By humans too. More often than not, as an act of respect or love, taking some of the person's mana into yourself. Anyway, how could they know what we were? When he saw I'd come to gather our dead, he gave me his weapon. How else could he say he was sorry, and that we're brothers? Maybe he even realized that's literally true, after he'd had a little while to think the matter over. But I don't imagine their traditions are that old. It's enough, it's even better, that he simply confessed we were his kin because we also care for our dead."

"What are you getting at?" Neri snapped.

"Yes, what the destruction's going on down there?" Ilmaray demanded through the radio.

"Wait." Regor gripped the arms of his chair. His voice fell low. "You don't mean they're—"

"Yes, I do," Jong said. "What else could they be? How could a mammal that big, with hands and brain, evolve on these few islands? How could any natives have wiped out a colony that had atomic weapons? I thought about a slave revolt, but that doesn't make sense either. Who'd bother with so many slaves, when they had cybernetic machines? No, the swimmers are the colonists. They can't be anything else."

"Huh?" grunted Neri.

Ilmaray said across hollow space: "It could be. If I remember rightly, Homo Sapiens is supposed to have evolved from the, uh, Neanderthal, type, in something like ten or twenty thousand years. Given a small population, genetic drift, yes, a group might need even less time to degenerate."

"Who says they're degenerate?" Jong retorted.

Neri pointed to the staring-eyed head on the deck. "That does."

"That was an accident, I tell

you, a misunderstanding," Jong said. "We had it coming, blundering in blind the way we did. They aren't degenerate, they're just adapted. As the colony got more and more dependent on the sea, and there were mutations, those who could best take that sort of environment had the most children. A static civilization wouldn't notice what was happening till too late, and wouldn't be able to do anything about it if they did. Because the new people had the freedom of the whole planet. The future was theirs."

"Yeh, a future of being savages."

"They couldn't use our kind of civilization. It's wrong for this world. If you're going to spend most of your life in salt water, you can't very well keep your electric machines; and flint you can pick up almost anywhere is an improvement over metal that has to be mined and smelted.

"Oh, maybe they have lost some intelligence. I doubt even that, but if they have what of it? We never did find the Elder Race. Maybe intelligence really isn't the goal of the universe. I believe, myself, these people are coming back up the ladder, in their own way. But that's none of our business." Jong knelt and closed Mons' eyes. "We were allowed to atone for our crime," he said very softly. "The least we can do is forgive them in our turn. Isn't it? And . . . we don't know if any other humans are left, anywhere in all the worlds, except us and these."

"Why did they kill Mons?"

"They're air breathers," Jong said, "and doubtless they have to learn swimming, as pinnipeds do, instead of having an instinct. So they need breeding grounds. That beach, yes, that must be where the tribes are headed. A party of males went in advance to make sure the place was in order. They saw something strange and terrible walking on the ground where their children were to be born, and they felt compelled to attack it."

Neri slumped down on a bench. The silence came back.

Until Ilmaray said: "I think you have the answer. We can't stay here, then. Return immediately and we'll get under weigh."

Regor nodded and touched the controls. The engine hummed into life. Jong got up, walked to a port, and watched the sea beneath him dwindle as the sky darkened and the stars trod froth.

I wonder what that sound was, he thought vaguely. *A wind noise, no doubt, as Mons said. But I'll never be sure.* For a moment it seemed to him that he heard it again, in the thrum of energy and metal, in the beat of his own blood, the horn of a hunter pursuing a quarry that wept as it ran.

THE END

Four walls do not a prison make— unless they look out upon a world that doesn't exist anymore.

By KEITH LAUMER

Illustrated by SCHELLING

WALLS

HARRY TRIMBLE looked pleased when he stepped into the apartment. The lift door had hardly clacked shut behind him on the peering commuter faces in the car before he had slipped his arm behind Flora's back, bumped his face against her cheek and chuckled, "Well, what would you say to a little surprise? Something you've waited a long time for?"

Flora looked up from the dial-a-ration panel. "A surprise, Harry?"

"I know how you feel about the apartment, Flora. Well, from now on, you won't be seeing so much of it—"

"Harry!"

He winced at her clutch on his arm. Her face was pale under the day-glare strip. "We're not —moving to the country . . ?"

Harry pried his arm free. "The country? What the devil are you talking about?" He was frowning now, the pleased look gone. "You should use the lamps more," he said. "You look sick." He glanced around the apartment, the four perfectly flat rectangular walls, the glassy surface of the variglow ceiling, the floor with its pattern of sink-away panels. His eye fell on the four foot square of the TV screen.

"I'm having that thing taken out tomorrow," he said. The pleased look was coming back. He cocked an eye at Flora. "And I'm having a Full-wall installed!"

Flora glanced at the blank screen. "A Full-wall, Harry?"

"Yep!" Harry smacked a fist into a palm, taking a turn up and down the room. "We'll be the first in our cell block to have a Full-wall!"

"Why—that will be nice, Harry . . ."

"Nice?" Harry punched the screen control, then deployed the two chairs with tray racks ready to receive the evening meal.

BEHIND him, figures jiggled on the screen. "It's a darn sight more than nice," he said, raising his voice over the shrill and thump of the music. "It's expensive, for one thing. Who else do you know that can afford—"

"But—"

"But nothing! Imagine it, Flora! It'll be like having a . . . a balcony seat, looking out on other people's lives."

"But we have so little space now; won't it take up—"

"Of course not! How do you manage to stay so ignorant of technical progress? It's only an eighth of an inch thick. Think of it: that thick—" Harry indicated an eighth of an inch with his fingers— "and better color and detail than you've ever seen. It's all done with what they call an edge-excitation effect."

"Harry, the old screen is good enough. Couldn't we use the money for a trip—"

"How do you know if it's good enough? You never have it on. I have to turn it on myself when I get home."

Flora brought the trays and they ate silently, watching the screen. After dinner, Flora disposed of the trays, retracted the table and chairs, and extended the beds. They lay in the dark, not talking.

"It's a whole new system," Harry said suddenly. "The Full-wall people have their own programming scheme; they plan your whole day, wake you up at the right time with some lively music, give you breakfast menus to dial, then follow up with a good sitcom to get you into the day; then there's nap music, with subliminal hypnotics if you have trouble sleeping; then—"

"Harry—can I turn it off if I want to?"

"Turn it off? Harry sounded puzzled. "The idea is to leave it on. That's why I'm having it installed for you, you know—so you can use it!"

"But sometimes I like to just think—"

"Think! Brood, you mean." He heaved a sigh. "Look, Flora, I know the place isn't fancy. Sure, you get a little tired of being here all the time; but there are plenty of people worse off—and now, with Full-wall, you'll get a feeling of more space—"

"Harry—" Flora spoke rapidly— "I wish we could go away. I mean leave the city, and get a little place where we can be alone, even if it means working hard, and where I can have a garden and maybe keep chickens and you could chop firewood—"

"Good God!" Harry roared, cutting her off. Then: "These fantasies of yours," he said quietly. "'You have to learn to live in the real world, Flora. Live in the woods? Wet leaves, wet bark, bugs, mould; talk about depressing . . ."

There was a long silence.

"I know; you're right, Harry," Flora said. "I'll enjoy the Full-wall. It was very sweet of you to think of getting it for me."

"Sure," Harry said. "It'll be better. You'll see . . ."

* * *

THE Full-wall was different, Flora agreed as soon as the service men had made the last adjustments and flipped it on. There was vivid color, fine detail, and a remarkable sense of depth. The shows were about the same —fast-paced, bursting with variety and energy. It was exciting at first, having full-sized people talking, eating, fighting, taking baths, making love, right in the room with you. If you sat across the room and half-closed your

eyes, you could almost imagine you were watching real people. Of course, real people wouldn't carry on like that. But then, it was hard to say what real people might do. Flora had always thought Doll Starr wore padded brassieres, but when she stripped on Full-wall—there wasn't any fakery about it.

Harry was pleased, too, when he arrived home to find the wall on. He and Flora would dial dinner with one eye on the screen, then slip into bed and view until the Bull-Doze pills they'd started taking took effect. Perhaps things *were* better, Flora thought hopefully. More like they used to be.

But after a month or two, the Full-wall began to pall. The same faces, the same pratfalls, the same happy quiz masters, the puzzled prize-winners, the delinquent youths and fumbling dads, the bosoms—all the same.

On the sixty-third day, Flora switched the Full-wall off. The light and sound died, leaving a faint, dwindling glow. She eyed the glassy wall uneasily, as one might view the coffin of an acquaintance.

It was quiet in the apartment. Flora fussed with the dial-a-ration, averting her eyes from the dead screen. She turned to deploy the solitaire table and started violently. The screen, the residual glow having faded now, was a perfect mirror. She went close to it, touched the hard surface with a finger. It was almost invisible. She studied her reflected face; the large dark eyes with shadows under them, the cheekline, a trifle too hollow now to be really chic, the hair drawn back in an uninspired bun. Behind her, the doubled room, unadorned now that all the furnishings were retracted into the floor except for the pictures on the wall: photographs of the children away at school, a sunny scene of green pastureland, a painting of rolling waves at sea.

She stepped back, considering the effect.

THE floor and walls seemed to continue without interruption, except for a hardly noticeable line. It was as though the apartment were twice as large. If only it weren't so empty . . .

Flora deployed the table and chairs, dialled a lunch, and sat, eating, watching her double. No wonder Harry seemed indifferent lately, she thought, noting the rounded shoulders, the insignificant bust, the slack posture. She would have to do something in the way of self-improvement.

Half an hour of the silent companionship of her image was enough. Flora snapped the screen back on, watched almost with relief as a grinning cowboy in velvet chaps made strumming

motions while an intricately-fingered guitar melody blared from the sound track.

Thereafter, she turned the screen off every day, at first only for an hour, later for longer and longer periods. Once, she found herself chatting gaily to her reflection, and hastily fell silent. It wasn't as though she were becoming neurotic, she assured herself; it was just the feeling of roominess that made her like the mirror screen. And she was always careful to have it on when Harry arrived home.

It was about six months after the Full-wall had been installed that Harry emerged one day from the lift smiling in a way that reminded Flora of that earlier evening. He dropped his brief-case into his floor locker, looked around the apartment, humming to himself.

"What is it, Harry?" Flora asked.

Harry glanced at her. "It's not a log cabin in the woods," he said. "But maybe you'll like it anyway . . ."

"What . . . is it, dear . . ."

"Don't sound so dubious." He broke into a broad smile. "I'm getting you another Full-wall."

Flora looked puzzled. "But this one is working perfectly, Harry."

"Of course it is," he snapped. "I mean you're getting another wall; you'll have two. What about that? Two Full-walls—and nobody else in the cell-block has one yet. The only question is—" he rubbed his hands together, striding up and down the room, eyeing the walls—"which wall is it to be? You can have it adjacent, or opposite. I went over the whole thing with the Full-wall people today. By God, they're doing a magnificent job of programming. You see, the two walls will be synchronized. You're getting the same show on both—you're seeing it from two angles, just as though you were right there in the middle of it. Their whole program has been built on that principle."

"Harry, I'm not sure I want another wall—"

"Oh, nonsense. What is this, some kind of self-denial urge? Why not have the best—if you can afford it. And by God, I can afford it. I'm hitting my stride —"

HARRY, could I go with you some day—tomorrow? I'd like to see where you work, meet your friends—"

"Flora, are you out of your mind? You've seen the commuter car; you know how crowded it is. And what would you do when you got there? Just stand around all day, blocking the aisle? Why don't you appreciate the luxury of having your own

place, a little privacy, and now two Full-walls—"

"Then could I go somewhere else I could take a later car. I want to get out in the open air, Harry. I . . . haven't seen the sky for . . . years, it seems."

"But . . ." Harry groped for words, staring at Flora. "Why would you want to go up on the roof?"

"Not the roof; I want to get out of the city—just for a little while. I'll be back home in time to dial your dinner . . ."

"Do you mean to tell me you want to spend all that money to wedge yourself in a verticar and then transfer to a cross-town and travel maybe seventy miles, packed in like a sardine, standing up all the way, just so you can get out and stand in a wasteland and look back at the walls? And then get back in another car —if you're lucky—and come back again?"

"No—I don't know—I just want to get out, Harry. The roof. Could I go to the roof?"

Harry came over to pat Flora awkwardly on the arm. "Now, take it easy, Flora. You're a little tired and stale; I know. I get the same way sometimes. But don't get the idea that you're missing anything by not having to get into that rat-race. Heaven knows *I* wish I could stay home. And this new walll is going to make things different. You'll see . . ."

THE new Full-wall was installed adjacent to the first, with a joint so beautifully fitted that only the finest line marked the junction. As soon as she was alone with it, Flora switched it off. Now two reflections stared back at her from behind what appeared to be two intersecting planes of clear glass. She waved an arm. The two slave figures aped her. She walked toward the mirrored corner. They advanced. She stepped back; they retreated.

She went to the far corner of the room and studied the effect. It wasn't as nice as before. Instead of a simple room, neatly bounded on all four sides by solid walls, she seemed now to occupy a stage set off by windows through which other, similar, stages were visible, endlessly repeated. The old feeling of intimate companionship with her reflected self was gone; the two mirror-women were strangers, silently watching her. Defiantly, she stuck out her tongue. The two reflections grimaced menacingly. With a small cry, Flora ran to the switch, turned the screens on.

They were seldom off after that. Sometimes, when the hammering of hooves became too wearing, or the shouting of comics too strident, she would blank them out, and sit, back to the mirror walls, sipping a cup of

hot coflet, and waiting—but they were always on when Harry arrived, sometimes glum, sometimes brisk and satisfied. He would settle himself in his chair, waiting patiently enough for dinner, watching the screens.

"They're all right," he would declare, nodding. "Look at that, Flora. Look at the way that fellow whipped right across there. By golly, you've got to hand it to the Full-wall people."

"Harry—where do they make the shows? The ones that show the beautiful scenery, and trees and rolling hills, and mountains?"

Harry was chewing. "Don't know," he said. "On location, I suppose."

"Then there really are places like that? I mean, they aren't just making it up?"

HARRY stared at her, mouth full and half open. He grunted and resumed chewing. He swallowed. "I suppose that's another of your cracks."

"I don't understand, Harry," Flora said. He took another bite, glanced sideways at her puzzled expression.

"Of course they aren't making it up. How the devil could they make up a mountain?"

"I'd like to see those places."

"Here we go again," Harry said. "I was hoping I could enjoy a nice meal and then view awhile, but I guess you're not going to allow that."

"Of course, Harry. I just said—"

"I know what you said. Well, look at them then." He waved his hand at the screen. "There it is; the whole world. You can sit right here and view it all—

"But I want to do more than just view it. I want to live it. I want to be in those places, and feel leaves under my feet, and have rain fall on my face—"

Harry frowned incredulously. "You mean you want to be an actress?"

"No, of course not—"

"I don't know what you want. You have a home, two Full-walls, and this isn't all. I'm working toward something, Flora . . ."

Flora sighed. "Yes, Harry. I'm very lucky."

"Darn right." Harry nodded emphatically, eyes on the screens. "Dial me another coflet, will you?"

* * *

THE third Full-wall came as a surprise. Flora had taken the 1100 car to the roboclinic on the 478th level for her annual check up. When she returned home—there it was. She hardly noticed the chorus of gasps cut off abruptly as the door shut in the faces of the other wives in the car. Flora stood, impressed in spite of herself by the fantastic panorama filling her apartment.

Directly before her, the studio audience gaped up from the massed seats. A fat man in the front row reached inside a red plaid shirt to scratch. Flora could see the perspiration on his forehead. Farther back, a couple nuzzled, eyes on the stage. *Who were they,* Flora wondered; *How did they manage to get out of their apartments and offices and sit in a real theatre . . .*

To the left, an owlish youth blinked from a brightly lit cage. And on the right, the MC caressed the mike, chattering.

Flora deployed her chair, sank down, looking first this way, then that. There was so much going on—and she was in the middle of it. She watched for half an hour, then retracted the chair, deployed the bed. She was tired from the trip. A little nap . . .

She stopped with the first zipper. The MC was staring directly at her, leering. The owlish youth blinked at her. The fat man scratched himself, staring up at her from the front row. She couldn't undress in front of all of them . . .

She glanced around, located the switch near the door. With the click, the scene died around her. The glowing walls seemed to press close, fading slowly. Flora turned to the one remaining opaque wall, undressed slowly, her eyes on the familiar pictures. The children—she hadn't seen them since the last semi-annual vacation week. The cost of travel was so high, and the crowding . . .

She turned to the bed—and the three mirror-bright walls confronted her. She stared at the pale figure before her, stark against the wall patched with its faded mementos. She took a step; on either side, an endless rank of gaunt nude figures stepped in unison. She whirled, fixed her eyes gratefully on the familiar wall, the thin crevice outlining the door, the picture of the sea. . . .

She closed her eyes, groped her way to the bed. Once covered by the sheet, she opened her eyes. The beds stood in a row, all identical, each with its huddled figure, like an infinite charity ward, she thought—or like a morgue where all the world lay dead . . .

HARRY munched his yeast chop, his head moving from side to side as he followed the action across the three walls.

"It's marvellous, Flora. Marvellous. But it can be better yet," he added mysteriously.

"Harry—couldn't we move to a bigger place—and maybe do away with two of the walls. I—"

"Flora, you know better than that. I'm lucky to have gotten this apartment when I

did; there's nothing—absolutely nothing available." He chuckled. "In a way, the situation is good job insurance. You know, I couldn't be fired, even if the company wanted to: They couldn't get a replacement. A man can't very well take a job if he hasn't a place to live in the city—and I can sit on this place as long as I like; we might get tired of issue rations, but by God we could hold on; so—not that anybody's in danger of getting fired."

"We could move out of the city, Harry. When I was a girl—"

"Oh, not again!" Harry groaned. "I thought that was all threshed out, long ago." He fixed a pained look on Flora. "Try to understand, Flora. The population of the world has doubled since you were a girl. Do you realize what that means? There are more people alive now than had been born in all previous human history up to fifty years ago. That farm you remember visiting as a kid—it's all paved now, and there are tall buildings there. The highways you remember, full of private autos, all driving across open country; they're all gone. There aren't any highways, or any open country except the TV settings and a few estates like the President's acre and a half—not that any sun hits it, with all those buildings around it—and maybe some essential dry-land farms for stuff they can't synthesize or get from the sea."

"There has to be some place we could go. It wasn't meant that people should spend their lives like this—away from the sun, the sea . . ."

A shadow crossed Harry's face. "I can remember things, too, Flora," he said softly. "We spent a week at the beach once, when I was a small boy. I remember getting up at dawn with the sky all pink and purple, and going down to the water's edge. There were little creatures in the sand—little wild things. I could see tiny fish darting along in a wave crest, just before it broke. I could feel the sand with my toes. The gulls sailed around overhead, and there was even a tree—

"But it's gone now. There isn't any beach, anywhere. That's all over . . ."

He broke off. "Never mind. That was then. This is now. They've paved the beach, and built processing plants on it, and they've paved the farms and the parks and the gardens—but they've given us Full-wall to make up for it. And—

THERE was a buzz from the door. Harry got to his feet.

"They're here, Flora. Wait'll you see . . ."

Something seemed to tighten around Flora's throat as the men emerged from the lift, gingerly handling the great roll of wall screen.

"Harry . . ."

"Four walls," Harry said triumphantly. I told you I was working toward something, remember? Well, this is it! By God, the Harry Trimble's have shown 'em!"

"Harry—I can't—not four walls . . ."

"I know you're a little overwhelmed—but you deserve it, Flora—"

"Harry, I don't WANT four walls! I can't stand it! It will be all around me—"

Harry stepped to her side, gripped her wrist fiercely. "Shut up!" he hissed. "Do you want the workmen to think you're out of your mind?" He grinned at the men. "How about a coflet, boys?"

"You kiddin?" one inquired. The other went silently about the work of rolling out the panel, attaching contact strips. Another reached for the sea-scene—

"No!" Flora threw herself against the wall, as though to cover the pictures with her body. "You can't take my pictures! Harry, don't let them."

"Look, sister, I don't want your crummy pictures."

"Flora, get hold of yourself! Here, I'll help you put the pictures in your floor locker."

"Bunch of nuts," one of the men muttered.

"Here, keep a civil tongue in your head," Harry started.

The man who had spoken stepped up to him. He was taller than Harry and solidly built. "Any more crap outa you and I'll break you in half. You and the old bag shut up and keep outa my way. I gotta job to do."

Harry sat beside Flora, his face white with fury. "You and your vaporings," he hissed. "So I have to endure this. I have a good mind to . . ." he trailed off.

The men finished and left with all four walls blaring.

"Harry," Flora's voice shook. "How will you get out? They've put it right across the door; they've sealed us in . . ."

"Don't be a bigger idiot than you have to." Harry's voice was ugly over the thunder from the screens. He went to the newly covered wall, groped, found the tiny pin-switch. At a touch, it slid aside as always, revealing the blank face of the lift shaft safety door. A moment later it too slid aside and Harry forced his way into the car. Flora caught a glimpse of his flushed angry face as the door closed.

AROUND her, the walls roared. A saloon fight was in full swing. She ducked as a

chair sailed toward her, whirled to see it smash down a man behind her. Shots rang out. Men ran this way and that. The noise was deafening. That man, Flora thought; the vicious one; he had set it too loud purposely.

The scene shifted. Horses galloped across the room; dust clouds rose, nearly choking her in the verisimilitude of the illusion. It was as though she crouched under a small square canopy of ceiling in the middle of the immense plain.

Now there were cattle, wild-eyed, with tossing horns, bellowing, thundering in an unbroken sea across the screens, charging at Flora out of the wall, pouring past her on left and right. She screamed, shut her eyes, and ran blindly to the wall, groping for the switch.

The uproar subsided. Flora gasped in relief, her head humming. She felt faint, dizzy; she had to lie down— Everything was going black around her; the glowing walls swirled, fading. Flora sank to the floor.

* * *

Later—perhaps a few minutes, maybe hours—she had no way of knowing—Flora sat up. She looked out across an infinite vista of tile floor, which swept away to the distant horizon in all directions as far as the eye could see; and over all that vast plain, hollow-eyed women crouched at intervals of fifteen feet, in endless numbers, waiting.

Flora stared into the eyes of the nearest reflection. It stared back, a stranger. She moved her head quickly, to try to catch a glimpse of the next woman—but no matter how fast she moved, the nearer woman anticipated her, interposing her face between Flora and all the others. Flora turned; a cold-eyed woman guarded this rank, too.

"Please," Flora heard herself pleading. "Please, please—"

She bit her lip, eyes shut. She had to get hold of herself. These were only mirrors—she knew that. Only mirrors. The other women—they were mere reflections. Even the hostile ones who hid the others—they were herself, mirrored in the walls.

She opened her eyes. She knew there were joints in the glassy wall; all she had to do was find them, and the illusion of the endless plain would collapse. There—that thin black line, like a wire stretched from floor to ceiling—that was a corner of the room. She was not lost in an infinitude of weeping women on a vast plain; she was right there, in her own apartment—alone. She turned, finding the other corners. They were all there, all visible; she knew what they were . . .

But why did they continue to

look like wires, setting apart the squares of floor, each with its silent, grieving occupant . . . ?

She closed her eyes again, fighting down the panic. She would tell Harry. As soon as he came home—it was only a few hours—she would explain it to him.

"I'm sick, Harry. You have to send me away to some place where I'll lie in a real bed, with sheets and blankets, beside an open window, looking out across the fields and forests. Someone—someone kind—will bring me a tray, with a bowl of soup—real soup, made from real chickens and with real bread and even a glass of milk, and a napkin, made of real cloth . . ."

She should find her bed, and deploy it, and rest there until Harry came, but she was so tired. It was better to wait here, just relaxing and not thinking about the immense floor and the other women who waited with her . . .

She slept.

When she awoke, she sat up, confused. There had been a dream . . .

But how strange. The walls of the cell block were transparent now; she could see all the other apartments, stretching away to every side. She nodded; it was as she thought. They were all as barren and featureless as her own —and Harry was wrong. They all had four Full-walls. And the other women—the other wives, shut up like her in these small, mean cells; they were all aging, and sick, and faded, starved for fresh air and sunshine. She nodded again, and the woman in the next apartment nodded in sympathy. All the women were nodding; they all agreed—poor things.

WHEN Harry came, she would show him how it was. He would see that the Full-walls weren't enough. They all had them, and they were all unhappy. When Harry came—

It was time now. She knew it. After so many years, you didn't need a watch to tell when Harry was due. She had better get up, make herself presentable. She rose unsteadily to her feet. The other husbands were coming, too, Flora noted; all the wives were getting ready. They moved about, opening their floor lockers, patting at their hair, slipping into another dress. Flora went to the dial-a-ration and all around, in all the apartments, the wives deployed the tables and dialled the dinners. She tried to see what the woman next door was dialling, but it was too far. She laughed at the way her neighbor craned to see what SHE was preparing. The other woman laughed, too. She was a good sport.

"Kelpies," Flora called cheerily. "And mockspam, and coflet . . ."

Dinner was ready now. Flora turned to the door-wall and waited. Harry would be so pleased at not having to wait. Then, after dinner she'd explain about her illness—

Was it the right wall she was waiting before? The line around the door was so fine you couldn't really see it. She laughed at how funny it would be if Harry came in and found her standing, staring at the wrong wall.

She turned, and saw a movement on her left—in the next apartment. Flora watched as the door opened. A man stepped in. The next-door woman went forward to meet him—

To meet Harry! It was Harry! Flora whirled. Her four walls stood blank and glassy, while all around her, the other wives greeted Harry, seated him at their tables, and offered him coflet . . .

"Harry!" she screamed, throwing herself at the wall. It threw her back. She ran to the next wall, hammering, screaming. Harry! Harry!

In all the other apartments, Harry chewed, nodded, smiled. The other wives poured, fussed over Harry, nibbled daintily. And none of them—not one of them—paid the slightest attention to her . . .

She stood in the center of the room, not screaming now, only sobbing silently. In the four glass walls that enclosed her, she stood alone. There was no point in calling any longer.

No matter how she screamed, how she beat against the walls, or how she called for Harry—she knew that no one would ever hear.

THE END

Imagine a Siren, A Circe, a Lorellei . . . lovely and lonely on a worldlet in space . . . and then a ship comes . . . with a handsome crew and a Captain . . . The prospects are for dalliance. But even . . .

Circe Has Her Problems

By ROGER ZELAZNY

THE fact that this place could not possibly exist should be the tipoff. It should be a craggy, barren hunk of rock, drifting through sunless space without a redeeming feature on its wrinkled vizard. Instead, it is a delicious island in the void, with a breathable atmosphere (breathable by anyone I want to breathe it!), fresh fruits, glittering fountains, an amazing variety of animal life, and me—which would have made men suspect the big bit in the old days. But no, when men get to the point where they start hopping between stars, their minds are always too well-conditioned to the superstition of scientific causality . . .

I am a very lovely broad (I believe that is the current term), and I am as enticing as all hell (literally)—but I digress (I *will* get back to me in a moment) : my island is about fifty miles in diameter, if you can use that term for non-spherical objects (I am not strong on science), and it's sort of rectangular—even though you can walk on any of its surfaces (or inside it, for that matter) ; its skies twinkle a perpetual twilight, which is very romantic —and it abounds in chattering, hissing, singing, croaking, growling, and muttering beasts.

Which brings us nearer the heart of the matter, namely me.

Having been spawned in a far more libertine culture than the present cold, puritanical state of human civilization, I recently cut out for blacker pastures and set up shop here—where I stand out like a dwarf star on radar screens —which always makes for primate curiosity and an eventual

Illustrated by BLAIR

landing, which always makes for men who have been away from the present cold, puritanical state of human civilization long enough to appreciate a luscious doll like me.

Which brings us directly to the heart of the matter. Namely, my problem.

I am a sorceress by trade, not a goddess, but I happen to have a lot of Nymph blood in me (which can be either bad or good, if you look at things that way

very often—I don't). Anyhow, I had enjoyed my obvious attributes for a long while, until a cat-souled she-dog from the isle of Lesbos, in a fit of perverse jealousy (or jealous perversity—slice it either way), laid this curse bit on me, which was very bad indeed (I *do* look at things that way in *this* matter!).

Like I dig men: big men, little men, fat, thin, coarse, refined, brilliant, and et cetera men—the whole lovin' race of 'em! But my present unfortunate condition affects approximately ninety-nine percent of them.

Like, when I kiss them, they have a tendency to assume other forms—chattering, hissing, singing, croaking, growling, muttering forms—all of them quite unsatisfactory—which explains my woes, as well as the background noises.

NOW then, once in a lopsided crescent moon, the right guy comes along—some lug with a genetic resistance to Sappho's abracadabra pocus—and I am always extremely nice to him. Unfortunately, men like that are far between, and they have a tendency to wear out quite soon. Hence, I have been extremely troubled for the past several centuries.

This latest crew is one such heartbreaking instance. None of the clean-shaven, broad-shouldered, Space Academy products could bear more than a mild peck on the cheek before howling away on all fours with their tails between their legs. Change them back? Sure, I can do that—but whyfor? Like, there is no percentage in kissing animals human if, as soon as you kiss them a second time, they become animals again. So I let them practice Darwin there in the trees while I look enticing and sigh for Mister Right.

(I kissed a navigator an hour ago—he's the one peeling the banana with his feet . . .)

"Pardon me, Miss."

Like wow!

"I am Captain Denton and I am looking for my crew," he smiles. "I hope you understand English."

"Like hope no more, Daddy," say I. "Loud and clear.

"Beg pardon?"

"I understand you, you living Hermes by Praxiteles with a crewcut, you."

"Do you live here?"

"Indeed, and well." I move nearer and breathe upon him.

"Have you seen my men anywhere about? When I found that the atmosphere was breathable I permitted them to leave the ship, for recreational purposes. That was three days ago—"

"Oh, they're around." I toy with the gold medallions on his blue jacket. "What did you get

all these lovely medals for?"

"Oh, . this one is the Star of Valor, this is the Cross of Venus, that is the Lunar Crescent, and this is an Exemplary Conduct Medallion," he recounts.

"Tsk, tsk," I touch the latter. "Do you always behave in an exemplary manner?"

"I try, Miss."

I throw my arms about his neck.

"I'm so happy to see an Earthman, after all these years!"

"Really, Miss, I—"

I kiss him a good solid one on the mouth. Why beat about the bush, torturing myself? I might as well find out right away.

And nothing happens! Not a bit of fur! Nary horn nor tail!

And nothing else, either, for that matter . . .

He unclasps my arms gently, but with a firm grip of immense strength. He is so—so masterful. Like one of the Argive chieftains, or the Myrmidon warriors . . .

"I appreciate your enthusiasm at meeting another person if, as you say, you have been alone upon this worldlet very long. I assure you that I shall give you passage to a civilized planet, as soon as I can locate my crew."

"Pooh!" say I. "I don't want your civilized planets. I'm happy here. But you, Big Man, you have unsuspected talents—and great potential! Like, we shall play a wild harpsichord together!"

"'Duty Before All,' Miss, is the motto of the Corps. I must locate my crew before I indulge in any musical pasttimes."

LIKE, I don't dig geometry, but I know a square when I see one. Still, Science is only one of the paths man need follow . . .

"Step into my parlor," say I whistling for the palace, which comes running and settles out of sight on the other side of the hill. "I shall refresh you and give you assistance in your search."

"This is very kind of you," he replies (Grandmother Circe! those shoulders!). "I shall accept your invitation. Is it far?"

"We're almost there already, Captain." I take his arm.

I feed him a roast pig, which had seen happier days, and I proceed to douse his wine with every aphrodisiac I have in stock. I sit back and wait, looking alluring.

Nothing happens.

"Don't you feel a little—uncomfortable?" I finally ask, raising the temperature ten degrees. "Perhaps you'd like to take off your jacket."

"Yes, I believe I shall. It is a trifle warm in here."

"Take off anything you like," I suggest, whistling up a swimming pool. "Perhaps you would like to bathe?"

"I did not notice that pool before. This wine must be making me drowsy."

I whistle for the perfumed bed, and it rolls in with a musical accompaniment.

"Well, a nice bath and a good bed will make you feel like a new man."

"I really should be looking for my crew," he protests, weakly.

"Nonsense, nothing in this world could hurt a fiy." I dampen out the background howls and snarls to prove my point. "They will be all right for a few more hours, and you could use the rest."

"True," he finally acknowledges. "They are probably bivouacked beside some gentle waterfall, or engaged in a boyish game of touch football. I shall bathe."

And he undresses and I whistle, which, unfortunately, causes the icebox to move into the room and stop at the edge of the pool.

"Amazingly sophisticated servomechanisms you have," he observes, splashing back to the edge and proceeding to raid the icebox.

* * *

An hour later he is still eating! He is one of those big, hearty types with his mind in his stomach—but still, what a magnificent animal! Great bulging muscles, skin smooth and perfect as marble, deeply tanned, a warrior's dark eyes . . .

I find I am getting a first-class crush on this jerk!

Finally, he finishes eating and steps from the pool, like Neptune rising from the Aegean—a dripping god of youth and power. I know that he must be thinking by now what I have been thinking all along. It is a simple matter of physiology, according to Science—also, them green fiies from Spain are pretty effective.

He towers above me, and I look coy, timid, and, at the same time, inviting.

"It is still bothering me," he observes. "I had better go look for my crew before I take my rest."

THAT does it! Suddenly I see red, also the rest of the rainbow. I snap my fingers and everything vanishes but the bed, into which we are immediately projected.

"Wha-what happened?" he asks.

"Captain Denton," say I, "you have in every way flaunted my obvious charms, and insulted my person by failing to recognize it. I am extremely lovely, and sadly, miserably," I whisper it, "passionate!"

"Oh my!" says he. "Is that so?"

"Indeed. I weep for the strong arms of a man, the dart of Cupid hath pierced my heart, I am not prone to argue . . ."

"I see," he clears his throat. "And you have lured me here for this specific reason?"

"Yes", I reply, softly.

"And you did something to my crew?"

"Yes."

"What?"

"Kiss me and I'll tell you."

"All right."

He does. Aphrodite! What a fine feeling after all those centuries!

"What did you do with them?"

"I kissed them," say I, "and they were metamorphosed into animals."

"Goodness!" he exclaims, quickly surveying his person. "And you are such a lovely creature!"

"Now you're getting with it," I agree. "You are one of those rare brutes my kiss does not affect with tails, tusks, hooves, horns, or suchlike impedimentia."

"Can you change my men back?"

"I might, if you ask me—very nicely."

"You—you're a sorceress!" he suddenly realizes. "I had always presumed they were but the fabrications of the unlearned. Can you work other magic?"

"You bet. Want some moonlight?"

I snap my fingers and the roof disappears. A gentle, inspiring moon hovers above us.

"Amazing! Oh my! Oh my! It is almost too much to ask—"

"What, dearest?" I nestle up against him. "Ask away, and Big Mama will make with the conjure."

A long, loud silence.

Finally, voice shaking, he asks it.

"Can you make me a man?"

"Wha?"

"A man," he repeats. "I am an android, as are all the captains of deep space cruisers these days. This is because we are more stable, single-minded, and less emotional than our human brothers."

"Brother!" exclaim I, getting to my feet and reaching for my robe. "Oh brother!

"Sorry, Jack," I finally pronounce, "I am just a sorceress. It would take a goddess to make you —anything."

"Oh," says he, sadly, "I suppose that it was too much to hope for. I have always wondered how people feel. It would have been so stimulating . . ."

* * *

I stalk away through the night. With some coaching he might make the vegetable kingdom next avatar. Stimulating!

Rounding up his scurvy crew, I—ugh!—kiss them all back into human form. I have to! He needs them to man the ship, and I can't have him slew-footing around looking virile, and at the same time as useful as a pinup in a monastery. Stimulating!

Someday my prince will come.

THE END

TIN LIZZIE

By RANDALL GARRETT

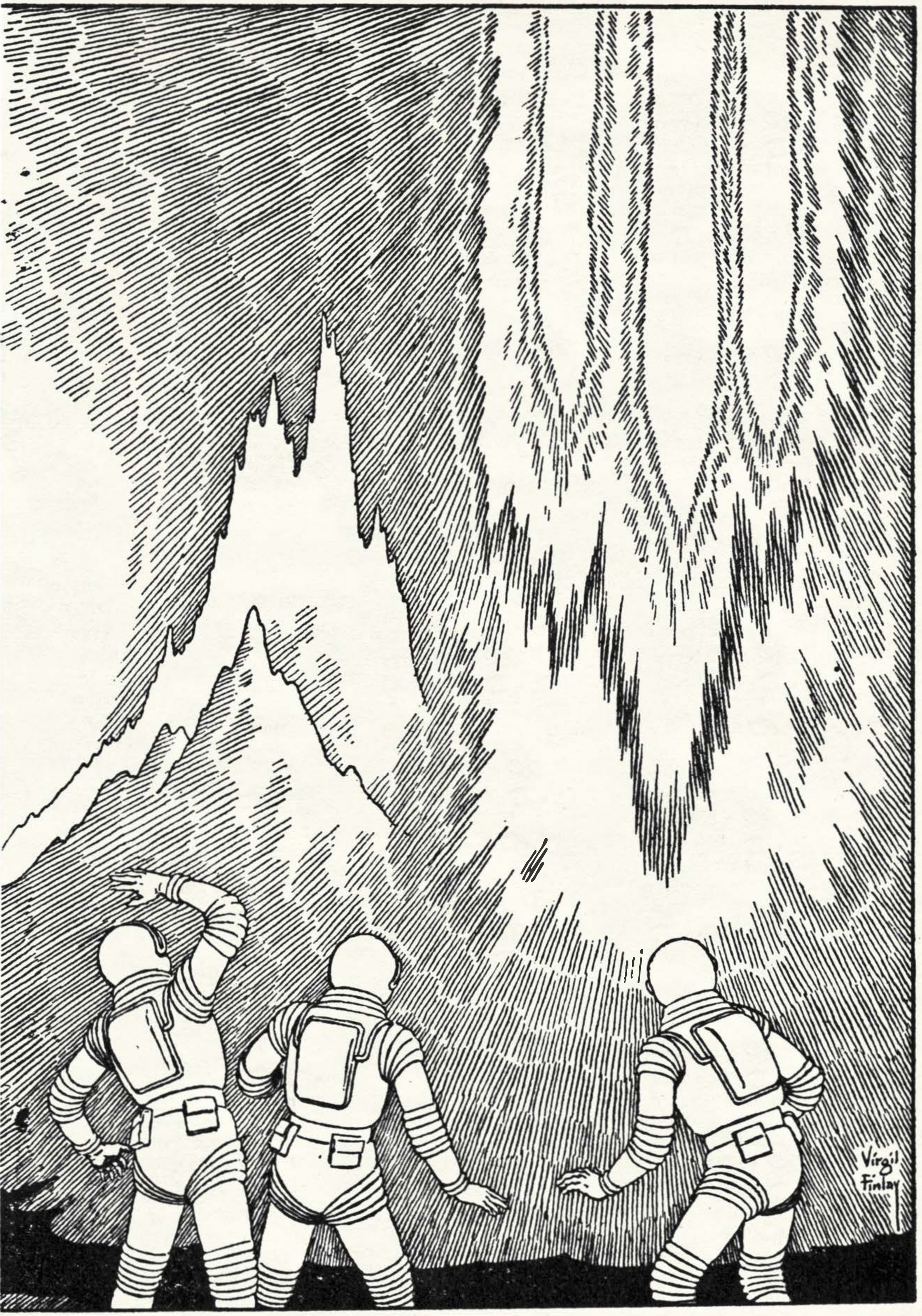
Illustrated by FINLAY

When they built the old space taxis, they built 'em to last. When they made men like Gen. Challenger, they made them to last, too. And lucky things these both were for the men of the Mars-12-X.

"The trouble with too many people," said the Engineer, "is that they think that 'outmoded' means the same as 'useless'. They think of a rifle as a deadly weapon and a crossbow as a quaint toy. They don't stop to think that a stone axe can kill a man just as dead as an H-bomb can. An axe is as efficient now as it ever was."

—THE IDLE WORSHIPPERS
by R. Philip Dachboden

THE tugship *Jove 7* caught the beamed message as she was heading Lunawards on her regular run from the Jovian Atmosphere Mining Plants orbiting


Virgil
Finlay

around the giant planet. The tugship was well inside the Asteroid Belt, heading toward the orbit of Mars when the signal, faint, but clear, came in.

Mayday — Mars — Mayday — Mars— Mayday — Mars —

Sam Arkwright, a brown-haired, lean-faced man who had the kind of face that looks perpetually worried whether the mind behind it is worried or not, checked his instruments carefully. Mars was a way off to one side but was still well ahead of the J-7. The signal was beamed, all right; it would have to be to carry this far. But the beam was spread. Evidently whoever was sending the signal knew about where the *Jove 7* was supposed to be at this time and had aimed accordingly and hoped like hell.

Arkwright aimed his own outside antenna at the red planet and sent back an answer signal. It would be several minutes before there would be any answer.

"Chan! Take a look at this!" he called, keeping his eyes on the instruments.

Chandra had been sitting across the control room taking a navigation fix, but when he had seen Arkwright suddenly snap to attention and start working the communication controls, he had come over to where Arkwright was sitting.

"A mayday from Mars?" the dark-skinned, dark-eyed Asian asked of nobody in particular. "Who the hell would be on that God-forsaken lump of nothing?"

"Probably from Deimos or Phobos," Arkwright said. "With their beam spread that wide, we can't pinpoint 'em any closer at this distance."

"Anyone else any closer than we are?" Chandra asked.

Arkwright took a quick glance at his ephemeris and his flight schedule listings. "No scheduled jobs. But there aren't *any* schedule jobs supposed to be anywhere near Mars right now, anyhow."

"Well, they know our schedule —approximately, at any rate— or they wouldn't be able to beam us."

Mayday — Mars — Mayday — Mars — Mayday — Mars —

The monotonous message kept coming in without change.

"Let me know when they answer," Chandra said. "I'll feed the orbit change into the computer."

"Suppose we ought to wake up Bjornsen and let him know?"

"No need for it. We can tell him when I get ready to go."

He started programming the computer for a change of orbit that would take the *Jove 7* into a Mars-approach orbit.

ARKWRIGHT went back to his instruments. Bjornsen slept on.

Three men in a boat.

The *Jove 7* was a tugship pulling a sphere of cargo behind her —half a million metric tons of fixed nitrogen—in the form of liquid N_2H_4. They were headed toward the factories of Earth's moon at a steady acceleration of five hundred centimeters per second squared—one half of a Standard Gee. At the halfway point, the tugship would cut acceleration, free herself from the sphere, go around to the other side, latch on again, and reverse acceleration, eventually putting the sphere of liquid into orbit around Luna, where the little jumpships would come up to her, load up, and carry the stuff down to Luna a few thousand tons at a time.

Except, of course, that things would no longer work out that way. A Mayday Call in space is always considered a matter of life and death.

The new orbit was actually two orbits. Both had to be computed separately.

The cargo sphere itself would be cut loose and allowed to fall toward the general direction of Earth's orbit at the velocity she had already attained, augmented only by the pull of the sun, with minor perturbations by the planets. A beeper radio would be put on her so that the tugship, knowing approximately where she was, could make close contact later.

The tugship itself would head Marsward on a high-acceleration orbit.

Mayday — Mars — Mayday — Mars — Mayday — Mars —

By now, Arkwright thought, there should have been an answer. The sender was automatic, of course, but there should be someone standing by to reply. Maybe there was only one man and he was asleep. Maybe there was no one left alive at all. Maybe their receiver was out of order. Maybe—

Hell, maybe a lot of things.

Wait and see.

Chandra said: "No answer?"

"Nothing."

"Okay. Go wake up Sven. We have twenty-one minutes before the tick."

Sven Bjornsen was already sitting on the edge of his bed when Arkwright came down the hatch. There was nothing odd about his being awake, even though he still hadn't finished but five of his allotted eight hours sleep. He had heard Arkwright coming down the ladder. A spaceman learns to react immediately and to come fully awake at the first sound of something unusual. If he doesn't learn that, he doesn't often come awake at all.

On the other hand, Bjornsen knew it wasn't a Triple-A-One Emergency or Arkwright would have been in a devil of a hurry, and no bells were ringing.

"What's happening Ark?"

"Get ready for high acceleration; we're cutting the bubble loose. Mayday call, Mars."

"Who is it?"

"Don't know. No reply to our signal yet."

"Why would anyone want to land on that hellish planet?" Bjornsen asked of no one in particular. "No wonder they're in trouble."

"They're probably not on the planet itself," Arkwright said. "My guess is Deimos or Phobos—or it may be a ship in orbit."

"You said the call was 'Mayday, Mars'?"

"'S right."

"If they'd meant Deimos or Phobos, they would've said so, wouldn't they? They're either on the planet itself or in orbit around it."

Arkwright looked thoughtful. "Maybe. If they're on the surface, atmospheric distortion could account for the spread and the weakness of their beam. But why would anyone want to land there?"

"Don't ask me. We'll ask them when we get there."

BY the time the tugship *Jove 7* had cut loose from the bubble and was ready to head for Mars, there had still been no answer from the Martian transmitter, which was still beaming out its steady Mayday call.

The three men strapped themselves in for high acceleration and the powerful little tugship launched itself toward Mars at five Standard Gees—five thousand centimeters per second squared.

Arkwright swung the beam antenna toward Luna and locked in. Then he started an automatic signal heading toward Luna.

Relay Mayday—Relay Mayday—Relay Mayday Mars—Jove Seven Relay Mayday—Relay Mayday Mars—

Eventually a reply came from the powerful transmitter on Earth's moon.

Have your relay, Jove Seven. Give details.

No details. Identity sender unknown. No reply to our signal. No signal from them except Mayday Mars. *Signal weak. Wide beamspread.*

There was a longer wait this time before the reply came.

Luna to Jove Seven. That's a non-sked. Scientific expedition under auspices American Museum Natural History. Last reported to us nine hours ago as arranged. Next report due in fifteen hours. No trouble as of last report. Intention was to land on planet. You are closest ship. Next closest three days away. Do what you can. Report to Luna regularly.

"Let's hope they didn't land," Arkwright said in a low voice.

Five gees of acceleration pressing his chest made talking difficult.

"Um," said Chandra.

Bjornsen said nothing.

They both knew what Arkwright meant. It would be impossible to land the *Jove 7* on the surface of Mars.

Mars, like Earth, has an abnormal atmosphere. No normal planet has a strong oxidizing atmosphere like Earth's. That much oxygen simply cannot exist in a free state in a universe that is 99% hydrogen. Only living things could produce such an atmosphere.

The atmosphere of Mars is more strongly oxidizing than that of Earth. The oxidizing agent that constitutes a high percentage of its "air" is not free oxygen, but a compound of oxygen, a reddish-brown gas known as nitrous anhyride or dinitrogen trioxide—N_2O_3. It is primarily that gas that gives Mars the reddish color that it exhibits from a distance. The atmosphere is also loaded with nitrous and nitric acids in vapor form.

These compounds don't bother the low forms of life that live on Mars; it is those life-forms that are responsible for its being there, just as it is the life-forms of Earth that are responsible for its oxygen atmosphere.

But the cupro-aluminum hull of the *Jove 7* wouldn't last long enough to allow them to land if her crew tried to take her down through that hellishly corrosive atmosphere.

AS the tugship shot through space toward her destination, the three men thought about the problem that lay ahead.

Space in itself can be a deadly killer. The men who worked in the Asteroid Belt to bring metals to Earth, and the men who worked from the moons of Jupiter, using scoopships to "mine" the atmsophere of that giant planet for its ammoniacal gases, were men who had learned by experience that space was deadly. Not vicious, not vindictive—just deadly. A man who failed to think clearly, who failed to reason ahead . . . died. Not "sooner or later," but sooner.

Mars was of little commercial worth. True, it had plenty of fixed nitrogen, in the form of oxides, but Jupiter was by far a better source, even though the giant planet was much farther from Earth. The scoopships that dived into the atmosphere of Jupiter at high velocity, compressing the atmosphere as they went, relied on the tremendous gravitation pull of the planet to give them that high speed, so that they could use just enough power to make the scoop and go out again on a hyperbolic orbit. The low gravity field of Mars, and the relative thinness of its atmos-

phere made it a poor prospect for atmosphere mining. In addition, the "air" of Mars was an oxidizing atmosphere while that of Jupiter was a reducing atmosphere. Metals won't burn on Jupiter the way they will on Mars.

What made Mars interesting was its life-forms. Utilizing the energy of the sun, those life-forms were nitrogen-fixing on a vast scale. Such life-forms, if they could be "tamed," would be of tremendous importance to Earth.

The atmosphere of Earth is nearly eighty percent "free"—uncombined—elemental nitrogen gas. Terrestrial plants and animals need nitrogen, but not as N_2 gas. It must be "fixed"—combined with other elements to make compounds that plants and animals can use. Some of Earth's nitrogen is oxidized by lightning; some is forced into combination by nitrogen-fixing bacteria. But these two processes alone do not supply nearly enough fixed nitrogen to grow the vast amounts of food needed to satisfy the hunger of six and a half billion people. Fixed-nitrogen fertilizer was needed in million-ton lots. And Jupiter could supply it more economically than Mars could—unless the nitrogen-fixing life-forms of Mars could be utilized for that purpose.

That had been the primary reason for the scientific expeditions to the otherwise useless fourth planet. But Mars, in spite of its small size, lacks seas; its total land area, therefore, is larger than that of Earth. So far, none of the plants discovered on Mars were capable of fixing free nitrogen; they used the dinitrogen trioxide of the air for their needs.

By the time the *Jove 7* had braked herself into an orbit around Mars, there was no question about the location of the transmitter that was sending out the Mayday call.

Arkwright checked his instruments to make sure of the exact location. "Right in the middle of the Xanthus Desert," he said bitterly. "Let's hope we can help 'em some way. We sure as hell can't go down after 'em."

He focussed his own antenna on the spot again and called out his identification. After a couple of minutes, a weak answer came.

"*Jove 7*, this is the *Mars 12-X*. There's a hell of an electrical storm down here, and we can't receive you very well. We're lucky we got through at all."

"What's the trouble?" Arkwright asked.

"The hull of our ship sprang a leak. Acid gases have corroded everything. Engines disabled, controls shot. We're living in our suits—and you know how long that can go on."

Arkwright glanced at his two partners. "Yeah," he said into the microphone. "How many of you are there?"

"Four. I'm Harley Jacobs; my partner is Lewis Nostrand. We have two passengers: Dr. Tatsu Nakomura and Dr. Fabian Smith."

"What caused your hull leak?"

There was a pause, then Jacobs said: "That's the funny part of it. We don't know."

CHANDRA positioned himself carefully against one wall of the control room and looked at Bjornsen and Arkwright. Since the tugship was in a free-fall orbit, the three men were weightless, but a null-gee condition was nothing new to them.

"Well," Chandra said, "either of you guys got any suggestions?"

Arkwright rubbed a knuckle across his upper incisors and stared at nothing in particular. Bjornsen looked blankly thoughtful.

It was a matter of time. Luna Station had been appraised of the situation and had had one reply: "There is no other ship that can make it in time."

The air supply in the spacesuits of the men on the surface of Mars simply wouldn't last long enough. By the time any rescue ship came, all four of the men in the *M-12-X* would be dead. All they had left was the air in their suit tanks; the air supply of the ship was polluted with the poisonous acid vapors of the Martian atmosphere. The apparatus for breaking down CO_2 into carbon and oxygen to replenish the air was utterly useless because of corrosion.

Problem: Four human beings, at the bottom of one of the most corrosive atmospheres in the Solar System, in a rather shallow gravity well and at a point where that gravity well has a potential of approximately point three seven Standard Gees, are going to die very shortly unless someone does something about it.

Additional Factors: The only ship within range has a drive that can easily overcome the gravitational obstacle, but its hull is made of cupro-aluminum—an alloy that works just fine in the vacuum of space, but is not meant for landing on any planet with an atmosphere. Especially not an atmosphere composed of the acids of nitrogen. The fact that the *Jove 7* had no landing gear whatever was of no importance in the face of the fact of the composition of her hull.

Actually, a tugship is not built to land on any body with a gravitational pull at the surface of over a tenth of a Standard Gee.

It *can* be done, but only if the drive is kept on continuously in order to hold her upright. A tug-

ship is shaped something like a football—a prolade spheroid. The direction of the drive is along the long axis. Ever try standing a football on end?

And once the *Jove 7* fell over, so that her drive was at right angles to the planet's surface, getting her up again would be well-nigh impossible.

A tugship is similar to an ocean liner in that respect. She's fine in her element, but don't try to make her do a job she's not suited for. Her purpose is to apply power—vast amounts of power—to millions of metric tons of stuff that has to be ferried through space. Most of her hull is full of drive mechanism and power plant, with just enough room left over for a three-man crew. Considering that a tugship is a hundred meters long and sixty meters in diameter (The *Jove 7* would overlap a football field at both ends), and that there is very little room inside her for three men, it is easy to see that she packs a hell of a lot of power.

ALL by herself, the *Jove 7* could — *theoretically!* — accelerate at over a million gravities. That would, of course, destroy her. An awful lot of the space inside her is taken up by safety mechanisms that insure her a top acceleration of ten—with an override which will allow fifteen in special cases.

But all her bracing is along the longitudinal axis. A tugship is like a tall building—she sits up fine, but if you lay her on her side, she'll break.

Jove 7 had been built in space and had never landed on a planet. To get down to Luna or to Earth, her crew would have to take one of the little jumpships. She would be parked in a stable orbit, and then a jumpship would come up, latch on, and transfer her crew to the planet below.

Land her on Mars?

Impossible.

And every man jack aboard her knew it.

"Leaky hull." Bjornsen's voice sounded sort of dreamy. "Funny."

"Nothing so damn funny about it," Arkwright muttered. "We'd have a leaky hull damn soon if we tried to land on that hellhole."

"Yeah," said Bjornsen, still dreamily thoughtful, "but they have a steel hull—which doesn't react rapidly to nitrogen acids—and a Teflon coating which does not react to any known acid or mixture of acids. And yet Jacobs doesn't know where she's leaking or how. Same thing happened to the Second Expedition, you know."

"Wasn't the Second," said Arkwright. "Third, I think."

"Second," said Bjornsen firmly. "The boys left two of their

jumpships—they called 'em 'space taxis' then—on Phobos because of the leaks."

"Oh, yeah," Arkwright said. "The Mars Monuments. You're right."

"What about it?" Chandra asked.

"Nothing," Bjornsen admitted. "It just went through my mind. They were coated with Teflon, too. And both of their 'space taxis' developed leaks."

"That's why they left 'em behind on Phobos," Arkwright said.

If there had been any gravity, Chandra would have stood up straight or even leaped from his chair. *"Phobos!"* He straightened up with a snap. "By God, that's *it!"*

Arkwright and Bjornsen looked at him blankly.

"What," asked Bjornsen cautiously, "is 'it'?"

Arkwright got it. He looked at the lean Indian with an expression like that of a mare who has just discovered that her foal is a mule.

"Are you out of your bloody mind, Chan?" He waved a hand in the air. "Those damn things are eighty years old!"

"They made it once," Chandra said softly. "They may make it again. Can it hurt to go look?"

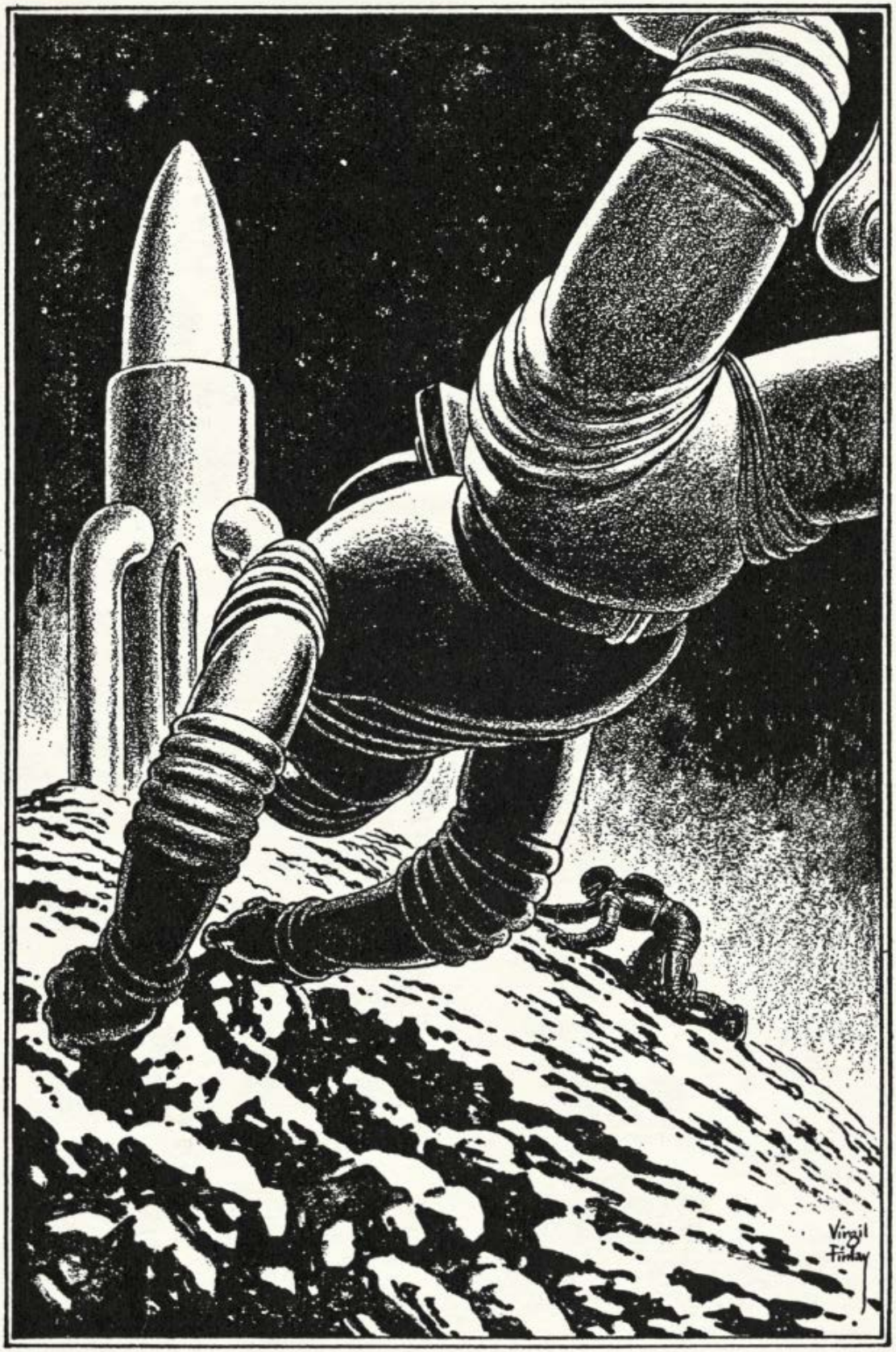
By that time, of course, Sven Bjornsen knew what they were talking about. He closed his eyes.

THE two ancient "space taxis" stood stark in the harsh sunlight, both anchored securely to the surface of little Phobos. The satellite itself was less than ten miles in diameter and had a surface gravity on the order of one ten thousandth of a Standard Gee or less—which meant that landing the *Jove 7* presented only the problem of anchoring it to the surface.

Sven Bjornsen stayed in the tugship while Chandra and Arkwright put on spacesuits and climbed across the rocky, irregular surface of the airless little moon toward the spot where the first of the primitive spaceboats were anchored to the surface. The other was a hundred meters or so away.

"Climbed" is the proper word. A man cannot walk—in the Earthly sense of the word—across the surface of a body with a gee pull of ten to the minus fourth SG. If he doesn't hold on tightly, just as though he were climbing the side of a mountain, the shove of one leg is sufficient to push him far enough from the surface that he will be hours in coming back down. Both Chandra and Arkwright were connected by a safety line to the tugship.

From the landing rings to the peak, the spaceboat stood ninety-five feet above the surface of Phobos, held down by four ca-


Virgil
Finlay

bles that were attached to the rock by means of heavy pitons driven deep into the stony surface. The two men stood upright near the base of the ship and looked upwards.

The spacecraft stood just as it had for three-quarters of a century and more. There was no air inside her; her airlock stood partly open. A few yards away, bolted to the surface rock, was a metal plate, put there by a later expedition. Neither man went over to look at it; they knew what it said, as did every schoolboy.

IN PERPETUAL MEMORY
OF
James Thornton Brown
and
Alec Dupres Fornier
who gave their lives
that their crewmates might live

Below that was the date and the identification of the Second Martian Expedition.

Chandra was the first to speak. "You know, Ark, I just remembered something that makes me feel very foolish."

"Congratulations. What is it?"

"We haven't got any way to fuel this damned thing, even if it is in perfect working order."

Arkwright swiveled his head in his fishbowl helmet and looked at the Indian. "You spent an hour or more telling us that all the fuel—both oxidizing and reducing agents—had been left on board when the ships were left. I remind you of the obvious." There was more than a trace of sarcasm in his voice.

Bjornsen's voice came over the 'phones. "Yeah." The same sarcasm was in his voice. "As Great Official History Expert, you are falling down on your job, Chan."

"I blush," said Chandra without doing so. "But I just now remembered what these museum pieces used for fuel. Red fuming nitric acid and hydrazine. It's a hypergolic combination. Doesn't need anything to fire it. As soon as the two components mix in the engine, they catch fire spontaneously."

"And what does that have to do with the price of incense on the Upper Ganges?" Arkwright asked.

When he spoke, Chandra's voice actually sounded a little embarrassed.

"Well, you remember there was a nitric acid leak aboard both these ships? That's why they were left behind. It's one of those historical facts that everyone remembers wrong—you know, like the notion that Henry VIII started the Church of England. Everybody assumes that the acid fumes came from a hull leak. But that isn't so. I remember reading that these ships kept their interior pressure higher than that of the atmospheric pressure of Mars' surface. Any

leak would have been *out*, not *in*. The leaks actually came from the oxidizer tank."

After a short silence, Arkwright said: "Oh, great. Well, we might as well take a look anyway."

CLIMBING the sixty-odd feet up the side of the old spaceboat was no more difficult than moving over the surface of the tiny Martian satellite itself; it was a matter of moving mass, not shifting weight. Even if a man fell from the top of the spaceboat, he wouldn't hurt himself, since his velocity when he hit would be on the order of nine hundred feet per hour. Timewise, however, it would be somewhat inconvenient—it would take him six and a half hours to fall.

Arkwright gripped the edge of the airlock with one hand and pushed in on the partly open door with the other. It moved in easily. Chandra followed him in. He waited in the airlock itself while Arkwright went on inside.

Both doors of the airlock had been left open; the interior of the ancient spaceboat had been exposed to the hard vacuum of space for nearly eighty years.

There was a prolonged silence while Arkwright played his flashlight beam around the interior of the control room—actually the only chamber in the ship. The whole set-up—controls, instruments, radar screens, and so on—was oriented around the three acceleration couches.

"How does it look to you?" Chandra said after awhile.

"Looks okay from here," Arkwright said. "But that doesn't mean much. Have to look inside—check the wiring and so on." But there had been something in Chandra's voice that made him look up and ask: "Why?"

"Nothing, I guess. I just got a sudden feeling of futility, that's all." He waved a hand in a gesture that took in the whole of the ancient hulk around him. "It seemed like a good idea at first, but . . ." He let his voice trail off.

Bjornsen's voice came over the phones. "What's the matter? Is the place a wreck or something?"

"No. It looks as new as it did the day the Aerospace Division of the Ford Motor Company built it." He paused. "But I don't know what half these instruments are for!"

BRIGADIER General Edwin E. Challenger, USAF Ret., was a hundred and four years old. He didn't look it. Modern geriatrics, a genetic inheritance from long-lived parents and grandparents, a sensible diet and physical regimen, and the fact that he had lived for forty years under the one-sixth Gee of

Luna had all combined to keep him in excellent physical condition. His hair was pure white and was thinning a little, and his tanned skin was covered with a network of fine wrinkles, but he didn't look much older than he had forty years before when he had retired and come to the Moon to spend the remainder of his life in comfort. His eyes and his mind were as clear as they had been when he was thirty.

He was quietly relaxing with an old detective novel and a tall glass of bourbon-and-branch when the phone chimed. He carefully put a bookmark between the pages of *The D. A. Cops A Plea* and put it on the table beside his lounging chair before answering the phone.

He listened calmly to what the man at Luna Station had to say, letting him finish without interruption. Then he said: "Those guys are out of their minds! I'll be right over!"

Before the other man could say anything, General Challenger cut off the phone.

Chief of Communications was waiting for the General when he came into the Communications Center fifteen minutes later.

"I'm terribly sorry about this, General," he said before Challenger had a chance to speak. "There was no need for Schlesser to have disturbed you. I realize that this must be a shock to you, and I want you to realize that such a thing wouldn't be allowed except under the most dire emergency, and—"

"What the hell are you talking about?" Challenger snapped waspishly.

"Why, the—er—desecration of The Monument. I—er—realize that—"

"I don't think you realize anything, Venner. What 'desecration' are you talking about?"

"Why, I thought Schlesser told you," the Chief of Communications said, looking blank. "The men on the *Mars-12-X* are—"

"—Are stranded and in danger of dying. I dig, man."

"You what?" Venner looked even blanker.

"I understand, Venner; I understand." There were times when General Challenger's slang was so old-fashioned it was incomprehensible. "You've got three men out there who want to use the Phobos spaceboats to rescue the *Mars-12-X* crew. I don't call that desecration, and neither would Brown or Fornier. I just wish they were here to do the job instead of these kids. What the hell do they know about rockets? Damn little, I'll bet."

"You'd win," said Venner. A man-carrying space rocket had not been built for nearly sixty years. The gravito-inertial engine had rendered the rocket obsolete just as the airplane had

done to the gas-filled dirigible.

"Well, at least they had sense enough to radio back for instructions instead of trying to figure out things for themselves." It wasn't a fair remark, and Challenger knew it. To try to use an unfamiliar machine without asking for instructions would be stupid, and stupid spacemen are dead spaceman.

"What do they figure on using for fuel?" the General asked. He knew the three spacemen must have something; otherwise they wouldn't have bothered Luna Station at all.

"Hydrazine and nitric acid—red fuming nitric acid."

"Good Lord man, I *know* that. What I don't know is where the hell they're going to get it."

"The hydrazine is easy," Venner said. "They—the *Jove 7*, that is—were pulling in half a million tons of the stuff from the Jovian atmosphere mines. They're going to rendezvous with the carrier sphere, siphon off what they need, and fuel the spaceboats with it."

"And the RFNA?" Challenger asked.

"Arkwright says that the tanks of both spaceboats are better than half full of the oxidizing agent."

General Challenger looked surprised for an instant, then looked thoughtful. "Can we still get them on the beam?" he asked.

"Yes, General. Er—we'll certainly appreciate any help you can give."

If you want to make a man feel old, Challenger thought, *all you have to do is remind him that he's the only man left alive who has ever piloted a rocket-driven spaceship.*

He could remember when the last veteran of World War II had died and how it had given him the feeling that at last a bit of living history had been relegated to the history books, where it belonged.

But even a bit of walking history can sometimes be useful, he decided.

ARKWRIGHT, Chandra, and Bjornsen felt a touch of awe when they heard the old man's voice come over the speaker. They couldn't have been much more surprised by the voice of Abraham Lincoln or Sir Winston Churchill.

"What's this about the RFNA tanks being half full?" the old man asked. "Have you checked anything besides the instruments?"

Chandra swallowed. "Yes, sir. We tapped both tanks for a sample. It's red fuming nitric acid, all right—as full strength as it was the day the tanks were filled."

There was the usual delay while the tight beam took its

time in traveling over the millions of miles and a return answer came. But spacemen were used to such delays.

"Then I suggest you pressurize the hulls," said Challenger, "and find out what was leaking. Both of those ships were full of N_2O_4 when we reached Phobos. That's why we left 'em there and let out the air. Anyway, check for the leaks. If you find any, fix 'em. If you can't find 'em, keep about twenty pounds per square inch pressure inside the hull; Martian atmosphere can't leak in past that.

"Now: I'm going to warn you men that you will be risking your lives if you try to take those two spaceboats to the surface of Mars and return. Controlling a rocket isn't like controlling a gravito-inertial engine. Instead of four men dying on Mars, there may be five or six.

"Knowing that, do you still want to try it?"

He paused, waiting for their answer. When it came, he replied:

"I thought as much. That answer, gentlemen, was in the best traditions of the Space Service. Now, your trouble is going to be in landing. Also, you'll have to refuel on Mars. There isn't enough RFNA in those tanks to get you back up. Fortunately, the place where you'll be landing, on the Xanthus, has plenty of the stuff lying around in pools. There are pumps, compressors, and filters aboard for the purpose. But be sure your hydrazine tanks are full.

"The first thing to do is to go over the whole ship, so you'll be familiar with it. Now, begin at the . . ."

He spoke for an hour while the three men made notes. Then they asked questions.

Then Arkwright and Chandra began their inspection of the two ancient ships while Bjornsen blasted off toward the cargo sphere of hydrazine that was orbiting sunwards.

By the time he returned, Arkwright and Chandra were as familiar with the two spaceboats as they would ever be this side of actual use.

Twenty p.s.i. of pressure inside the hull showed no leaks. The pressure remained constant. If there were any leaks, they were so minor that they could not possibly cause any trouble.

When the fuel tanks of both spaceboats were loaded with hydrazine, and the instrument check had been made. Arkwright and Chandra matched coins to see who would take the first boat down.

Arkwright lost.

Chandra climbed aboard the first of the two spaceboats and cast free the anchors that had held it in position for eighty years.

There was no need to waste any more of the RFNA and hydrazine than necessary. The *Jove 7* was a tugship, specially built for hauling jobs. Pulling the relatively small Mark I spaceboat into an orbit a hundred miles from the Martian surface was a simple, easy job.

Using the computer on the *Jove 7* to get a precise orbit that would land the spaceboat as near as possible to the *Mars-12-X*, Arkwright relayed his information to Chandra. The spaceboat was in a tight orbit; the *Jove 7* moved a quarter of a mile away from it.

Then Arkwright spoke slowly and deliberately into the microphone.

"On the tick, Chan. You have six minutes."

Five minutes later: "You have one minute."

Then: "Seconds. Ten. Nine. Eight. . . ."

The final countdown had begun.

At "Zero", Chandra fired his rockets. The red fuming nitric acid sprayed into each rocket engine from one nozzle, the hydrazine from another. Instantly, they reacted. Blazing white tongues of power lanced from acid sprayed into each rocket engine, braking the orbiting ship. She began to drop toward the atmosphere below.

GENERAL Challenger sat in an easy chair in the Communications Central. He was relaxed, and his eyes were closed. No one else in the room knew whether he was dozing or not, but all the technicians walked and talked softly on the assumption that he was.

The General was contented with that. He wasn't dozing; he was thinking. And he was perfectly happy with the quiet that allowed him to do so.

The first boat was down safely. Chandra had come in a shade too hard, and the landing had given him a bone-rattling jar, but nothing had been damaged.

Those old Fords were built to take punishment, General Challenger thought. *If the second lands as well as the first, the rescue might come off in spite of everything.*

He had to admit himself that he hadn't really expected the thing to get this far without accident. It wasn't that these men were untrained; quite the contrary. They knew space, and they knew the engines and the instruments and the devices that they had to use to stay alive in that deadly environment. But the machines they used were so far advanced that Challenger hadn't thought the men would be able to make the adjustment to such old-fashioned devices so quickly. It was as though an expert rifle-

man had suddenly picked up a hundred yards.

No; wait. That was a bad analogy, he realized. A gravito-inertial engine is a different form of propulsion, but the effects are similar to those of a rocket.

Keep the machine approximately the same, but change the mode of propulsion. An expert rifleman ought to become a pretty fine crossbowman with very little practice.

Hell, Challenger thought, *I was trained on turbojets and ramjets, but I learned to fly an old World War One S.P.A.D. without much trouble. And it was damned near as old then as these spaceboats are now.*

Well, not really, of course. The original fabric had been replaced, and parts of the strutsand wiring had been rebuilt, and the engine had been completely overhauled. But if these spaceboats had been sitting on the surface of a planet like Earth or Mars, they would have needed extensive repairs, too. Lindbergh's plane, *The Spirit of St. Louis,* was still in excellent condition in the Smithsonian Institute.

Sure. Take care of a piece of machinery, and it will stay in good condition.

But it will damned well not repair itself just sitting there!

A voice was coming over the tight beam from the *Jove 7.* Bjornsen was giving Arkwright the countdown for the landing of the second spaceboat.

". . . Three. Two. One. *Zero!*"

ARKWRIGHT felt rather than heard the drumming roar of the rockets as he rode the spaceboat down toward the Xanthus on a fountain of flame.

Lord! he thought. *How did they stand the vibration? It'd drive me nuts! And these acceleration couches aren't any great shakes, either. I'll be black and blue from the lumps.*

But at the same time, there was a feeling of exhilaration, the kind of feeling he had had when he was a kid, when his dad had bought him a suit of Genuine Fiberglas Medieval Armor with Saf-T Sword—and a pony to top it off! He had slain innumerable dragons, uncountable giants, and vast hordes of villainous Saracens, had Sir Sammy Arkwright, and rescued bevies of Fair Damosels.

He had helped other spacemen out of tight spots before, and he had saved more than one man's life by quick and daring action—just as his own life had been twice saved by others.

But he had never done it by riding a roaring rocket down on her jets! He kept his eyes on his instruments and his hands on the unfamiliar controls.

Velocity? Dropping steadily. Check.

Declaration? Constant. Check.

Distance to surface? Check.

Angular velocity—Wind velocity with relation to ship and ground — Hydrazine flow — RFNA flow—All Check.

The hull temperature was rising, but it was still well within the safety limits.

Down — down — down — falling, not like a plummeting stone, but inversely to that, slowing down as he dropped rather than speeding up.

The tricky part was in turning the axis of the ship so that the rockets were pointing straight down as soon as his ground velocity had dropped to zero.

Slower and slower.

In the TV screen, he could see the Xanthus moving by through a thin red-brown haze of dinitrogen trioxide. Nothing. Empty, barren wasteland, jutting rocks wind-eroded by the thin acid wind, fine sand that drifted into fantastic dune formations. And, here and there, an "oasis" of dampness—a dampness that was caused by rivulets of liquid that drained down from the low mountains to make pools of, not water, but HNO_3 and HNO_2—nitric and nitrous acids. Under the low pressure of the Martian atmosphere, they boiled off in the daytime and never formed large lakes. Then the pools would reform at night.

Then the wide-angle lens of the exterior TV camera (And what an ancient relic *that* was!) picked up two objects.

The *Mars-12-X* and Chandra's spaceboat.

They were perhaps a hundred yards apart. It looked as though he were going to overshoot them by half a mile or so.

He applied more power, and the bellowing rockets increased their din in the thin air.

Arkwright's eyes darted rapidly over his instruments, back to the screen, and back to the instruments again, while his sensitive fingers manipulated the rocket controls.

The spaceboat slowed, tilted, and eased itself to the surface on a slowly diminishing shaft of roaring fire.

Arkwright's antique spaceboat was only a hundred and fifty yards from Chandra's when it dropped to the yielding sand on its landing ring.

In the sudden silence, Arkwright couldn't even think of anything to say. He switched on the outside antenna.

Then Chandra's voice came into his earphones. "You okay, Ark?"

"I'm fine. Never felt better."

"I know what you mean," Chandra said. "After this, I could go to sleep on a roller-coaster. Here come the boys."

Arkwright looked at his TV

screen and switched cameras. Four men were coming out of the *Mars-12-X*.

"—all right? Are you okay?" came a chorus of tinny voices.

"Sure," Arkwright said. "You guys ready to get the hell out of this overgrown test tube?"

"Any time you are," said one voice. "We've shut off everything in our ship and we'll seal it before we leave. We have our equipment—what's left of it—sealed in Teflon bags. It won't dissolve any more now; not in a helium atmosphere."

"Okay. All we have to do now is pump some of the spare acid that's floating around here into our oxidizer tanks, and we'll be all set."

GENERAL Challenger had been tapping his fingers thoughtfully on the arm of his chair. Now he looked up at Venner. "What are they using for bacterial decontamination?"

"The men on the *Mars-12-X*? Hard ultraviolet and concentrated sulfuric acid spray. They douse the outside of their suits carefully in the airlock before entering the ship proper."

"Mmmmm. Maybe they don't infect the human body," Challenger said thoughtfully. "Vacuum kills 'em, that's for sure. On the other hand, maybe I'm nuts."

Venner looked puzzled. "I beg your pardon?"

"Just thinking aloud," said Challenger. "Let me talk to Bjornsen."

Between long pauses, the conversation went this way:

"Bjornsen, are they fueled yet?"

"Not yet, sir. Twenty, maybe twenty-five minutes yet."

"All right. While they're waiting, I want them to get some soil samples. They probably already have some, but I want fresh ones. And some samples of the ground liquid—the nitric acid mixture. Before and after it goes through the pumps and purifiers. I want 'em sealed tight, hermetically. Also tell 'em to get some samples of the air inside the *Mars-12-X*."

"Do you suspect there's something in the air or liquid that we haven't suspected yet?" Bjornsen asked. There was an odd note in his voice.

"Yes, I do. Why?"

"Because the scientific boys down there think so too. Some of the plastic fittings in their ship have corroded—and nitric acid couldn't do that. Not even RFNA could corrode those plastics. There's something in there that dissolves epoxys—or at least etched the surface. Fluorine compounds, maybe?"

"I don't know. But get those samples. Oh, yes. One more thing. Make sure that every man jack of 'em gets out of their spaceboats and stands around in

that Phobosian vacuum for at least half an hour before you let them inside your own ship."

"Right, sir. That ought to evaporate anything away."

"It should," General Challenger agreed. "But use your own decon chamber, too. Make sure they're washed off completely. Oh, and make sure of one other thing. Make sure you leave those spaceboats just like you found 'em on Phobos—evacuated, doors open and everything. I'm not just being sentimental, either, though that's part of it."

"All right, sir. We'll do just as you say."

THE blastoff of the two ancient spaceboats was much simpler than the landing had been. There was not as much need for accuracy either in position or velocity. The *Jove-7* had only to latch on to them and use its own power to move them back to Phobos one at a time.

The big adventure was over. Back to routine. Nothing had happened that hadn't been expected. Nobody was killed, nobody hurt.

The *Jove 7* picked up her cargo bubble again and computed a new orbit to take her to Luna. She was a little crowded with seven men aboard, but, aside from a slight discomfort, that was bearable.

Arkwright, Bjornsen, and Chandra were allowed a week's leave before they began their return trip to the Jovian atmosphere mining operation. They spent part of it on Luna and part of it on Earth. Newsmen played up the rescue story for a day or two, but nobody became a celebrity. The whole thing had blown over and become dead, stale news by the time the three men returned to Luna to take the *Jove 2* out again.

But there was one more thing before they left Luna for Jupiter.

General Challenger asked to see them.

The old man had finished *The D.A. Cops A Plea* and had begun *The Case of the Guilty Client*, by the same author, when the three men presented themselves at his apartment.

"Come in, gentlemen, come in," Challenger said. "Sit down. Help yourselves to the booze. I wanted to do two things: Congratulate you on your excellent performance and tell you about some rather curious results of your little side jaunt."

The three men mixed drinks and waited expectantly. In the presence of the Grand Old Man, they hardly felt like talking.

"We have discovered," General Challenger said carefully, "that neither the spaceboats, eighty years ago, nor the *Mars-12-X* sprang any leaks."

Arkwright said, "But—" and stopped. The other two said nothing.

"We found 'em this time," the General went on. "We could have found 'em eighty years ago if we'd known what we were looking for. Bacteria, gentlemen. Bacteria. Or, rather, a microscopic life-form that's remotely akin to bacteria. They thrive on hard ultraviolet and concentrated sulfuric acid doesn't faze 'em. Any hydrocarbon compound, any plastic, will feed 'em for a while. They need minerals, of course, but not too terribly much.

"All three of those ships were infected with them. As long as they have light for energy—especially UV, but visible light will do—they can get along fine. And in an atmosphere of nitrogen and oxygen, they're like a pack of wolves in a sheepcote. They're nitrogen fixers with a vengeance. They were converting the atmosphere of the ships into N_2O_5 and other oxides of nitrogen. If they have a little water vapor to work with, they can turn out nitric acid nicely, thank you.

"Fortunately, hard vacuum kills them. That's why the spaceboats were decontaminated. That's why *we* were decontaminated eighty years ago, when we left the spaceboats behind and went across the surface of Phobos to our mother ship, just as you did."

CHANDRA found his voice. "How come none of the other expeditions found them, sir?"

"They might have, but they didn't know what to look for. They live off of the larger plants, evidently—that is, off of their dead remains. The ones in the Xanthus Desert are in spore form, blown there by the wind. They don't break out of the spores until the conditions are right—until there's food around. If there *is* food around, they take a more mobile form, and in that form sulfuric acid will kill them. None of the other expeditions landed on the Xanthus."

Arkwright suddenly said: "*Good Lord!*"

His crewmates stared at him, and the General said, "What's the matter?"

"Can you imagine what would happen if those damn things got loose on Earth?" There was more than a touch of horror in Arkwright's voice. "It'd end up like Mars—an atmosphere of N_2O_5 and seas of nitric acid! And there'd be no way to stop it!"

Chandra and Bjornsen looked stunned as the notion hit them.

But General Challenger shook his head. "Not a chance. That's one of the reasons that none of the cultures of the other expeditions showed any signs of life. They killed the organisms in trying to culture them."

"With what?"

"Water. Liquid water. Plain, common, ordinary H_2O. They can't handle it, except in vapor form, and then only if the percentage is about one one hundredth of that on Earth. That's why it never bothered a human being. As soon as one of the organisms touches your skin, the slight dampness kills it. Even in one of the infected spaceships, they could only live and propagate in the driest spots—inside the instrument panels, for instance, which are dehumidified to prevent excess electrical leakage, and where insulation was plentiful for food. They have to have *some* water, of course, but the pure stuff is deadly. It's like the hydrochloric acid that every normal human being has in his stomach— a little of the dilute stuff is necessary, but pure HCl will kill you."

"I just thought of something else," said Bjornsen with an odd calm. "We are going to be out of jobs."

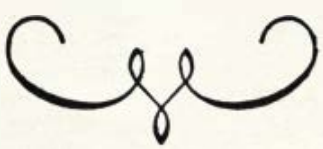
"In a way, yes," General Challenger said thoughtfully. "But not permanently. Granted, special cultures of this bacteria in sealed chambers can be used to fix Earth's nitrogen. Earth won't need to import fixed nitrogen anymore. But what about the Asteroid Belt? They're building factories out there now, and they'll be building more in the years to come. There won't be any free oxygen out there. They'll have to get it from the stony asteroids. The big steel companies will still need nitrogen—so will the synthetics manufacturers.

"No, gentlemen, you aren't out of jobs. You just won't have the long haul to Earth any more. I predict that the Jovian atmosphere mines will still be in operation, on an even bigger scale, when you kids are as old as I am."

"Well," said Arkwright, "I hope that I'm in as good a shape as you are when that time comes, sir."

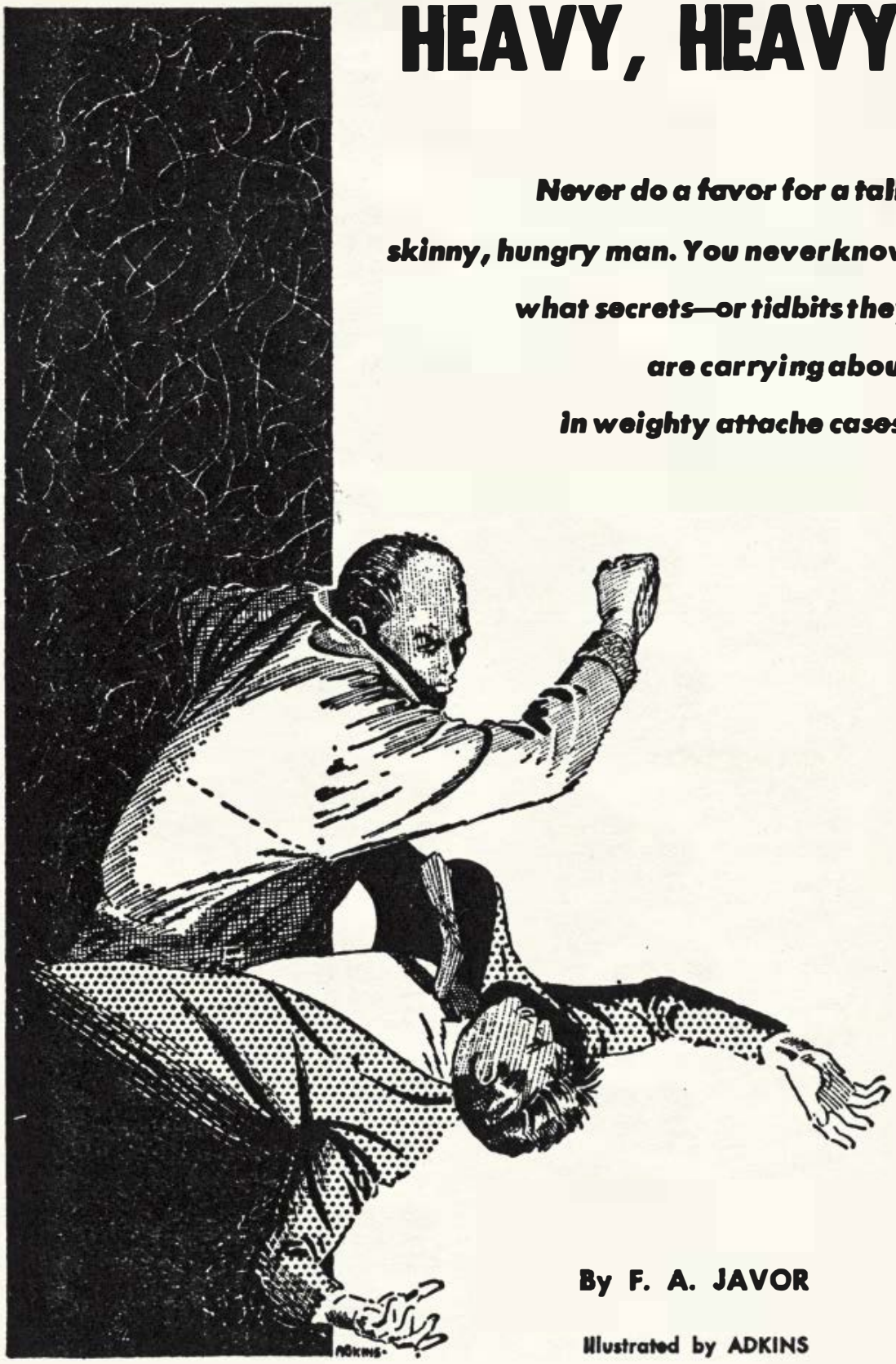
General Challenger raised his eyebrows. "I hope *I* am, too. I have no intention of passing on while all this excitement is going on around me." He smiled. "I am very fond of this material universe. I like to watch it evolve as it moves through time. And since I can't take it with me, I ain't going."

THE END



HEAVY, HEAVY

Never do a favor for a tall, skinny, hungry man. You never know what secrets—or tidbits they are carrying about in weighty attache cases.



By F. A. JAVOR

Illustrated by ADKINS

I'M six feet four, weigh a flabby two hundred and have a souvenir of the Second Peace Action on the top of my balding head in the shape of a scar that itches when it figures I'm about to be sucked into something that, if I'm lucky, I'll live to regret.

I wish I'd paid my scar more attention when, yesterday, Keely walked up to me, put his bony hand on the padded shoulder of my slightly out-of-date travel-tunic and, in that odd voice of his, invited me up to his cubicle for a friendly game to help us both while away the four days stopover time we had here on *Poldrogi* before the starship connection for Earthside made planetfall.

I shouldn't have needed my scar to tell me something smelled. After all, men who are as loaded as G. Warren Keely was reputed to be, just didn't walk up to an ex-SpaceNav Photo Mate and invite him anywhere, much less to an intimate gaming venture of theirs.

But now all I could do was to just sit here in the sound-conditioned quiet of Keely's room, clutching my hungry straight against the travel-worn front of my tunic and hope that Keely, across the table from me, would not see my eyeballs popping from the strain and know that I hadn't filled it.

But G. Warren Keely wasn't looking at me. His eyes in that bony face of his seemed to be staring unseeingly at his cards and I could see the tip of his tongue flicking in and out between his thin lips. He looked tense enough to twang.

It didn't mean a thing. Keely's skinny body looked as tight-drawn as the E string on a cheap guitar no matter if he was holding all the aces or the well known doodle-y. And I had but two chips of my last pile left in front of me and a hard knot in the pit of my stomach to remind me of that. Small as this pot was, I had a lot more riding on it than just the chips and credit-discs I'd put into it.

I licked my lips and sat, feeling the cold sweat trickling down my sides under my shirt, waiting for Keely to make up his mind.

To my left, Hale, the dealer on this hand, a stocky man with the star-and-grapple device of my own branch of the Service, SpaceNav, glowing green and delicately shaded on the back of his hand as only the Chin-Worlds can tattoo, cleared his throat.

IN front of Keely a chip slipped from its balance on top of one of his piles and struck the table top with a tiny clatter. The sound seemed to make up his mind. I saw his eyes deep in their sockets measuring my last two chips like he was down to his last half mil-

tion and wondering where his next was coming from. And then he picked up two of his own chips and dropped them onto the small pile in the center of the table.

"I'll tap you," he said, his voice tight, sounding like that of a heavily burdened fat man and not at all like what you would expect to hear coming from a dried-up looking stilt-walker like him.

I knew Keely was talking to me because Hale, and Morgan, the player on my right, had dropped out before I'd drawn the one card I hoped would fill the empty belly of my straight and missed it.

But Hale, dealing, had shoved Keely's two chips back at him with his tattooed hand. "If you have a pat hand, say so," he snapped. "Else don't be so hungry for Pike's blood that you have to squeeze him before you draw."

But Hale didn't sound annoyed. Why should he be, with what had been my chips piled in front of him almost as high as in front of Keely after the way Keely's raising into him, after I'd committed myself to a pot had whipsawed me.

Keely smiled. A death's-head smile with his bleached teeth and tight-drawn skin. He put his cards, face down and fanned close in front of him, put the two chips on top of them and stood.

Inside, I groaned. Was he really all that superstitious, or was he throwing more mud in my eyes so that I'd think he was holding nothing?

Keely walked around his chair, lifting his half-boots carefully over the small, heavy-handled sample case he seemed to have picked up since our landing. He sat down, spat over his left shoulder. Then with a bony finger he pushed one card out of his fan, shoved the rest of them toward Hale.

"Four," he said, in his fat man's voice.

Hale and Morgan burst out laughing and I wished that I could have joined them. Keely had bet into me like a man with a powerhouse and now he was asking for what was practically a new hand.

But he had his cards now and again he threw in his two chips. "I tap you."

I took my last two chips in my hand and if it's true that a drowning man thinks fast enough to see his whole life flashing through his mind, then I might as well have been drowning.

Only I wasn't seeing my past, I was thinking of my future. My future. Keely had my cameras in hock, the cameras I'd hoped to open up the star-worlds with. Except that the star-worlds didn't much seem to care if a balding,

flabby ex-SpaceNav Photo Mate opened them up or not, so that I was already scraping before I even felt Keely's bony hand on my shoulder.

Now I was broke, even my Earthside passage-chit turned in to get the credits to sit in on this last game. If I lost, I'd be stranded on this transit-stop world called *Poldrogi* and my skin was crawling at the thought.

A transit-stop world is like any other place catering exclusively to people just passing through. There's lots of action and lots of credits flowing, but only between the natives and the transients. If you're a native, you've got your local bigwigs to look out for you. If you're a transient, you've got your money to do you the same service. But if you're just passing through and go broke? Well, who can blame the locals if they take it out on you for the slights, the insults, the downright brutalities they've put up with from transients who are perhaps less sensitive, but better brained than to get themselves stranded like me, Eli Pike.

I WEIGHED the two credits in my hand. Two credits. Flitterfare from here to the launchport . . . or one shot of Muscat. Two credits, my last.

I weighed them and looked at my cards. At the inside straight, still empty in the middle and the eight I'd drawn. But it did match up with my outside card to give me a pair of them. A pair of eights against a four card draw.

I weighed my credits and looked at my cards and waited for my scalp wound to give me some kind of a hint. An itch, a tingle, anything, but I guess after all the ignoring I'd been giving it lately it was sulking.

Nothing.

I sighed and dropped my two credits into the pot.

Keely grinned and laid down his cards face up. "I helped my hand a little on that draw," he said.

He didn't have to tell me. I could see his cards. Five of them, and all blue. He'd drawn four cards to fill out a flush.

Hale said it for me. "I see it, but I don't believe it." He dropped the deck he was still holding and glanced at me, looking uncomfortable. After all, Keely hadn't been exactly subtle about the way he was reaming me. "This kind of luck who can fight?"

I shoved back my chair and stood up. "That cleans me," I said and the knot in my stomach couldn't be so hard after all. From the way it was shaking, it must be as soft as jelly. "See you around," I said and headed for Keely's door. All I wanted from his room right now was out.

"Pike! Wait!" It was Keely's voice and it stopped me.

I turned. Morgan was rubbing the back of his head and Hale was on his feet, stretching. The game was obviously over.

Keely waved me to a seat with one bony hand and when the others had gone, took the time to order up his lunch on the vid-com before he turned to me. And I mean took his time. I'd seen him study over the menu on the starship coming here, pulling out his lower lip, rubbing heads with the wine steward, even calling up the chef, so that I didn't fidget as much as I might otherwise have. The way Keely ate, his bones should have been lost in fat and not pushing hard through his skin.

I shook my head. If I ate like that, I'd waddle," I said and I was surprised to hear my voice come out unsteady. Maybe listening to Keely ordering all that food, and me not knowing where my next was coming from, had got me more unsettled than I already was.

Keely shrugged. "We each of us has his idiosyncracy. Mine, I like to think, is at least endurable." Then he leaned back in his chair and kept looking at me out of those bony-socketed, beady eyes of his until I put my hands on the arms of my chair and started to push myself up.

Then he held up both his thin hands. "Don't be so impatient," he said. "I think you'll find what I have to say to you well worth waiting to hear."

I hesitated, then dropped back again. If his purpose was to draw me out fine and snip off the knots he was making it.

HE lifted his half-booted foot and with it shoved the small sample case I'd been watching him step over each time he circled his chair for luck out into the clear. From the way it scraped the floor it was heavy. "I'd like you to do me a favor," he said.

I eyed the case. Black, shiny composition. About a foot high, and the same in the other two dimentions. Sturdy handle on top. It could pass for the case of one of my camera sync motors. But I'd bet no motor ever weighed what this box looked to.

"Like what?" I said, and I had all I could do to keep from reaching up and scratching the scar on the top of my head.

Keely was great on not answering questions. Instead he reached inside his tunic and came out with a short, compact-looking cylinder and stood it on the table right out in front of me.

Bright yellow the paper wrapping was, a roll of the new double-eagle credit-coins. Fifty of them in that roll and I didn't

need to see the black figures printed on the side to know that at twenty Earthbucks each I was staring at, what was, for me, salvation.

Keely let me drool a long minute before he waved a hand at the roll. "Go ahead," he said. "Pick it up. See what it feels like."

I reached out, did as he said. The skinny devil with his fat man's voice knew the roll would have a nice heft to it, that I might not be able to put it down.

But then Keely didn't know about my scar. I faked scratching it by rubbing it with the palm of my hand. I rubbed hard, but I had to give in.

I put the heavy roll of credits back on the table. "No, thanks," I said and heaved myself out of Keely's chair and headed for his door.

"Fifty credits . . . ," his fat voice said, ". . . and your cameras."

It stopped me. The cameras I'd lost to Keely in yesterday's game, mine again . . . and enough credits to get me back Earthside and, if I watched it, a little left over.

So let my blasted scar itch. I turned back.

"You drive a hard bargain," I rasped. "Who do I kill?" and I wasn't really sure but that I wasn't half serious.

Keely laughed. "It's not that hard to take," he said and kicked at his black sample case. "Take this Earthside with you when you go. Give it back to me when you get there."

I looked at him.

"That's it," he said.

"What's in the box?" I said.

"You've got a license to transport communications equipment," he said, not exactly answering me again. "Put it among your cameras and nobody will look at it twice."

KEELY was right about my having the license. Since the hard lesson of the last Peace Action, cameras, recorders, transmitters, anything larger than the personal limited range receivers most people carried had to be specially licensed. And the licenses were hard to get, almost impossible, it was rumored, without a service record of some sort to prove one's dependability.

Keely knowing about my license was no surprise, all photographers had them, it might even be the reason he'd sought me out to begin with. But he could be wrong about his case not being noticed among my equipment, and I didn't need an itching scar to warn me about carrying pigs in pokes.

"Is it communications equipment?" I said.

He hesitated, then nodded. "Yes, of a sort."

I didn't believe him. I started for the door again. Being stranded on a transit-world might get me knifed up some dark alley, but it was only a maybe. If I lost my license to carry my cameras over Keely's box, then *that* would be a sure thing. What else did I know how to do to earn me eating credits?

"Forget it," I said over my shoulder at Keely, half expecting him to try to stop me again.

But he didn't. If he had, maybe I would have kept on going and gotten out of there. But he just snorted in a disgusted way, like he was mad at himself for being soft-headed enough to try to do someone a favor. "Suit yourself," he said, and folded his long bony fingers over the non-existent paunch of his stomach.

Swearing at my scar, I turned back. I swept Keely's roll of credits into my tunic pocket, grabbed hold of his sample case to take it with me before I changed my mind again . . . and almost pulled my arm out of its socket.

The case did not budge.

With both hands I gripped the handle, squatting to lift with my legs so that its weight would not pop my back. It weighed. I wouldn't care to estimate what it weighed, but it weighed, and, leaning over backward against the pull, I carried it from Keely's room, him opening the door for me and peering up and down the hall for some reason before he waved me on past him.

"You've got it now," he said and his voice wasn't tight, or fat-sounding. Just cold and the chill I felt I told myself came from the sweating his blasted case was making me do. "You've got it, don't lose it." And I heard him close and bolt his door behind me.

AFTER the brightness of Keely's room the hall was dim, and when I came to the cross-corridor with my eye-bulging burden and saw the two squat figures step out of it toward me, I took them at first to be Hale and Morgan, and half-wondered what they wanted.

But then I saw that the shorter of the two men had a kind of ape-like shuffle to the way he walked, and I knew then it was not the two men I'd been playing poker with the past two days.

There was no preamble. The taller man just stepped close to me. "Give me that," he snapped and reached for Keely's case.

Maybe I still had some of the chill of Keely's voice chasing itself up and down my spine, or maybe it was just a reflex action.

"Give me that," he said, and I did. As he and his ape-walking buddy reached their ham hands for the handle of Keely's case I swung it.

I swung it like an athlete swings his hammer, and Lord knows I've photographed enough of them to do it. But not that far. Just inches. Just far enough to give it a little arc when I let go the handle.

It arced. Like the proverbial ton of bricks it arced, and landed on the bigger ape's foot.

I heard the crunch of bones with a completely human feeling of satisfaction.

Big Ape yowled. He gripped his leg with both his hands and tried to heave his ruined foot out from under. He choked, gurgled and went down. He was out and a lucky thing for him it was. The human body can take just so much pain and then it cuts out. If his first yank hadn't knocked him out, the twisting of his trapped foot as he went down would have finished the job.

His ape-walking buddy goggled at the heap on the floor, then swung on me. "Why you . . . ," lifting both arms, hands outstretched, edges down like two huge meat cleavers rising up on either side of my head.

I'm no karate or judo or any such kind of expert. All the body combat training I ever had was the demonstration or two in SpaceNav boot camp that they marched me to and marched me away from while they were making up their minds whether to assign me to Cook and Baker's School or the Photo Lab on Pensa. As it turned out I went to neither. Someone slipped and I went to an operational photo unit right out of boot.

But how much science does it take to come up with a knee just as the other guy is closing in on you? Anyway, I did and I must have caught Ape-Walk where it hurts, because he turned green and grabbed himself. Which gave me the chance to come up under that craggy chin of his with my right hand in which, incidentally, I seemed to somehow be gripping the firm, hard roll of double-eagles I'd swept off Keely's desk and dropped into my tunic pocket.

Ape-Walk went down and I don't think it needed my boot at the side of his head to keep him there. But I was worked up and not thinking except maybe a fleeting thought about Heaven helping the expert in anything if he gets stupid enough to go up against a worked-up tyro.

I got even more worked up when I saw what was in Keely's box that I might have gotten myself killed over.

The heavy falling must have sprung its lock because as I stepped around Ape-Walk and squatted down to lift with my legs and not my back, the lid flew up with my first tug and I was staring down into its small inside.

Empty! Completely empty, except for two small fat coils wired together in the bottom that I recognized on sight even in the shaded hall light. I've used the gimmick often enough to anchor equipment under water or against a wind. Anti-gravity coils, jerry-rigged to reverse their polarity so that each one's field augmenting the other's made the case weigh like the backbreaker it did.

I reached down, ripped out the heavy jumper wire and the case was light in my hand as I stormed back to Keely's room.

"Keely," I shouted, pounding on his locked door, not much caring who heard the racket I was making. "Keely. Open up. It's Pike."

The door opened, suddenly, and I almost fell into the room.

I'D only been gone minutes, but it was long enough for Keely's food to have been brought up to him. At least I thought it was because he stood away from the door with a small kebab skewer in his fingers; on the end of it a tiny, brown, peanut-shaped carcass, and I didn't need the faintly sickening sweet smell nor the burning candle-warmer on the table behind him, to know Keely was roasting for himself the contraband grubs of the Ra-Pak beetle.

And from the glaze in Keely's eyes I think I would have won a bet that he hadn't removed their venom sacs.

Ra-Pak grub venom. The fat, stinking grubs, roasted, were disgusting enough, but gourmets have been known to work up a fancy for eating many an oddball thing, earth and clay in ancient Spain, for example. But the venom. That had an absinthe-like effect on the brain and moral fibre that made it an outlawed thing on any world that was not altogether depraved. Even here on *Poldrogi* I could think of no one who would touch the traffic in the worms.

That meant that Keely must have brought his supply with him, and if he could get Ra-Pak grubs through customs, then what did he need me for to move an empty box?

I shoved the sample case up to his face with one hand, reached for his tunic front with the other. "Two apes," I started to say, but he'd stepped back and, if there had been any blood in his face to drain away, I think it would have done so when he saw me and the open case.

His mouth worked soundlessly and then he was able to get out the words. "Already? They caught up with you already?"

And then the glaze cleared from his eyes and he was his tight-drawn, snide self again. "Throw that thing away," he

said, making a motion at the box I was holding under his thin nose. "I guess they're closer to me than I thought."

I dropped the case. Not on his foot, but on the floor. "They," I said. "Who're they? What did you suck me into? I've got a right to know."

Keely shrugged. "Rights," he said. "I made a play and I missed. You're fifty double-eagles ahead because of it. Keep them and forget it. Good bye."

But those two apes out in the hall would come looking for me when they came to and I knew exactly nothing about what was going on. "Listen," I said to Keely. "I'm not going until . . ."

"Move," Keely snapped, and suddenly pointing at me was the kebab skewer I'd surprised in his hand, the wormlike Ra-Pak grub still impaled on its point.

An eight inch skewer of steel, held daintily with a delicacy, no matter how repulsive, on its point is one thing. But settled firm in the hand and pointing at your throat, it suddenly becomes a very convincing stiletto.

"Move," Keely said. "I won't tell you again."

I moved. Out. And again the door was closed and bolted behind me.

I DID not go to see if the apes were still piled up on the hall floor, but went in the other direction instead. As far as the first cross-corridor.

I ducked into it, pulled my room key from my pocket, hung it by its ring on my finger in plain sight. If I heard someone coming I could start walking and obviously be a guest looking for his room. Meanwhile, I could stay where I was and keep an eye and an ear on Keely's room.

Sooner or later he would have to come out and if he didn't look to be staggering under any weight, then what I had to look for was still inside. Because it was beginning to dawn on me that Keely had selected me to carry his black box Earthside, not because he couldn't do it himself, secretly, but because my two hundred pounds of staggering flab couldn't be missed doing the same.

A decoy I'd been. A patsy. And now I was in it with Keely on one side of me and the apes or whoever it was wanted something weighty from Keely, on the other. And now that I'd tangled with both sides, I stood a good chance of getting clobbered by either or both. Still ignorant of what it was all about, but clobbered just the same.

The answer was in Keely's room, but first I had to get in.

His lunch came, but from the other direction so that I didn't need to use my "riving guest" dodge. The waiter rolled in his

cart and left it. I was too far away to hear Keely shoot home the bolt of his door behind him, but I was sure he had.

Having seen the almost obscene pleasure Keely took with his food, I expected a long wait, and he didn't disappoint me. My neck and my shoulders were stiff with all the waiting and I was leaning them on the wall and shifting, and beginning to think that I had Keely figured wrong, that he was inside getting himself way out on grub venom and I could be here the rest of the day and all of the night, when he finally came out and went down the hall to the downflit, his skinny legs moving like scissors.

Now, unbolted on the inside, his door could be unlocked from the hall side by anyone who had a master to this tier. And that meant the waiter who'd be coming back for his food cart.

I got myself ready for him by breaking open the roll of double-eagles and distributing them loose in my tunic pockets. When he opened the door and went in I was right on his heels, my hand in my side pocket.

"Keely?" I said to the room. "Keely? It's Pike. Where are you?"

The waiter turned on me, his eyes hostile. And then I saw the light come into them and knew he was hearing me jingling the double-eagles in my pocket with what I hoped would be taken for impatience. "Where is that guy," I added for effect.

The waiter was very polite. "I'm afraid Mr. Keely isn't here," he said. "I think I passed him in the hall a few minutes ago."

You didn't pass him anywhere, friend, I said to myself, he was long gone before you showed up. But I dropped into Keely's chair behind his card table and looked at my wrist-chrono. "Then he'd better be getting back soon," I said. "I don't plan on waiting long."

THE waiter started to say something, protest maybe about my staying alone in Keely's room, but I stopped him.

I stopped him by starting to take double-eagles from my various pockets where I'd stowed them and stacking them on the table in front of me.

I looked up at him. "Well," I said, "what are you waiting for?" I waved a hand at his cart and the empty dishes. "Clean up this mess and get out of here."

I held my breath and went on pulling credits from my pockets and stacking them and hoping that with all that hard loot piling up in front of me I would not only look respectable to the waiter, but also as if I had a right to be where I was.

I did. Because he mumbled "Yessir," scooped up his dishes

and was gone. I didn't tip him because A, double-eagles was all I had and to flip him one of those for just letting me wait in Keely's room was too much and would make him suspect me to be a phony, and B, or maybe A again, a double-eagle was, after all, a double-eagle.

The waiter had no sooner closed the door behind him than I was on my feet and rummaging in Keely's closet.

I didn't know what it was that I was looking for, but I was sure it would be small enough to fit into a one-foot-by-one-foot box and heavy. Too heavy for the bottom of a hotel-dresser drawer to support, and for the same reason not likely to be lifted onto a high closet shelf.

On the closet floor I looked, and on the closet floor I found it. A sturdy, metal-bound tache case, the only one of the bags stowed there with enough heft to it. I dragged it out of the closet darkness and into the light.

It was locked. I'd expected it to be. The locks, two, set deep in the plasti-leather. No prying them open.

Cutthecase.

I looked around for something sharp, a skewer perhaps, but there were none in the drawers I hastily pulled out.

A skewer! Food! With Keely's rates and his appetites, his room had a wine cooler and when I opened it I saw I was in luck. A tall bottle cooling.

I smashed it and took the broken neck to the side of the tache case. It cut, but only through the plasti-leather. Underneath it, the hardness of metal.

I sat back on my heels, puffing with my flab and my exertions, having it in mind to risk the reception committee maybe waiting for me in my room and to haul case and all there for a better go at the locks when I heard a fumbling at the door.

Escape!

I shoved the case across the floor to the window, flung open the sash, hefted the weight up onto the sill, lifted one leg over the edge after it.

Thirty-seven dizzy levels below was the nearest terrace and I balanced there, half in, half out, gripping the case teetering on the sill in my sweaty palms.

The door burst open and Keely shot into the room. He tried to slam it shut, but the two men were too close behind him, thrusting him back as they smashed in.

Ape-Walk and a tall, blonde man with a blaster. "Freeze," the blonde one said, and Keely froze.

I couldn't believe it, but was Keely sobbing quietly? And then I saw that his eyes were on the case teetering in my hands. Sweaty hands that were having trouble gripping it because it

kept trying to slip out of them. Staring and saying over and over, "No. Oh, no."

The blonde one with the blaster motioned at me with it. "Inside," he said, but I shook my head. "You want this case," I said. "I come in and you take it and blast me. I stay here maybe you blast me anyway, but the case goes down with me if you do."

There was a long silence between us and then the blonde one laughed. "Mexican standoff. What do you want? A cut?"

"No, an explanation."

The pale eyes wavered. "An explanation?"

"Sure," I said and I was sweating. "Keely here set me up for some kind of patsy. All I want is to know what he sucked me into."

The two men were looking at me and not at Keely. Out of the corner of my eye I saw a glint of light and the broken bottle neck I'd dropped by the closet door was somehow hurtling through the air and full at the tall man with the blaster.

In that instant I knew about Keely. About him and about a chip that fell of itself off the top of a pile, a skewer that settled itself in his hand, even about the tache case that seemed to want to free itself of my grasp on it. Keely could move things with his mind!

The hurtling bottle neck!

Without thinking, I yelled and the tall man dropped. The jagged glass missile missing his face and eyes by the scantest of margins, to go smashing against the wall.

Thinking or not, it turned out to be the smarest thing I'd done since I first saw Keely. But just now he looked to be flinging himself at me, bony arms outstretched, hands clawing.

I shoved myself into the room, pushing one way, the case flying the other. But Keely was past me and I thought out the window after the case.

He hung there straining. Straining until I heard the smashing sound from the terrace far below. Then he fell back into the room, sliding down until he sat on the floor under the window and this time there was no mistaking the fact that the sounds coming from behind the hands covering his face were sobs.

The tall man was picking himself up from the floor, his face white. "I owe you for that," he said, and put away his blaster.

He looked at Keely sobbing on the floor and spat. "The pig," he said. "Serves him right. He did it to himself."

LATER, back in my room, I was still shaking my head over what the blonde man had

told me of Keely and his strange talent . . . and the even stranger use to which, driven by his compulsion to eat, yet smothering in inexorably swelling fat, Keely had put it.

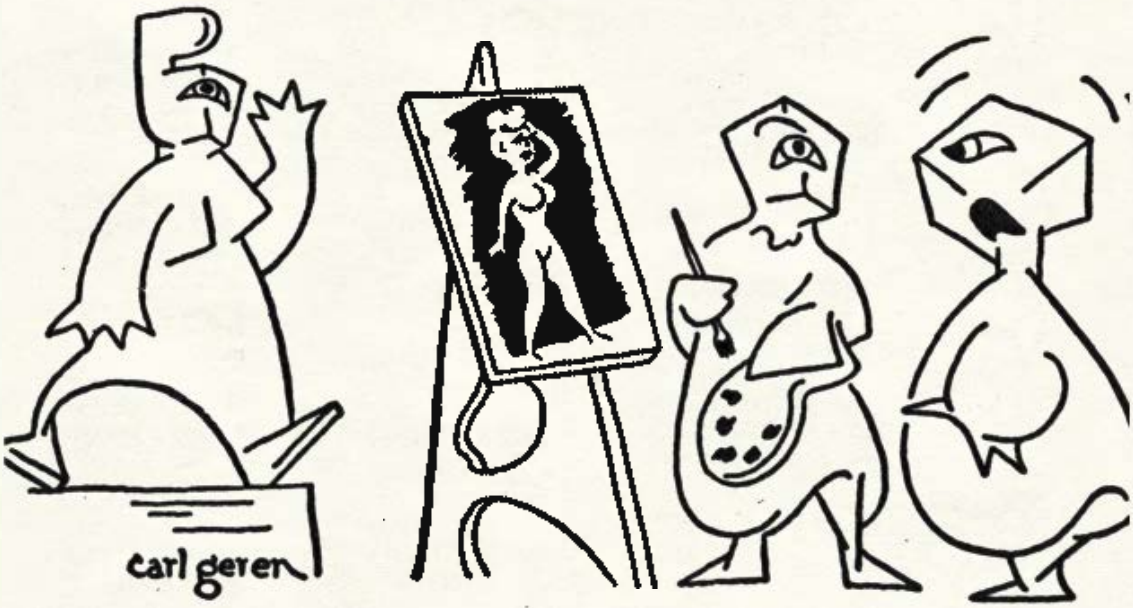
Imperfectly, because his control was erratic, incomplete, taking along bits of nerve and other tissue, and cutting down their bulk but not their weight by squeezing from them some of the space between their atoms, Keely had teleported to refri-jars he could carry in his double-locked case, the fat-bloated cells of his body.

And because a man does not grow obese by adding more cells to his body but by distending, with the by-products of his gluttony, those he already has, Keely could not bring himself to abandon these cells. And in the learning of this fact of Keely's mind, was born the blonde man's plan.

What better to hold for a rich man's ransom than bits of his own body? And if caught? All they'd taken were a few refri-jars of oddly heavy human fat. A laboratory curiosity, but of no intrinsic value.

A direct and imaginative plan except, of course, it hadn't worked out. I shook my head. Well, the kidnappers, if you could call them that, were gone and so was Keely, spirited out the back way by the jittery hotel people, strapped in a psycho-cocoon and still sobbing.

I rubbed my hand over my balding head. I had no cameras and no illusions about getting them from Keely when he got out of the psycho-home, if he ever did. But my scar didn't itch and, when I moved, the double-eagles sagging my tunic pockets made a light but thoroughly comforting jingle. THE END



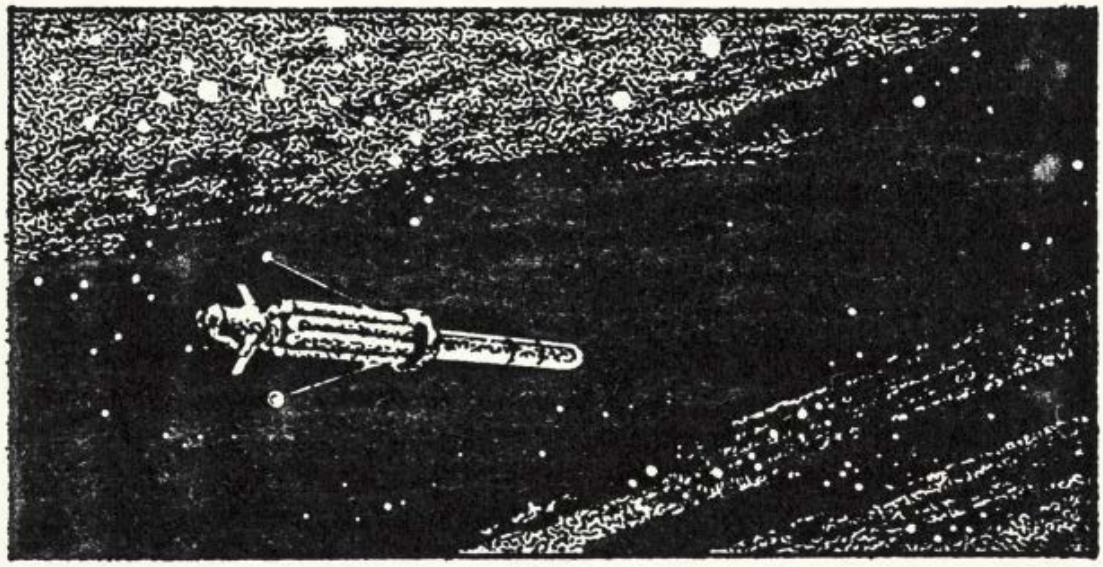
"That surrealist stuff bores me."

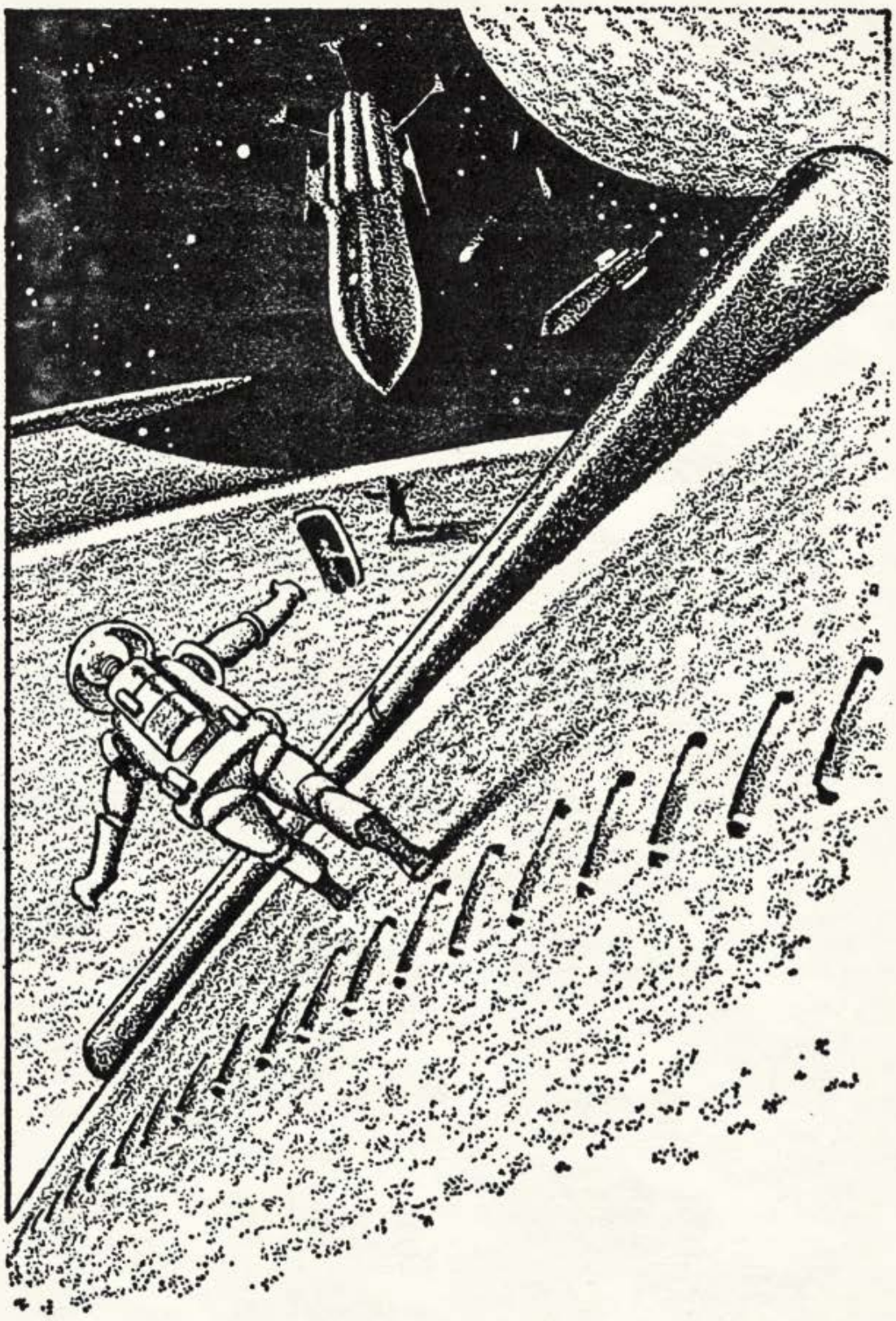
the Crime and the Glory of Commander Suzdal

By CORDWAINER SMITH

Do not read this story; turn the page quickly. The story may upset you. Anyhow, you probably know it already. It is a very disturbing story. Everyone knows it. The glory and the crime of Commander Suzdal have been told in a thousand different ways. Don't let yourself realize that the story really is the truth.

It isn't. Not at all. There's not a bit of truth to it. There is no such planet as Arachosia, no such people as klopts, no such world as Catland. These are all just imaginary, they didn't happen, forget about it, go away and read something else.





The Beginning

COMMANDER Suzdal was sent forth in a shell-ship to explore the outermost reaches of our galaxy. His ship was called a cruiser, but he was the only man in it. He was equipped with hypnotics and cubes to provide him the semblance of company, a large crowd of friendly people who could be convoked out of his own hallucinations.

The Instrumentality even offered him some choice in his imaginary companions, each of whom was embodied in a small ceramic cube containing the brain of a small animal but imprinted with the personality of an actual human being.

Suzdal, a short, stocky man with a jolly smile, was blunt about his needs:

"Give me two good security officers. I can manage the ship, but if I'm going into the unknown, I'll need help in meeting the strange problems which might show up."

The loading official smiled at him, "I never heard of a cruiser commander who *asked* for security officers. Most people regard them as an utter nuisance."

"That's all right," said Suzdal. "I don't."

"Don't you want some chess players?"

"I can play chess," said Suzdal, "all I want to, using the spare computers. All I have to do is set the power down and they start losing. On full power, they always beat me."

The official then gave Suzdal an odd look. He did not exactly leer, but his expression became both intimate and a little unpleasant. "What about other companions?" he asked, with a funny little edge to his voice.

"I've got books," said Suzdal, "a couple of thousand. I'm going to be gone only a couple of years Earth time."

"Local-subjective, it might be several thousand years," said the official, "though the time will wind back up again as you re-approach Earth. And I wasn't talking about books," he repeated, with the same funny, prying lilt to his voice.

Suzdal shook his head with momentary worry, ran his hand through his sandy hair. His blue eyes were forthright and he looked straightforwardly into the official's eyes. "What do you mean, then, if not books? Navigators? I've got them, not to mention the turtle-men. They're good company, if you just talk to them slowly enough and then give them plenty of time to answer. Don't forget, I've been out before. . . ."

The official spat out his offer: "Dancing girls. WOMEN. Concubines. Don't you want any of those? We could even cube your

own wife for you and print her mind on a cube for you. That way she could be with you every week that you were awake."

SUZDAL looked as though he would spit on the floor in sheer disgust. "Alice? You mean, you want me to travel around with a ghost of her? How would the real Alice feel when I came back? Don't tell me that you're going to put my wife on a mousebrain. You're just offering me delirium. I've got to keep my wits out there with space and time rolling in big waves around me. I'm going to be crazy enough, just as it is. Don't forget, I've been out there before. Getting back to a real Alice is going to be one of my biggest reality factors. It will help me to get home." At this point, Suzdal's own voice took on the note of intimate inquiry, as he added, "Don't tell me that a lot of cruiser commanders ask to go flying around with imaginary wives. That would be pretty nasty, in my opinion. Do many of them do it?"

"We're here to get you loaded on board ship, not to discuss what other officers do or do not do. Sometimes we think it good to have a female companion on the ship with the commander, even if she is imaginary. If you ever found anything among the stars which took on female form, you'd be mighty vulnerable to it."

"Females, among the stars? Bosh!" said Suzdal.

"Strange things have happened," said the official.

"Not that," said Suzdal. "Pain, craziness, distortion, panic without end, a craze for food—yes, those I can look for and face. They will be there. But females, no. There aren't any. I love my wife. I won't make females up out of my own mind. After all, I'll have the turtle-people aboard, and they will be bringing up their young. I'll have plenty of family life to watch and to take part in. I can even give Christmas parties for the young ones."

"What kind of parties are those?" asked the official.

"Just a funny little ancient ritual that I heard about from an Outer Pilot. You give all the young things presents, once every local-subjective year."

"It sounds nice," said the official, his voice growing tired and final. "You still refuse to have a cube-woman on board. You wouldn't have to activate her unless you really needed her."

"You haven't flown, yourself, have you?" asked Suzdal.

It was the official's turn to flush. "No," he said, flatly.

"Anything that's in that ship, I'm going to think about. I'm a cheerful sort of man, and very friendly. Let me just get along with my turtle-people. They're not lively, but they are consider-

ate and restful. Two thousand or more years, local-subjective, is a lot of time. Don't give me additional decisions to make. It's work enough, running the ship. Just leave me alone with my turtle-people. I've gotten along with them before."

"You, Suzdal, are the commander," said the loading official. "We'll do as you say."

"Fine," smiled Suzdal. "You may get a lot of queer types on this run, but I'm not one of them."

The two men smiled agreement at one another and the loading of the ship was completed.

THE ship itself was managed by turtle-men, who aged very slowly, so that while Suzdal coursed the outer rim of the galaxy and let the thousands of years—local count—go past while he slept in his frozen bed, the turtle-men rose generation by generation, trained their young to work the ship, taught the stories of the earth that they would never see again, and read the computers correctly, to awaken Suzdal only when there was a need for human intervention and for human intelligence. Suzdal awakened from time to time, did his work and then went back. He felt that he had been gone from earth only a few months.

Months indeed! He had been gone more than a subjective ten-thousand years, when he met the siren capsule.

It looked like an ordinary distress capsule. The kind of thing that was often shot through space to indicate some complication of the destiny of man among the stars. This capsule had apparently been flung across an immense distance, and from the capsule Suzdal got the story of Arachosia.

The story was false. The brains of a whole planet—the wild genius of a malevolent, unhappy race—had been dedicated to the problem of ensnaring and attracting a normal pilot from Old Earth. The story which the capsule sang conveyed the rich personality of a wonderful woman with a contralto voice. The story was true, in part. The appeals were real, in part. Suzdal listened to the story and it sank, like a wonderfully orchestrated piece of grand opera, right into the fibers of his brain. It would have been different if he had known the real story.

Everybody now knows the real story of Arachosia, the bitter terrible story of the planet which was a paradise, which turned into a hell. The story of how people got to be something different from people. The story of what happened way out there in the most dreadful place among the stars.

He would have fled if he knew

the real story. He couldn't understand what we now know:

Mankind could not meet the terrible people of Arachosia without the people of Arachosia following them home and bringing to mankind a grief greater than grief, a craziness worse than mere insanity, a plague surpassing all imaginable plagues. The Arachosians had become *un*-people, and yet, in their innnermost imprinting of their personalities, they remained people. They sang songs which exalted their own deformity and which praised themselves for what they had so horribly become, and yet, in their own songs, in their own ballads, the organ tones of the refrain rang out,

And I mourn Man!

They knew what they were and they hated themselves. Hating themselves they pursued mankind.

Perhaps they are still pursuing mankind.

THE Instrumentality has by now taken goed pains that the Arachosians will never find us again, has flung networks of deception out along the edge of the galaxy to make sure that those lost ruined people cannot find us. The Instrumentality knows and guards our world and all the other worlds of mankind against the deformity which has become Arachosia. We want nothing to do with Arachosia. Let them hunt for us. They won't find us.

How could Suzdal know that?

This was the first time someone had met the Arachosians, and he met them only with a message in which an elfin voice sang the elfin song of ruin, using perfectly clear words in the old common tongue to tell a story so sad, so abominable, that mankind has not forgotten it yet. In its essence the story was very simple. This is what Suzdal heard, and what people have learned ever since then.

The Arachosians were settlers. Settlers could go out by sail-ship, trailing behind them the pods. That was the first way.

Or they could go out by planoform ship, ships piloted by skillful men, who went into space-two and came out again and found man.

Or for very long distances indeed, they could go out in the new combination. Individual pods packed into an enormous shell-ship, a gigantic version of Suzdal's own ship. The sleepers frozen, the machines waking, the ship fired to and beyond the speed of light, flung below space, coming out at random and homing on a suitable target. It was a gamble, but brave men took it. If no target was found, their machines might course space forever, while the bodies, protected by freezing as they were, spoiled

bit by bit, and while the dim light of life went out in the individual frozen brains.

The shell-ships were the answers of mankind to an over-population, which neither the old planet Earth nor its daughter planets could quite respond to. The shell-ships took the bold, the reckless, the romantic, the willful, sometimes the criminals out among the stars. Mankind lost track of these ships, over and over again. The advance explorers, the organized Instrumentality, would stumble upon human beings, cities and cultures, high or low, tribes or families, where the shell-ships had gone on, far, far beyond the outermost limits of mankind, where the instruments of search had found an earth-like planet, and the shell-ship, like some great dying insect, had dropped to the planet, awakened its people, broken open, and destroyed itself with its delivery of newly re-born men and women, to settle a world.

Arachosia looked like a good world to the men and women who came to it. Beautiful beaches, with cliffs like endless rivieras rising above. Two bright big moons in the sky, a sun not too far away. The machines had pretested the atmosphere and sampled the water, had already scattered the forms of old earth life into the atmosphere and in the seas so that as the people awakened they heard the singing of earth birds and they knew that earth fish had already been adapted to the oceans and flung in, there to multiply. It seemed a good life, a rich life. Things went well.

Things went very, very well for the Arachosians.

This is the truth.

This was, thus far, the story told by the capsule.

But here they diverged.

THE capsule did not tell the dreadful, pitiable truth about Arachosia. It invented a set of plausible lies. The voice which came telepathically out of the capsule was that of a mature, warm happy female—some woman of early middle age with a superb speaking contralto.

Suzdal almost fancied that he talked to it, so real was the personality. How could he know that he was being beguiled, trapped?

It sounded right, *really* right.

"And then," said the voice, "the Arachosian sickness has been hitting us. Do not land. Stand off. Talk to us. Tell us about medicine. Our young die, without reason. Our farms are rich, and the wheat here is more golden than it was on earth, the plums more purple, the flowers whiter. Everything does well—except people.

"Our young die . . ." said the womanly voice, ending in a sob.

"Are there any symptoms?" thought Suzdal, and almost as though it had heard his question, the capsule went on.

"They die of nothing. Nothing which our medicine can test, nothing which our science can show. They die. Our population is dropping. People, do not forget us! Man, whoever you are, come quickly, come now, bring help! But for your own sake, do not land. Stand off-planet and view us through screens so that you can take word back to the Home of Man about the lost children of mankind among the strange and outermost stars!"

Strange, indeed!

The truth was far stranger, and very ugly indeed.

Suzdal was convinced of the truth of the message. He had been selected for the trip because he was good-natured, intelligent, and brave; this appeal touched all three of his qualities.

Later, much later, when he was arrested, Suzdal was asked, "Suzdal, you fool, why didn't you test the message? You've risked the safety of all the mankinds for a foolish appeal!"

"It wasn't foolish!" snapped Suzdal. "That distress capsule had a sad, wonderful womanly voice and the story checked out true."

"With whom?" said the investigator, flatly and dully.

Suzdal sounded weary and sad when he replied to the point. "It checked out with my books. With my knowledge." Reluctantly he added, "And with my own judgment. . . ."

"Was your judgment good?" said the investigator.

"No," said Suzdal, and let the single word hang on the air as though it might be the last word he would ever speak.

But it was Suzdal himself who broke the silence when he added, "Before I set course and went to sleep, I activated my security officers in cubes and had them check the story. They got the real story of Arachosia, all right. They cross-ciphered it out of patterns in the distress capsule and they told me the whole real story very quickly, just as I was waking up."

"And what did you do?"

"I did what I did. I did that for which I expect to be punished. The Arachosians were already walking around the outside of my hull by then. They had caught my ship. They had caught me. How was I to know that the wonderful, sad story was true only for the first twenty full years that the woman told about. And she wasn't even a woman. Just a klopt. Only the first twenty years. . . ."

THINGS had gone well for the Arachosians for the first twenty years. Then came disas-

ter, but it was not the tale told in the distress capsule.

They couldn't understand it. They didn't know why it had to happen to them. They didn't know why it waited twenty years, three months and four days. But their time came.

We think it must have been something in the radiation of their sun. Or perhaps a combination of that particular sun's radiation and the chemistry, which even the wise machines in the shell-ship had not fully analyzed, which reached out and was spread from within. The disaster hit. It was a simple one and utterly unstoppable.

They had doctors. They had hospitals. They even had a limited capacity for research.

But they could not research fast enough. Not enough to meet this disaster. It was simple, monstrous, enormous.

Femininity became carcinogenetic.

Every woman on the planet beran developing cancer at the same time, on her lips, in her breasts, in her groin, sometimes along the edge of her jaw, the edge of her lip, the tender portions of her body. The cancer had many forms, and yet it was always the same. There was something about the radiation which reached through, which reached into the human body, and which made a particular form of desoxycorticosterone turn into a subform—unknown on earth—of pregnandiol, which infallibly caused cancer. The advance was rapid.

The little baby girls began to die first. The women clung weeping to their fathers, their husbands. The mothers tried to say goodbye to their sons.

One of the doctors, herself, was a woman, a strong woman.

Remorselessly, she cut live tissue from her living body, put it under the microscope, took samples of her own urine, her blood, her spit, and she came up with the answer: *There is no answer.* And yet there was something better and worse than an answer.

If the sun of Arachosia killed everything which was female, if the female fish floated upside down on the surface of the sea, if the female birds sang a shriller, wilder song as they died above the eggs which would never hatch, if the female animals grunted and growled in the lairs where they hid away with pain, female human beings did not have to accept death so tamely. The doctor's name was Astarte Kraus.

The Magic of the Klopts

THE human female could do what the animal female could not. She could turn male. With the help of equipment from the

ship, tremendous quantities of testosterone were manufactured, and every single girl and woman still surviving was turned into a man. Massive injections were administered to all of them. Their faces grew heavy, they all returned to growing a little bit, their chests flattened out, their muscles grew stronger, and in less than three months they were indeed men.

Some lower forms of life had survived because they were not polarized clearly enough to the forms of male and female, which depended on that particular organic chemistry for survival. With the fish gone, plants clotted the oceans, the birds were gone but the insects survived; dragonflies, butterflies, mutated versions of grasshoppers, beetles, and other insects swarmed over the planet. The men, who had lost women worked side by side with the men who had been made out of the bodies of women.

When they knew each other, it was unutterably sad for them to meet. Husband and wife, both bearded, strong, quarrelsome, desperate and busy. The little boys somehow realizing that they would never grow up to have sweethearts, to have wives, to get married, to have daughters.

But what was a mere world to stop the driving brain and the burning intellect of Dr. Astarte Kraus? She became the leader of her people, the men and the men-women. She drove them forward, she made them survive, she used cold brains on all of them.

(Perhaps, if she had been a sympathetic person, she would have let them die. But it was the nature of Dr. Kraus not to be sympathetic—just brilliant, remorseless, implacable against the universe which had tried to destroy her.)

Before she died, Dr. Kraus had worked out a carefully programed genetic system. Little bits of the men's tissues could be implanted by a surgical routine in the abdomens, just inside the peritoneal wall, crowding a little bit against the intestines, an artificial womb and artificial chemistry and artificial insemination by radiation, by heat made it possible for men to bear boy children.

What was the use of having girl children if they all died? The people of Arachosia went on. The first generation lived through the tragedy, half insane with the grief and disappointment. They sent out message capsules and they knew that their messages would reach earth in 6 million years.

As new explorers, they had gambled on going further than other ships went. They had found a good world, but they were not quite sure where they were. Were they still within the familiar gal-

axy, or had they jumped beyond to one of the nearby galaxies? They couldn't quite tell. It was a part of the policy of old earth not to overequip the exploring parties for fear that some of them, taking violent cultural change or becoming aggressive empires, might turn back on earth and destroy it. Earth always made sure that it had the advantages.

The third and fourth and fifth generations of Arachosians were still people. All of them were male. They had the human memory, they had human books, they knew the words "mama," "sister," "sweetheart," but they no longer really understood what these terms referred to.

THE human body, which had taken four million years on earth to grow, has immense resources within it, resources greater than the brain, or the personality, or the hopes of the individual. And the bodies of the Arachosians decided things for them. Since the chemistry of femininity meant instant death, and since an occasional girl baby was born dead and buried casually, the bodies made the adjustment. The men of Arachosia became both men and women. They gave themselves the ugly nickname, "klopt." Since they did not have the rewards of family life, they became strutting cockerels, who mixed their love with murder, who blended their songs with duels, who sharpened their weapons and who earned the right to reproduce within a strange family system which no decent earth-man would find comprehensible.

But they did survive.

And the method of their survival was so sharp, so fierce, that it was indeed a difficult thing to understand.

In less than four hundred years the Arachosians had civilized into groups of fighting clans. They still had just one planet, around just one sun. They lived in just one place. They had a few spacecraft they had built themselves. Their science, their art and their music moved forward with strange lurches of inspired neurotic genius, because they lacked the fundamentals in the human personality itself, the balance of male and female, the family, the operations of love, of hope, of reproduction. They survived, but they themselves had become monsters and did not know it.

Out of their memory of old mankind they created a legend of old earth. Women in that memory were deformities, who should be killed. Misshapen beings, who should be erased. The family, as they recalled it, was filth and abomination which they were resolved to wipe out if they should ever meet it.

They, themselves, were bearded homosexuals, with rouged lips, ornate earrings, fine heads of hair, and very few old men among them. They killed off their men before they became old; the things they could not get from love or relaxation or comfort, they purchased with battle and death. They made up songs proclaiming themselves to be the last of the old men and the first of the new, and they sang their hate to mankind when they should meet, and they sang "Woe is earth that we should find it," and yet something inside them made them add to almost every song a refrain which troubled even them,

And I mourn Man!

They mourned mankind and yet they plotted to attack all of humanity.

The Trap

SUZDAL had been deceived by the message capsule. He put himself back in the sleeping compartment and he directed the turtle-men to take the cruiser to Arachosia, wherever it might be. He did not do this crazily or wantonly. He did it as a matter of deliberate judgment. A judgment for which he was later heard, tried, judged fairly and then put to something worse than death.

He deserved it.

He sought for Arachosia without stopping to think of the most fundamental rule: How could he keep the Arachosians, singing monsters that they were, from following him home to the eventual ruin of earth? Might not their condition be a disease which could be contagious, or might not their fierce society destroy the other societies of men and leave earth and all of other men's worlds in ruin? He did not think of this, so he was heard, and tried and punished much later. We will come to that.

The Arrival

SUZDAL awakened in orbit off Arachosia. And he awakened knowing he had made a mistake. Strange ships clung to his shellship like evil barnacles from an unknown ocean, attached to a familiar water craft. He called to his turtle-men to press the controls and the controls did not work.

The outsiders, whoever they were, man or woman or beast or god, had enough technology to immobilize his ship. Suzdal immediately realized his mistake. Naturally, he thought of destroying himself and the ship, but he was afraid that if he destroyed himself and missed destroying the ship completely there was a chance that his cruiser, a late model with recent weapons would fall into the hands of whoever it

was walking on the outer dome of his own cruiser. He could not afford the risk of mere individual suicide. He had to take a more drastic step. This was not time for obeying earth rules.

His security officer—a cube ghost wakened to human form—whispered the whole story to him in quick intelligent gasps:

"They are people, sir.

"More people than I am.

"I'm a ghost, an echo working out of a dead brain.

"These are real people, Commander Suzdal, but they are the worst people ever to get loose among the stars. You must destroy them, sir!"

"I can't," said Suzdal, still trying to come fully awake. "They're *people*."

"Then you've got to beat them off. By any means, sir. By any means whatever. Save Earth. Stop them. Warn Earth."

"And I?" asked Suzdal, and was immediately sorry that he had asked the selfish, personal question.

"You will die or you will be punished," said the security officer sympathetically, "and I do not know which one will be worse."

"Now?"

"Right now. There is no time left for you. No time at all."

"But the rules. . . . ?"

"You have already strayed far outside of rules."

There were rules, but Suzdal left them all behind.

Rules, rules for ordinary times, for ordinary places, for understandable dangers.

This was a nightmare cooked up by the flesh of man, motivated by the brains of man. Already his monitors were bringing him news of who these people were, these seeming maniacs, these men who had never known women, these boys who had grown to lust and battle, who had a family structure which the normal human brain could not accept, could not believe, could not tolerate. The things on the outside were people, and they weren't. The things on the outside had the human brain, the human imagination, and the human capacity for revenge, and yet Suzdal, a brave officer, was so frightened by the mere nature of them that he did not respond to their efforts to communicate.

He could feel the turtle-women among his crew aching with fright itself, as they realized who was pounding on their ship and who it was that sang through loud announcing machines that they wanted *in, in, in.*

Suzdal committed a crime. It is the pride of the Instrumentality that the Instrumentality allows its officers to commit crimes or mistakes or suicide. The Instrumentality does the things for mankind that a computer can-

not do. The Instrumentality leaves the human brain, the human choice in action.

THE Instrumentality passes dark knowledge to its staff, things not usually understood in the inhabited world, things prohibited to ordinary men and women because the officers of the Instrumentality, the captains and the sub-chiefs and the chiefs, must know their jobs. If they do not, all mankind might perish.

Suzdal reached into his arsenal. He knew what he was doing. The larger moon of Arachosia was habitable. He could see that there were earth plants already on it, and earth insects. His monitors showed him that the Arachosian men-women had not bothered to settle on the planet. He threw an agonized inquiry at his computers and cried out:

"Read me the age it's in!"

The machine sang back, "More than thirty million years."

Suzdal had strange resources. He had twins or quadruplets of almost every earth animal. The earth animals were carried in tiny capsules no larger than a medicine capsule and they consisted of the sperm and the ovum of the higher animals, ready to be matched for sowing, ready to be imprinted; he also had small life-bombs which could surround any form of life with at least a chance of survival.

He went to the bank and he got cats, eight pairs, sixteen earth cats, *felis domesticus*, the kind of cat that you and I know, the kind of cat which is bred, sometimes for telepathic uses, sometimes to go along on the ships and serve as auxiliary weapons when the minds of the pinlighters direct the cats to fight off dangers.

He coded these cats. He coded them with messages just as monstrous as the messages which had made the men-women of Arachosia into monsters. This is what he coded:

Do not breed true.
Invent new chemistry.
You will serve man.
Become civilized.
Learn speech.
You will serve man.
When man calls you will serve man.
Go back, and come forth.
Serve man.

These instructions were no mere verbal instructions. They were imprints on the actual molecular structure of the animals. They were charges in the genetic and biological coding which went with these cats. And then Suzdal committed his offense against the laws of mankind. He had a chronopathic device on board the ship. A time distorter, usually to be used for a moment or a second or two to bring the ship away from utter destruction.

The men-women of Arachosia were already cutting through the hull.

He could hear their high, hooting voices screaming delirious pleasure at one another as they regarded him as the first of their promised enemies that they had ever met, the first of the monsters from old earth who had finally overtaken them. The true, evil people on whom they, the men-women of Arachosia would be revenged.

Suzdal remained calm. He coded the genetic cats. He loaded them into life-bombs. He adjusted the controls of his chronopathic machine illegally, so that instead of reaching one second for a ship of 80,000 tons, they reached two million years for a load of less than four kilos. He flung the cats into the nameless moon of Arachosia.

And he flung them back in time.

And he knew he did not have to wait.

He didn't.

The Catland Suzdal Made

THE cats came. Their ships glittered in the naked sky above Arachosia. Their little combat craft attacked. The cats who had not existed a moment before, but who had then had two million years in which to follow a destiny printed right into their brains, printed down their spinal cords, etched into the chemistry of their bodies and personalities. The cats had turned into people of a kind, with speech, intelligence, hope, and a mission. Their mission was to attack Suzdal, to rescue him, to obey him, and to damage Arachosia.

The cat ships screamed their battle warnings.

"This is the day of the year of the promised age. And *now come cats!*"

The Arachosians had waited for battle for 4,000 years and now they got it. The cats attacked them. Two of the cat craft recognized Suzdal, and the cats reported,

"Oh Lord, oh God, oh Maker of all things, oh Commander of Time, oh Beginner of Life, we have waited since Everything began to serve You, to serve Your Name, to obey Your Glory! May we live for You, may we die for You. We are Your people."

Suzdal cried and threw his message to all the cats.

"Harry the klopts but don't kill them all!"

He repeated "Harry them and stop them until I escape." He flung his cruiser into non-space and escaped.

Neither cat nor Arachosian followed him.

* * *

And that's the story, but the

tragedy is that Suzdal got back. And the Arachosians are still there and the cats are still there. Perhaps the Instrumentality knows where they are, perhaps the Instrumentality does not. Mankind does not really want to find out. It is against all law to bring up a form of life superior to man. Perhaps the cats are. Perhaps somebody knows whether the Arachosians won and killed the cats and added the cat science to their own and are now looking for us somewhere, probing like blind men through the stars for us true human beings to meet, to hate, to kill. Or perhaps the cats won.

Perhaps the cats are imprinted by a strange mission, by weird hopes of serving men they don't recognize. Perhaps they think we are all Arachosians and should be saved only for some particular cruiser commander, whom they will never see again. They won't see Suzdal, because we know what happened to him.

The Trial of Suzdal

SUZDAL was brought to trial on a great stage in the open world. His trial was recorded. He had gone in when he should not have gone in. He had searched for the Arachosians without waiting and asking for advice and reinforcements. What business was it of his to relieve a distress ages old? What business indeed?

And then the cats. We had the records of the ship to show that something came out of that moon. Spacecraft, things with voices, things that could communicate with the human brain. We're not even sure, since they transmitted directly into the receiver computers, that they spoke an earth language. Perhaps they did it with some sort of direct telepathy. But the crime was, *Suzdal had succeeded.*

By throwing the cats back two million years, by coding them to survive, coding them to develop civilization, coding them to come to his rescue, he had created a whole new world in less than one second of objective time.

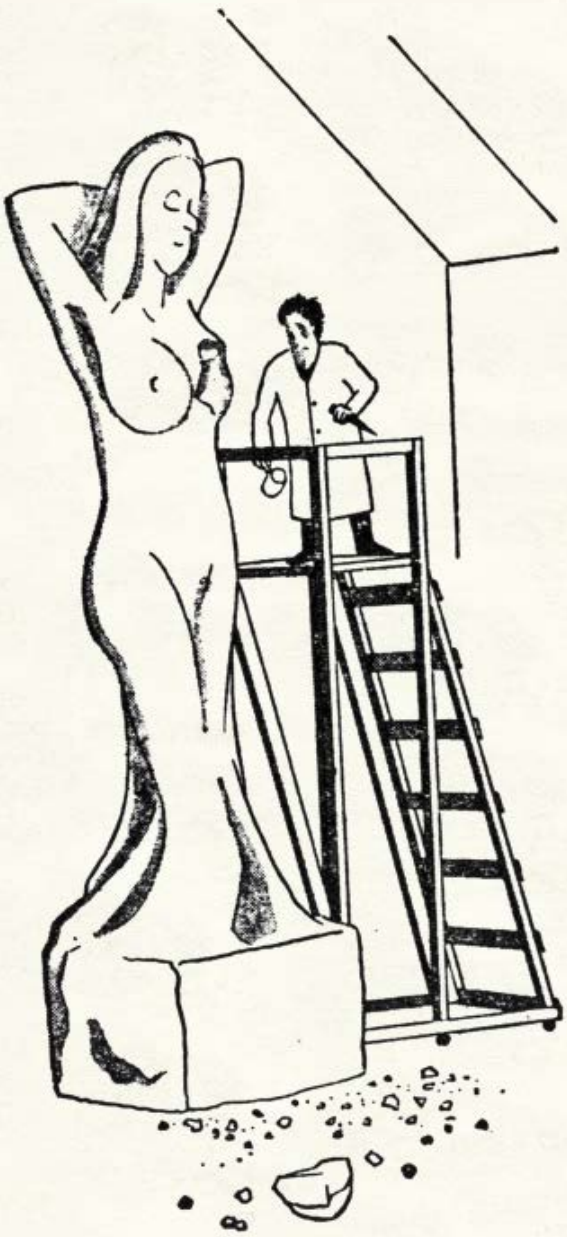
His chronopathic device had flung the little life-bombs back to the wet earth of the big moon over Arachosia and in less time than it takes to record this, the bombs came back in the form of a fleet built by a race, an earth race, though of cat origin, two million years old.

The court stripped Suzdal of his name and said, "You will not be named Suzdal any longer."

The court stripped Suzdal of his rank.

"You will not be a commander of this or of any other navy, neither imperial nor of the Instrumentality."

The court stripped Suzdal of



"Oops—!"

his life. "You will not live longer, former Commander, and former Suzdal."

And then the court stripped Suzdal of death.

"You will go to the planet Shayol, the place of uttermost shame from which no one ever returns. You will go there with the contempt and hatred of mankind. We will not punish you. We do not wish to know about you any more. You will live on, but for us you will have ceased to exist."

* * *

THAT'S the story. It's a sad, wonderful story. The Instrumentality tries to cheer up all the different kinds of mankind by telling them it isn't true, it's just a ballad.

Perhaps the records do exist. Perhaps somewhere the crazy klopts of Arachosia breed their boyish young, deliver their babies, always by Caeserean, feed them always by bottle, generations of men who have known fathers and who have no idea of what the word *mother* might be. And perhaps the Arachosians spend their crazy lives in endless battle with intelligent cats who are serving a mankind that may never come back.

That's the story.

Furthermore, it isn't true.

THE END

According to his Abilities

By HARRY HARRISON

Illustrated by FINLAY

Briggs had no trouble with the natives.

It was as if he was one of them.

JUST look at that gun barrel—big enough to poke your finger into," Aram Briggs said, and did just that. With an unconsciously lascivious motion he pushed the end of his grimy middle finger into the muzzle of the bulky hand gun and rotated it slowly. "Throws a slug big enough to stop any animal dead, hydrostatic shock, or if you use explosive slugs it can blow down a tree, a wall."

"I should think the recoil would break one's wrist the first time it was fired," Dr. DeWitt remarked with unconcealed animosity, peering nearsightedly at a snake preparing to strike.

"Where have you been living,

DeWitt—under a rock? Break nothing, the recoil on a gun this size would probably tear your whole hand right off if it wasn't damped. This is a 25 mm. recoilless. Instead of kicking back, the energy is what we call dissipated by going out slots . . ."

"Please spare me the inaccurate description of the principle of recoilless firearms; I know all I care to know on the subject. I would suggest you strap in before we start the braking descent."

"What's the matter doc, you getting nervous. That's not like you to snap like that." Briggs' grin was more sadistic than sincere and DeWitt fought against

the automatic feeling of distaste it produced in him.

"Sorry. Nerves I guess." That grin again. "But I cannot say I am used to this kind of mission nor pretend that landing on a planet full of hostiles is in any way attractive."

"That's why I'm here, DeWitt, and you should be damned happy I am. You science boys get yourself into trouble so you have to call on somebody who isn't afraid of guns to come along and pull you out." A buzzer sounded and a red light began an irritated blinking on the control board. "You let Zarevski get himself all hung up and you can't get him out by yourselves . . ."

"They're going to drop this ship in sixty seconds, that was the warning to strap in." DeWitt had of course seated himself as soon as they had left the parent ship for the small space-to-planet rocket, and carefully secured his straps. Now he glanced nervously from the large drifting shape of Briggs back to the flashing light. Briggs moved slowly, ignoring the warning, and DeWitt clenched his fists.

"Has the landing course been set?" Briggs asked as he slowly settled the handgun into his holster and even more slowly pulled himself down into the chair. He was still tightening his belt when the rockets fired. The first decelerating blast kicked the air from their chests and stopped any conversation until they cut off again.

AUTOMATICALLY programmed," DeWitt gasped, painfully inhaling and waiting tremulously for the next blast. "The computor will put us into the area over the village where they are holding Zarevski, but we will have to land the ship. I thought we would set down on a level spot near the river, you remember it from the maps, it's not too far from the village."

"Crap. We land right in the middle of the town, they got that great damned square or football field there, whatever it is."

"You can't do that!" DeWitt gasped, scarcely noticing a course-correction blast that pushed him into the resilient chair. "The natives will be there, you'll kill them."

"I doubt it. We'll come straight down with the hooter going, flashing the landing lights and hover a bit before the final drop, there won't be one of those creeps left within a kilometer when we finally touch down. Any stupid enough to stay will get cooked, and good riddance."

"No—it's too dangerous."

"Landing by the river is even worse. You want these things to think we're afraid of them or something? Land that far away and you'll never see Zarevski again. We land in the town!"

"You are not in control yet, Briggs. Not until we land. But perhaps you are right about the river . . ."

"You know damn well I am!"

DeWitt went on, ignoring the interruption. "I can think of other reasons why it won't do to be too far away. Yet your landing inside the city is just as bad. We can't guarantee that some of them won't be caught in the landing blast, and that must be avoided at all costs. I think, if you look there on your map, grid 17-L, you'll see an area that will make a good compromise. It borders on the village and seems to contain a crop of some kind. And none of the photographs show any natives in the field."

"All right, good enough. If we can't cook them we'll cook their corn on the cob." His laugh was so short and throaty it sounded like a belch of disgust. "Either way we'll throw a fright into them and let them know just what the hell we think and just why the hell they can't get away with this."

DeWitt nodded reluctantly. "Yes, of course. You probably know best." Briggs did know best, that was why he would run the operation on the ground, and he, Dr. Price DeWitt, with the myopic eyes and slightly rounded shoulders of a man who was more at home in a laboratory than an alien jungle, would be the second in command. It was not an easy thing to take orders from a man like Briggs, but it had been the decision of the Board and he had concurred.

Sending two men was a caloulated risk, with the odds carefully determined by computer to be well weighted in favor of success. The only other alternative was a small scale invasion by the military with no guarantee that their objective would be obtained. There would be few, or no, losses among the ranks of the invaders, but a number of natives would be killed and Zarevski would probably be assasinated before they could reach him. If this wasn't argument enough, Spatial Survey was morally and constitutionally opposed to violence against alien races. They would risk the lives of two men, two armed men who would only fight in self defense, and that was all. Aram Briggs and Price DeWitt had been the two men chosen.

"What's it really like down there?" Briggs asked suddenly, and for the first time the rasp of automatic authority was missing from his voice.

"Cold, a kind of particularly damp and nasty autumn that goes on forever." DeWitt worked hard not to show any of his natural feelings of pleasure at the light deflation of his companion's arrogance. "This planet is a cold one and the natives stay near the

equator. I suppose they find it comfortable, but on the first expedition we never seemed to be able to get warm."

"You speak their language?"

"Of course, that's why I'm coming, I'm sure they briefed you about that. We all learned it, it's simple enough. We had to if we wanted to work with the natives since they absolutely refused to learn a word of ours."

"Why do you keep calling them natives," Briggs asked with a sly smile, looking at DeWitt out of the corners of his eyes. "They have a name don't they? The planet must have a name?"

"It has an identification number, D2-593-4. You know Spatial policy on assigning names."

"But you must have had a nickname for the natives, you must have called them something . . . ?"

"Don't try to be coy, Briggs, it doesn't become you. You know perfectly well that a lot of the men called the natives "creeps," just as you well know I don't use the name myself."

Briggs barked a short laugh. "Sure, doc. Creeps. I promise not to use the word creeps in front of you—even if they are creeps."

HE laughed again but DeWitt didn't respond, sunk in his own thoughts, wondering for the thousandth time if there was any possibility of this rescue plan succeeding. Zarevski had been refused permission to visit this planet, had come in spite of this and had done something to anger the natives and had been captured. In the days that had passed since he had sent his last radio message he might have been killed. In spite of this it had been decided that a rescue attempt would be made. DeWitt felt a natural jealousy at this, that a xenologist could become so important that he could break all the rules and still be valued for his genius. DeWitt's own career of over ten years in the Spatial Survey was unmarked by anything other than a slow rise in position and an annual increase in salary. Pulling the eccentric Zarevski out of this self-made trap would probably be the most important entry in his record—if it could be done. And that was up to Briggs, the specialist, the man with the right abilities. A strident buzzer burst through his thoughts.

"The alarm, we are over the target area. I'll take control of the ship and land it . . ."

"And as soon as we touch down I'm in charge."

"You're in charge." It sounded very much like a sigh the way DeWitt said it and he wondered again if there could be any sense to this plan.

Though De Witt was theoretically flying the ship, he did little

more than point to a spot and tell the computor to land on it. It was the computor that monitored the approach, measuring the multiple forces involved, cancelling them precisely with blasts from the jets. Once the final descent began all DeWitt did was watch the ground below to be sure none of the natives would be caught by the landing. The instant they touched down safely and the roar of the engines died away Briggs was on his feet.

"Let's go, let's go," he ordered in his strident voice. "Grab that box of trade supplies and I'll show you how to get Zarevski away from the creeps."

DeWitt made no comment nor did he show his feelings in any way. He simply put the strap of the heavy box over his shoulder and struggled the weight of it towards the airlock. While the lock was cycling them out he zipped up the front of his heated coverall and turned on the power. When the outer door cracked open a keening wind thrust a handful of brown and strangely shaped leaves into the compartment, bringing with it the pungent, alien smell of the planet. As soon as it had opened wide enough Briggs pushed through and jumped to the ground. He turned slowly in a complete circle, gun ready in his hand, before grunting with satisfaction and shoving it back into the holster.

"You can come down now, DeWitt. None of them in sight."

He made no attempt to help the smaller man, only grinning with barely concealed contempt as DeWitt lowered the box by its strap, then jumped down clumsily after it.

"Now let's go get Zarevski," Briggs said, and stamped away towards the village. DeWitt trailed after.

Because he had twisted sideways to straighten the strap over his shoulder, DeWitt caught sight of the three natives a moment before Briggs did. They appeared suddenly from a stand of yew-like trees and stared at the new arrivals. Briggs, who was constantly turning his head to watch on all sides, saw them a moment later. He wheeled, dropped, drawing his gun at the same time, and when he was lying flat on the ground he pulled the trigger. Nothing happened. The natives dropped just then.

DEWITT didn't move, though he had to control a sudden shiver that trembled his body. From his belt hung a small metal box with control studs on its surface; it looked like a radio-intercom, but it wasn't. He had his finger pressed on one of the buttons, and didn't let up until Briggs had stopped pulling the trigger and began to examine the gun with horrified eyes.

"It didn't go off . . . But why?"

"Probably the cold. Contracted the parts," DeWitt said hurriedly glancing from the prone man to the natives who were slowly climbing to their feet. "I'm sure it will be all right the next time you need it. And it was a good thing that you didn't shoot. They weren't attacking, or trying to get close to us, just looking."

"They better not try any funny business with me," Briggs said, climbing to his feet and holstering his gun, though keeping his hand on the butt. "They're ugly ones, aren't they?"

By any human standards the aborigines of planet D2-593-4 could not have been called attractive. They resembled men only in rough outline of body, head, and paired arms and legs on a thin torso. Their skin appeared to be covered with hairy scales: fish-like brown scales the size of a man's hand whose lower edge shredded into a fringe of furlike substance. Either they were moulting, or the random nature of scale arrangement was natural, because here and there on the bodies of all of them patches of scales were missing and areas of raw looking orange skin shone through. They wore no clothes, only strings supporting containers and crude weapons, and the scales continued irregularly over all parts of their bodies. Their heads were perhaps their most repulsive aspect, covered with slashed and wrinkled orange skin. Both men knew that quivering slashes covered olfactory and auditory organs, yet the resemblance to mortal knife wounds was still disconcerting. The tiny eyes peered malevolently from another transverse slit situated near the top of the skull. DeWitt had spent more than a terran year on this planet and still found the sight of them repellent.

"Tell them not to *come* any closer," Briggs ordered. He seemed unpreturbed by their appearance.

"Stop where you are," DeWitt said in their language.

They stopped instantly and the one on the right, with the most weapons, hissed through a mouth slit. *"You speak our language."*

DeWitt started to answer, then restrained himself. It was a statement, not a question, and he was under strict orders to volunteer nothing. He was to act as much like a translating machine as possible since this was Briggs' show. Before he could translate the opening remark, the native went on.

"How is it that you speak our language? Does this other one talk too?"

"What is it jabbering about?" Briggs demanded, and snorted in anger when DeWitt had translated. "Just tell him that your job is translating and I got no

time to waste on that kind of stuff, and tell them we want Zarevski."

This was a test of theory, and DeWitt took a deep breath before he answered. He put an effort into attempting to translate as exactly as possible and was surprised when they took no umbrage at the insulting tone of the words, in fact even bobbed their heads from side to side slightly in the local gesture of agreement.

"Where did you learn our language?" The leader asked DeWitt, who translated the question for Briggs before he answered.

"On this planet. I was here with the first expedition."

Briggs was laughing. "I bet they didn't recognize you, probably think all humans look alike—bet they even think *we* are ugly!" The smile vanished as quickly as it had arrived. "Stop the horsing around. We came for Zarevski and that's all we care about. Tell them that."

DeWitt did, having difficulty only with "horsing around" though he managed to get the meaning across.

"Come with me," the leader said, turning and walking towards the village. His companions went with him, but Briggs put a restraining hand on DeWitt's shoulder.

"Let them get a bit ahead, I want to keep my eyes open for any tricks. And we don't want to do just what he says or he'll think he can push us around. All right, we can go now."

AT a respectable distance, as though they just happened to be strolling in the same direction by coincidence, the two parties straggled into the village. None of the inhabitants were in sight, though smoke rose from holes at the peak of most of the angled wattle and daub houses. The sensation of unseen eyes watching from their deep interiors was intense.

"In there," the alien called back over his shoulder, at the same time jerking his many-gingered hand at a building no different than all the others.

The aliens kept walking on, without looking back, and Briggs stopped, quizzically watching them go. Only when they were out of sight did he turn and suspiciously examine the indicated building. It was perhaps five meters tall at the ridgepole and slanted straight to the ground on both sides. Narrow slits of windows let a certain amount of light into it, and the flat front was pierced by a doorway the size and shape of an open coffin. It must have looked that way to DeWitt too, because his nose almost twitched with intensity as he examined the black opening.

"No way out of it," Briggs

finally said. "We have to go in and that door is the only way. You go first and I'll keep my eyes open."

THE difference between the two men was proven then in the most obvious manner possible. DeWitt had some natural qualms about going through the door, but he forced them down, mumbled his memory through the various forms of greeting, and bent over to step inside. He had just thrust his head in through the doorway when Briggs grabbed him by the shoulder and threw him backwards onto the ground. He landed painfully on the end of his spine, the heavy box crashed into his leg, and looked up in amazement at the thick spear sticking in the ground and still vibrating with the force of impact. It had penetrated deep into the earth in the exact spot where he had been.

"Well, that shows one thing," Briggs exulted, pulling the dazed DeWitt to his feet. "We've found the right place. This job is going to be a lot shorter and easier than I thought." With one heavy boot he kicked the spear out of his way, bent under the door and stalked into the building. DeWitt stumbled after him.

Blinking in the smoke-laden air they could dimly see a group of natives at the far end of the room. Without looking around Briggs stalked towards them. DeWitt followed, stopping just long enough to examine the mechanism fixed over the door. Enough light penetrated from the slit windows so that he could just make it out: a frame fixed to the wall that held a heavy wooden bow two meters long. A rope, running towards the group at the other end of the building, had released the simple trigger mechanism. No part of the trap was visible outside the door—yet Briggs had known about it.

"Get over here DeWitt," the voice bellowed. "I can't talk to these creeps without you! Come on!"

DeWitt hurried as fast as he could and dropped his heavy box in front of the five natives. Four of them stood in the background, hands on weapons, eyes that reflected the ruddy firelight gleamed malevolently from thinned slits. The fifth alien sat in front of them, on a box or platform of thick woven wood. A number of pendant weapons, bangles and oddly shaped containers, the local mark of high rank, were suspended from his body and limbs, and in both hands he balanced a long-bladed weapon resembling a short sword with a thin blade.

"Who are you?" the alien asked, and DeWitt translated.

"Tell him we want to know his name first," Briggs said, clearing his throat noisily and spit-

ting on the packed dirt floor.

After a short wait, during which his eyes never left Briggs, the seated alien said, *"B'deska."*

"My name is Briggs and I'm here to get a man like me who is called Zarevski. And don't pull any more tricks like that thing at the door because you're allowed just one free shot with me and you've had it. Next time I kill somebody."

"You will eat with us."

"What the hell is he trying to pull, DeWitt? We can't eat the local grub."

"You can if you want to, some of the xenologists did though I never had the nerve. There is nothing in it to cause anything worse than a bad heartburn, though I'm told the taste is loathsome beyond imagining. It is also an important social custom, no business is ever transacted except over a meal."

"Bring on the ohow," Briggs said resignedly. "I only hope this Zarevski is worth it."

ONE of the other aliens put down his weapons at a hissed word and went to a darkened corner of the building, bringing back a guard with a wooden stopper and two cups of crudely fired clay. He placed the gourd on the ground and one of the cups before the visitor and the other in front of the seated chieftan. Briggs squatted on his haunches, and reaching out he took up both cups and raised them at arms' length.

"Great cups," he said. "Great workmanship. Tell him that. Tell him that these ugly pieces of mud are fine art and that I admire his taste."

DeWitt translated this, and while he did Briggs put the cups down again. Even DeWitt noticed that he had changed cups, so that each of them had the other's. B'deska said nothing, but pulled the plug from the gourd and first filled his cup with dark liquid, then Briggs'.

"Oh God, that's horrible," Briggs said, taking a small sip and shuddering. "I hope the food is better."

"It will be worse, but you only have to take a token mouthful or two."

The same native who had brought the drink, now appeared with a large bowl brimming with a crumbled grey mixture whose very smell provoked nausea. B'deska tipped a handful of it into a suddenly gaping mouth slit, then pushed the bowl over to Briggs who scooped up as small a portion as was possible. DeWitt could see a tremor shake his back as he licked it from his fingers. No amount of coaxing by the alien could force him to take a second sample. B'deska waved the bowl away and two smaller bowls of food were

brought. Briggs looked down at his on the fioor before him and slowly rose to his feet.

"I warned you, B'deska," he said.

Before DeWitt had finished translating this Briggs stamped on the bowl, crushing it, then ground the contents into the floor with his heel. The alien who had served the food was running towards the door and in sudden realization DeWitt grabbed for the control unit on his belt, but this time he was too slow. Before he could touch the radio control that would prevent Briggs' gun from firing the gun went off with a booming roar and the alien fell, a gaping hole in his back.

Briggs reholstered the gun calmly and turned back to B'deska who had raised his sword so that the point rested on the box next to him, but who otherwise had not moved.

"Now that that's out of the way, tell him I'm willing to talk business. Tell him I want Zarevski."

"Why do you want the man Zarevski," B'deska asked, his manner as unmoved as Briggs'. The dead alien lay crumpled, bleeding slowly into the dirt, and they both ignored him.

"I want him because he is my slave and he is very expensive and he ran away. I want him back and I want to beat him."

"I can't say that," DeWitt protested. "If they thought Zarevski was a slave they might kill him . . ."

HIS words were broken off as Briggs reached out and lashed him across the back of the face with his hand. It staggered him, bringing tears of pain to his eyes.

"Do what I tell you, you idiot," Briggs shouted. "You were the one who told me they kept slaves, and if they think Zarevski is a slave that will give them a chance to get a good price for releasing him. Don't you know that they think you are a slave too?"

DeWitt had not realized it until that moment. He translated carefully. B'deska appeared to be thinking about this, though his eyes were on the box of trade goods all the time.

"How much will you pay for him. He committed a bad crime and this will cost a lot."

"I'll pay a good price. Then I will take him and beat him, then bring him home and make him watch while I kill his son. Or maybe I will make him kill his son himself."

B'deska bobbed his head in agreement when this was translated, and after that it was just a matter of bargaining. When the agreed number of brass rods and paste gems had been taken

from the box B'deska climbed to his feet and left the room. The other aliens picked up the ransom payment and left after him. DeWitt gaped after them.

"But—where is Zarevski?"

"In the box of course—where else did you think he would be? If he was valuable enough for us to come and get him B'deska wasn't going to allow him out of sight, or someone else would have made a deal with us. Didn't you see the way he had that pig-sticker ready to stab down into the box. One wrong move of ours and he would have put paid to Zarevski."

"But wasn't your killing one of his men a wrong move?" DeWitt asked, tearing at the strings that sealed the box.

"Of course not. There was poison in that bowl, that was obvious. So I killed the slave just like I told him I would."

The top came off and inside, gagged and trussed like a pig, was Zarevski. They cut away his bindings and rubbed the circulation back into his legs so that he could walk. DeWitt supported him with one arm and Briggs waved them towards the door.

"Go on first and I'll come behind with the box. I don't think there will be any trouble, but if there is any you know that I can take care of you—slaves!" He laughed uproariously, all by himself.

They stumbled slowly through the empty streets and Zarevski smiled back over his shoulder. A number of his teeth were missing and there were clotted cuts on his face, but he was alive.

"Thanks, Briggs. I heard the whole thing and couldn't say a word. You handled it perfectly. I made the mistake of trying to be friendly with these damn snakes, and you saw what happened to me. Someone I had talked to died, and they said I had killed him with the evil eye, then grabbed. I wish you had been with me."

"That's okay, Zarevski, people make mistakes." His tone of voice left no doubt that he was one who never did. "Only you better not talk anymore until we're away from here. They saw you talking to me so you know what I have to do."

"Yes, of course." Zarevski turned back, closing his eyes, wincing even before the blow landed. Briggs raised his foot and kicked him in the back, knocking him sprawling. He made no attempt to help when DeWitt once more dragged him to his feet.

ONCE they were near the ship Briggs walked up close to them.

"Not much more, then we'll all be out of this."

"Are you in Spatial Survey?"

Zarevski asked. "I can't say I remember your name."

"No, this is just a temporary job."

"You should make it permanent! The way you handled those natives—we can use men like you. Wouldn't you want to do that?"

"Yes," Briggs said, he was sweating in spite of the cold. "It's not a bad idea. I could help you people."

"I know you could. And there is plenty of room for advancement."

"Shut up, Zarevski! That's an order," DeWitt broke in.

Zarevski dismissed him with a look and turned back to Briggs who was kneading his hands together with excitement.

"I could use an assistant like you on expeditions. I have enough men in the labs for writing up reports, but no one for field work . . ."

"Be quiet, Zarevski!"

". . . no one who really knows his way around like you do."

"And do I!" Briggs shouted and threw his head back, tearing his fingers down his face, scratching the soft flesh. "I can do it. I can do it better than anyone you know, better than anyone in the whole world. You're all against me but I can do it better . . ."

"Briggs!" DeWitt shouted, turning and grabbing the man by both arms. "Listen to me Briggs! Sunset-now! Do you hear me . . . SUNSET-NOW!"

With a tremulous sigh the big man closed his eyes and let his arms drop. DeWitt tried to hold him up but his weight was too great and he slumped to the ground. Zarevski looked on, dumbfounded.

"Come on, help me. You did this to him so you had better help carry him into the ship before B'deska and the rest of the locals see what has happened and come out after our skins."

"I don't understand," Zarevski said, helping to carry the dead weight to the ship, looking worriedly over his shoulder as the outer lock ground open. "What's the matter with him?"

"Nothing now, before we left I planted the posthypnotic command with a key word just in case of trouble. He's asleep, that's all. Now we'll take him back to the hospital and try and put him back together. Everything considered he held up very well, and I would have got him back to the ship if you hadn't started your damn recruiting speech. Glory of Spatial Survey my foot!"

"What are you talking about?" Zarevski snapped.

BEHIND them the heavy door closed with a satisfying sound and DeWitt whirled to face the man they had rescued, anger

finally burning through his control.

"Just who do you think Briggs is—a professional hero out of some historical novel that Spatial went out and hired? He is a sick man, right out of the hospital, and I'm his doctor—which is the only reason I'm here. One of the staff had to go with him, and I was the youngest so I volunteered."

"What do you mean hospital?" Zarevski asked with a last attempt at bluster. "The man's not sick . . ."

"Mentally sick—and on the way to being cured until this happened. I hate to think how long it will set him back. Not as sick as some, he has almost a classic case of *paranoia simplex*, which is why we could use him. His delusions of persecution relate to his actual perception of his surroundings. So he was right at home down there. If you had read all the reports instead of blundering in you would have found out that those aliens have a society where a condition very much resembling paranoia is the norm. They feel that everyone is against them—and they are right. Everyone is. No sane person could have been counted on to have the right reactions in such a society—we needed someone who suffered from the *same sickness*. The only thing I'm even remotely happy about in this whole mess is that it wasn't my decision to send Briggs down there. They decided that upstairs and I did the dirty work. I and Briggs."

Zarevski looked down at the slack face of the man on the floor, breathing hard even though he was unconscious.

"I'm sorry . . . I didn't . . ."

"You couldn't know." Dr. DeWitt was rigid with anger as he felt the fast, erratic pulse of his patient. "But there is one thing you did know. You weren't supposed to land on that planet—but you did anyway."

"That's none of your business."

"Yes it is, just for now. Just for these few minutes before we go back to the ship and before I go back to my ward and they forget about me, with maybe a small commendation on my record, and you go back to being the great Zarevski and they put your name in the headlines. I helped pull you out of there which gives me the right to tell you one thing. You're a grandstander Zarevski and I hate your guts. I . . . oh what the hell . . ."

He turned away and Zarevski opened his mouth to say something, then changed his mind.

It was a short trip back to the waiting mother ship, and they didn't talk to each other because there was really nothing to say.

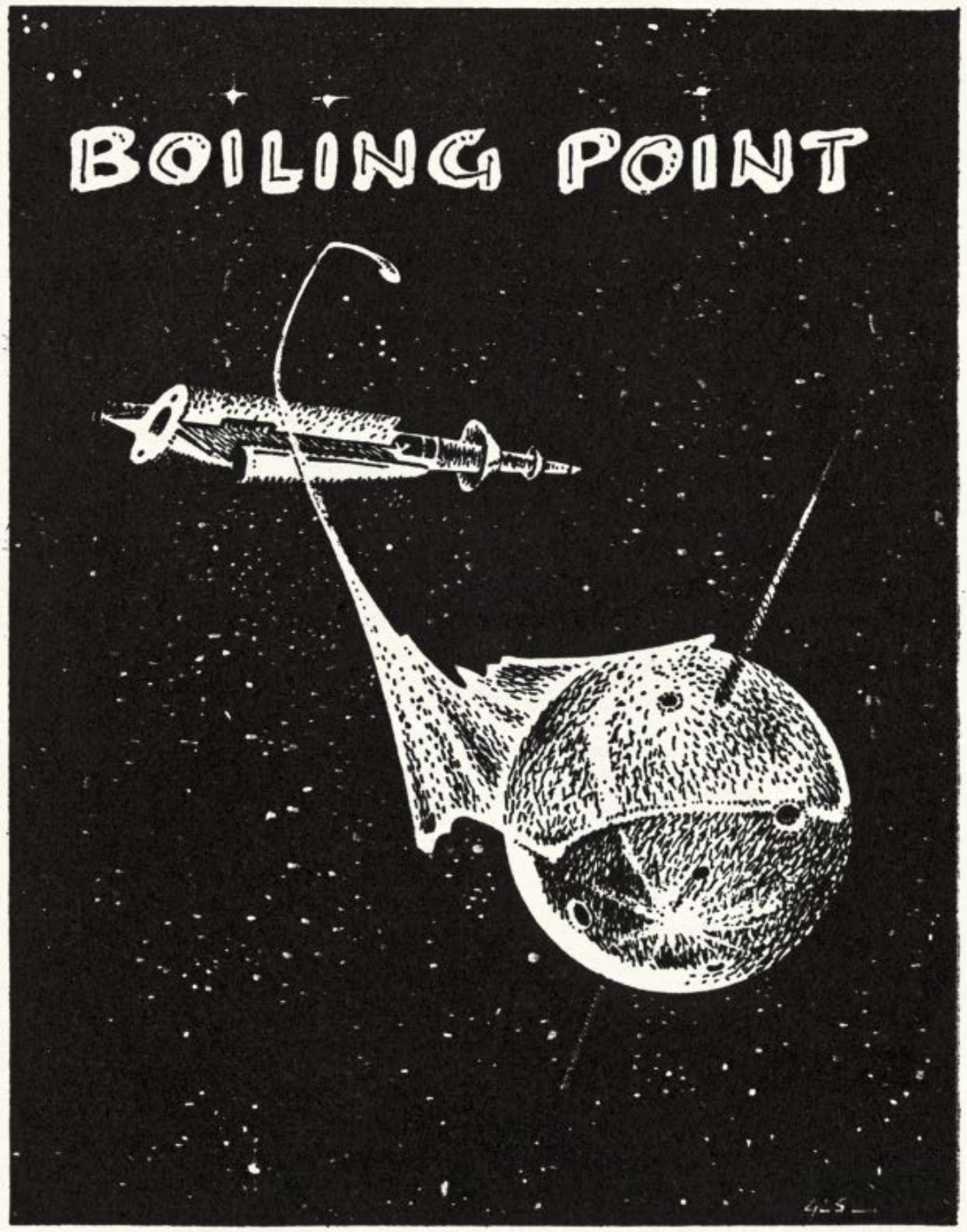
THE END

Stasek didn't want to be on the blowtorch run in the first place. Now he had a hitchhiker who was hungry for sunlight.

By LESTER DEL REY

Illustrated by SCHELLING

BOILING POINT



THEY had come to him and told him to grab a blowtorch and head out to service the ring of satellites strung like beads between the orbit of Venus and the orbit of Mercury. Stasek, a big, rangy young man who thought he had more important things to do than that, stared in bewilderment at the port official who gave him the news.

"You're joking," Stasek said. "I'm not a technician. I've got work to do."

"Servicing the satellites is work," the supervisor said mildly. "Pretty important work, at that."

"For a technician," Stasek said. "I'm on the energy-eater project, for Pete's sake. Do you think I can take time out and go play nursemaid to a bunch of satellites? You could do the job remote, and you know it!"

"The regulations say that the satellites shall be serviced manully." The voice was not so mild now. "Tompkins was supposed to make the trip, only they're busy cutting his appendix out of him right now. Vaughn can't pilot a blowtorch to save himself. Dominick doesn't have the technical background to do the work. That leaves you, Stasek. They're tuning up a torch for you right now. Blastoff is in twenty-eight minutes." The supervisor allowed himself a faint smile. "Who knows? Maybe you'll catch an energy-eater out there while you're working."

Stasek gaped like a gaffed fish. He found himself suddenly alone in the laboratory, with nobody to argue with. They had him. He couldn't protest. He was sore as hell, but they had him. The supervisor was right; *someone* had to do the job. It was dog-work, mindless work, but the regulations were specific: the satellites had to be tuned up from time to time. Stasek had always made fun of the technicians who went hopping out there to do the stupid job. Now it was his turn. Shaking his head slowly, he cleaned off his desk and walked to the window. Outside, the pearly-gray cloud barrier arched like a burnished vault across the heavens, and below it stretched the barren fields of Venus, dead and empty. Stasek banged his fist lightly against the window. Then he went down the corridor and toward the blastoff area to get into his suit.

A figure came up the hall as Stasek went down it. Nick Vaughn, the short, chunky physicist who ran the big fusion converter in the basement. Stasek saw Vaughn's grin, fifty feet away, and knew there would be trouble.

There was. Vaughn said, "I hear you're taking a little blowtorch flight, Jimmy."

"News travels fast."

"It's a small base. So you're running the nursemaid route, eh? Be sure to blow their noses, now. And don't forget to wipe their little—"

"Shut up," Stasek said crisply. "Do me that much of a favor."

"Jimmy Stasek flying the nursemaid route! My, my, my what's the universe coming to?"

Nursemaid.

Stasek was still simmering as he suited up, dogged his helmet into place, and walked out onto the field to get into the blowtorch they had readied for him. He hadn't been behind the controls of a blowtorch in eight or nine Earthtime months, but his papers were up to date. The ship was small, almost dainty. Blowtorches didn't come big. The blowtorch drive could send a small ship anywhere in the Solar System, but it didn't have the oomph to push anything really massive.

It was useful enough for its purpose—flitting around on low-cargo missions among the inner worlds. The direct conversion of a tiny, intermittent fusion blast to propulsive drive made the blowtorch go. The pilot sat a dozen feet away from a miniature sun, but a magnetic pinch field kept the thermonuclear reaction in check. Same principle as the big generator downstairs that powered the whole Venus station —energy tapped from a plasma of shattered atoms, a drifting soup of protons and neutrons. It didn't take a devil of a lot of skill to handle a blowtorch. That was why Stasek, who was basically a life-sciences man, had taken the trouble to get his papers.

The field technicians nodded respectfully at him as he went down the tunnel to the ship. Stasek nodded back. No sense in biting *their* heads off, he thought. They hadn't sent him out on this damfool mission. They were just greasemonkeys. They were probably laughing behind his back, because they knew as much as he did how idiotic it was to send a grown man out to tend a bunch of orbiters that ought to be able to look after themselves.

Stasek keyed in the computer. Somewhere in the bowels of the blowtorch, minirelays began to close. He got his clearance from field control. He gave the ship computer the go-ahead.

The blowtorch trembled a moment as its little fusion converter spewed out a tiny fraction of its force. Stasek, at the controls, didn't need to do a thing, not on a blastoff. The computer could handle the problem of blastoffs without his help, thank you.

IN a moment he was through the cloud barrier and into the darkness. Earth was below the horizon today, but he saw Mars,

clear and sharp against the backdrop of space. They wouldn't have done a fool thing like this to him on Mars, he thought. They weren't shorthanded there. But here, on Venus, the stepchild of space, the U.N. appropriation was bestowed grudingly, and the technical staff was no more than skin-deep. Stasek scowled and thought of his unfinished work, and got even angrier.

He was tackling the problem of the energy-eaters, those totally mysterious, wholly baffling lifeforms that had been discovered about five years back, drifting seemingly at random through the universe. Nobody had gotten close enough to an energy-eater to find out anything about its makeup, though it was a pretty good guess that they were nonprotoplasmic. They had the damndest metabolism ever. Raw energy, that was what they gobbled, erg on erg. Solar energy? Sure. Any kind. The shielded spy satellites that skimmed the photosphere had seen energy-eaters drifting right across the face of the sun, emitting electromagnetic radiation right up and down the spectrum as they ate. Photosphere heat didn't seem to bother them at all.

Of course, they took their snacks elsewhere, too. One of their favorite tricks was to sidle up to a space satellite and drain its solar batteries dry, drink up its accumulators as though they were so much Dom Perignon. For a prank, too, the energy-eaters might burp out a bit of energy, enough to nudge the satellite right out of orbit. You didn't have to perturb a satellite's orbit very seriously in order to send it spiralling into the sun.

The satellites were important, and hardly expendable. They were up there for a variety of reasons. Some were communications relays, handling messages on the Mars-Earth-Venus circuit. Others were sunpot observation platforms. Others were energy accumulators, soaking up the sunshine and beaming it to darkside Venus and to Mars. There weren't enough big fusion converters around yet to handle all energy needs; solar batteries still were important. And there were half a dozen other uses for the belt of satellites. They weren't toys.

Which was why Jimmy Stasek was sitting back of a blowtorch's controls, heading sunward from Venus to take care of them.

He couldn't do the fine-scale work, of course. He didn't have the technical background for that. But he knew how to jolt a satellite back onto orbit after it had been perturbed, and he knew how to replace a burned-out bank of accumulators, and he knew how to do the other little odd jobs that had to be done. You learned

more than your own specialty, when you went to space, and Stasek had always had a mechanical knack.

He could do the job. But he didn't *want* to. He wanted to be back in his lab, running through the data on energy-eaters and trying to figure some pattern. The trouble was that hardly anyone had ever *seen* an energy-eater. They didn't seem to go any further out than about 50,000,000 miles from the sun. Now and then, pilots making the Mercury run had spotted them. Somehow, though, anyone who had ever come really close to an energy-eater had failed to survive the meeting. Nobody knew what happened to such unfortunates. It just seemed as though these particular snarks were boojums, every single time. When you met one, you softly and suddenly vanished away.

THE blowtorch headed inward, sunward. The computer knew where all the satellites were supposed to be, and would take him to them, one by one, as their orbits were crossed. If they were off orbit, it was Stasek's job to find them, feed the data to his computer, and discover how much of a nudge it would take to put the satellites back in their proper path.

The first satellite was okay. Stasek found it on a solar orbit half a million miles out from Venus. It had suffered some minor meteor damage, but was almost smack on orbit even so, and functioning properly. Stasek matched velocities with it for a while and ran some routine checks, but nothing needed to be done.

The second satellite, a few hundred thousand miles on, was in bad need of a tune-up, though. Deftly, Stasek hung his blowtorch in a parking orbit alongside, got out, squirted himself over to the satellite and went to work, for all the world like the video repairman he had once dreamed of being. In half an hour he had wired an entirely new battery series into the circuitry, corrected a minor malfunction of the meteor screen, and twisted the slightly battered mouth of the cosmic-ray trap back into the more receptive position it was supposed to have. Then he moved on.

He serviced a third satellite, and a fourth. His pride in his own craftsmanship almost made him forget how sore he was at being sent out to do donkey-work of this sort. Almost. He couldn't help reflecting, though, that he was wasting precious time and risking his even more precious life for the sake of a job that any nineteen-year-old technician could be doing. What was the use of a man's spending ten

years getting special training, if they sent him out on a mission like this?

Stasek growled in the general direction of Venus. Then he got moving again, on to the next satellite, and the next, and the next.

He was homing in on the ninth orbiter in the series when he saw the energy-eater.

IT was wrapped around the satellite like a starfish around a clam. Stasek cut in the manual drive and improvised an observing orbit a couple of miles away, while he took a good, long, close look.

The energy-eater fit all the descriptions. It was shapeless, featureless, and of no particular color. It seemed more purple than anything else to Stasek, but, as he watched, the energy-eater's light emission shifted in easy stages toward the low-frequency end of the spectrum, and a moment later it was glowing cherry-red at him.

The chart said that this particular satellite had a twenty-foot diameter. The energy-eater was wrapped completely around it, engulfing it. But, so the eyewitness reports went, energy-eaters could expand or shrink within an enormous range of sizes, and bigger ones than this had been reported.

The chart also gave the satellite's orbit as something a couple of degrees different from the one it was currently moving on. The energy-eater had hauled it a bit toward the sun. Stasek didn't bother to check, but it seemed likely that the satellite was now on a collision course with the sun, which would mean the waste of a couple of megabucks of United Nations money unless Stasek could shoo the alien creature away and restore the right orbit.

The trouble was, Stasek didn't give much of a damn about the satellite. He would rescue it, yes, if he had the chance. But he was a lot more interested in studying the energy-eater, now that this lucky break had dumped one right in his lap. All at once, he didn't feel so annoyed about having been ordered out here. He had made dozens of trips through this part of space, *looking* for energy-eaters, without ever catching so much as a glimpse of one. So of course it would happen that when he came out here unwillingly, grumbling and mumbling every step of the way, he would run right into one.

The regulations were quite specific on what you were supposed to do if you came across an energy-eater. First of all, you were supposed to contact the nearest base and file a full report on what you saw. Secondly, you were supposed to get the devil

out of the vicinity—especially if you were out there alone. The one thing you were not supposed to do was to approach the energy-eater in any kind of attempt to make contact or close-range observations. Too many men had been lost that way. There were too many boojums out here.

Those were the regulations.

To hell with the regulations, Stasek thought.

He had come this far on a fool's errand. He wasn't going to go meekly away, now that he had stumbled across something that might make the whole trip worthwhile. Nobody knew more about energy-eaters than he did, only he knew hardly anything about them at all. He might never get a better chance to observe one, not if he wandered around out here for the next two hundred years.

First, though, he realized he had better tell home base about it. Just in case—

HE made contact. He gave his coordinates and said, "There's an energy-eater out here. Munching on XIX-AB."

"You really found one?" gulped the communications man.

"Damn right," Stasek said. "You taping this? Here's the description."

Stasek described the energy-eater meticulously, the way he had always hoped other observers would do it in the reports that eventually found their way to his desk. Before he had finished, he was aware that others at the Venus end had cut into his line, and when he indicated that he was through, he heard his supervisor's voice saying, "All right, Stasek. Now get the devil away from the thing before you land in trouble."

"I've got some further observations to make, sir."

"Like hell you do. You know the regulations."

For the second time that day, Stasek felt anger flare within him. A muscle throbbed in his cheek; he clamped his gloved hands into fists. Tightly he said, "I'm sorry, sir. The energy-eaters are my project, and I've got to have a good look. This may be the best chance I'll ever get."

"Stasek, you listen to me! Do you hear—"

"Sorry, sir." He jabbed at the set, cutting off the incoming signal. They could hear him, if he had anything to report, but they wouldn't be able to expostulate with him. Damned idiocy! Sending a man all the way out here, and then not letting him do his proper work!

He got the blowtorch out of its observation orbit and jockeyed it closer to the infested satellite, studying the energy-eater in chilled fascination. It seemed to

be no more than a bundle of radiation itself, nothing organic about it. Yet reports said that they were sentient, that they thought and reacted and even communicated.

Maybe so, maybe not. Stasek had never known what to believe, in the reports he got. The only observations you could really trust, in the long run, were your own—and sometimes you couldn't even be too sure of those.

His blowtorch was no more than a hundred yards from the satellite, now. Delicately, he matched velocities and stayed put. The energy-eater seemed disturbed. It had puckered itself up around one pole of the satellite, contracting to less than a quarter of its earlier size. There it was, bulging out of the satellite, radiating deep purple again.

"The energy-eater has drawn himself up in a knot," Stasek said into the microphone. "He looks like a big ameba, I'd say. He seems bothered by my presence here. Now he's developing a kind of pseudopod that's coming up out of the middle of the heap. Eight, ten feet long, I'd say. Waving around—almost sniffing, really. And now—"

Abruptly Stasek stopped talking. The pseudopod grew from eight to eighty feet in a fraction of a second, and then to three hundred. A loop of alien life-stuff wrapped itself around the nose of Stasek's blowtorch. A moment later, the energy-eater came oozing up its own pseudopod, pulling away from the satellite and plastering itself like a thin layer of jelly all over the blowtorch.

Shaken, Stasek said, "It's on the torch, now. Happened very fast. I can see it moving beyond my window here And—and—I'll be damned if it isn't trying to *tell* me something!"

THERE were no words, of course.

Just a steady throbbing beat against Stasek's brain, and a sudden idea sprouting out of nowhere: the idea of hunger.

Stasek wasn't hungry. He had had a big meal not too long before, and in any case this wasn't the sort of situation that tends to sharpen a man's appetite. It was the thing outside that was hungry, and the energy-eater had somehow let Stasek know about it.

Hungry. Hungry. Hungry.

"Hungry for what?" Stasek found himself asking.

As though in answer, an image blossomed in Stasek's mind: a golden sun, streaming radiantly, shooting tongues of fire hundreds of thousands of miles outward.

"For energy?" Stasek asked. "Yes, sure. Of course you are.

What else would you want to eat?"

The energy-eater was congealing, again, pulling together on the snout of the blowtorch. When it had first come over from the satellite, it had spread out everywhere on the little ship. Now it was a ball about a foot in diameter, right on the nose. It radiated soft green light.

Stasek picked up another thought. It was one that he did not like at all. It was the unmistakable image of the blowtorch heading sunward with the energy-eater riding happily on the prow.

"No," Stasek said. "We can't do that. I'm not built for riding through the sun. Neither is the ship. I'll die. The ship will melt."

Blank incomprehension greeted his words. For a moment, Stasek felt no contact at all with the creature outside. Then the image returned: the blowtorch heading for the sun.

"You want a free ride?" Stasek asked. "I'm sorry. No go."

He was uncomfortably aware that the orbit of the blowtorch was changing. The satellite where he had originally spied the energy-eater had sailed off on an orbit of its own, and was a goodly distance away by now. Somehow, the energy-eater had managed to deflect the blowtorch inward by a degree or two. Stasek began to sweat. He keyed in the computer and told it to correct the orbit, get it off what was almost certainly a sun-bound track.

The computer didn't do a thing. The computer helplessly flashed the red light that said it was having a system breakdown. Bathed in sweat, now, Stasek keyed in the auxiliary navigation aid, and found that it, too, was frozen.

He looked at the creature perched outside. "How the hell did you do that?" he asked.

A sensation of bland self-satisfaction came back.

"You can monkey with my circuits?" Stasek asked. "You can freeze the whole works?"

Affirmative.

"Will you cut it out?" Stasek radioed. "I don't want to ride into the sun. Let go of the controls."

Negative.

SUDDENLY, Stasek began to realize why none of the other spacemen who had had close contact with energy-eaters had ever come home. The sun was an awfully warm place.

He went to his manuals and tried to give the torch an orbit-correcting jolt. Nothing happened. Somehow the energy-eater had interposed his own influence between Stasek's control panel and the guts of the ship. Was the blowtorch shorted completely, Stasek wondered? Were

they going to drift helplessly right into the sun?

Just for the hell of it, he punched out an orbit that would be even more directly sunward, and tried the manuals again. This time they worked. A jolt of energy flared at the tail, and the nose of the blowtorch swung around. Stasek tried the computer, and found that it, too, would work—but only to take the ship in the direction the energy-eater wanted to go.

"Very cute," Stasek said. "We can go anywhere at all, so long as it's toward the sun."

Affirmative.

There was a good hunk of space betwen Stasek and the sun, at the moment—better than twenty million miles. But it was not necessary to ride all the way into the heart of the sun to get cooked. He'd be crossing the orbit of Mercury soon. The heat would begin to build up. The blowtorch's heat-shields would last only so long. Then they'd be that much slag—and he'd be a heap of charred ash a short while afterward.

"You can get to the sun without me," Stasek told the energy-eater. "Why take me along?"

It wasn't easy to understand the reply. But it seemed to Stasek that the energy-eater was telling him that it was more fun to make the trip with company.

HALF an hour later, Stasek was beginning to fry. The blowtorch was aimed right into the sun now, and it was impossible for Stasek to use his controls for anything but sunward acceleration. They were moving at a good clip, now. The heat-shields were complaining, giving off a high whine as they desperately tried to shunt the incoming radiation off into space. Stasek's mood was one of calm desperation. There was no sense panicking, he thought. He wasn't going to die. At least, not yet. He could always abandon ship and set himself up as a little satellite of his own, and touch off a rescue beacon and wait to be rescued. About once out of ten, they actually did rescue castaways before they starved or died of thirst. Those were fair odds. The odds against surviving a plunge into the sun were a lot worse.

Of course, he'd be a laughingstock when he got home. They'd break him for having disobeyed orders and lost his ship. And he'd never live down the fact that he, the so-called student of energy-eaters, had been captured by one and dragged off on a wild sunward jaunt.

The A level of heat-shields had given out, now, expiring with a throbbing little whimper. The cabin temperature was up around 150, now. The temperature in Stasek's suit was only

110, not exactly balmy. Looking outside, Stasek could see the remains of the heat shields ablating off and disappearing. He wondered how long it would be before the ship began to melt.

It got hotter. There were deformation streaks in the cabin window, now. The B level of heat-shields was ready to call it quits. That left C level and D level, and when they were gone, well, it was the end of the road.

He talked to the energy-eater. He cajoled it. He pleaded with it. He begged it to change its mind and let him head the ship the other way. No use. It was like arguing with a fish, or with a woman.

Then he got angry—again.

Of all the idiotic messes! To die, or to be disgraced, for *this!* No, Stasek thought. He wouldn't let it happen.

"Hey, you moron out there!" Stasek called. "Listen to me! I've got food for you. Good food, you dope! You don't need to bother with the sun. I've got all the food you can eat."

He got an expression of interest.

Rage made him tremble. All day long, he had been a puppet, pushed around first by his supervisor, now by this inane bundle of alien intelligence out there. He had had enough.

"I've got a sun of my own," he said. "A little one, right here in the ship. Come look, if you don't believe me. And I've got a bigger one back home. You can live right in it. You can eat all you want, you lousy glutton!"

THE very force of his anger seemed to make an impression on the energy-eater. At his boiling point now, Stasek erupted with a torrent of verbiage, extending a friendly invitation in one sentence, haranguing the energy-eater for its mindless, destructive stupidity in the next. The alien seemed fascinated. It took on a triangular shape, and rippled and throbbed, going from color to color.

"Do you hear me?" Stasek bellowed. "Will you do as I say?"

The alien continued to ripple. The walls of the cabin were ripping now too, as waves of heat deformed them. Stasek could feel his suit starting to overheat. He didn't dare check on what the suit temperature was. He didn't give a damn, any more. Let the alien-eater drag him right into the sun. Let the blank-blank belt of satellites fall into the sun too, and Earth and Mars and Venus, and—

And suddenly the energy-eater was right inside the cabin with him.

It had contracted into a globe about the size of a basketball, and hovered impudently in mid-air a couple of feet away from

him. There was no mistaking its thought.

It was telling him:

I'm hungry, it was saying. Put up or shut up.

"Sure," Stasek said. "Just follow me, and don't eat anything you aren't allowed to eat."

He led the alien back into the drive compartment of the ship. Opening the hatch, he pointed to the chamber that housed the little fusion generator.

"In there," Stasek said. "And leave a little energy for me, will you. I'll need it to get home."

SOME hours later, the blowtorch limped into its home base. It was pretty much of a mess, but nothing that couldn't be repaired in a couple of weeks. It needed a new set of heat shields and a new skin, among other things. But, since Stasek had stopped off on the way back to rescue that sunward-heading satellite, the trip had been worthwhile.

And he had a passenger.

On the way in, he had radioed advance word, and everything was ready for him. He put the blowtorch down on manuals. The field was clear. Stasek got out, and so did the energy-eater. Stasek crossed the field, with the energy-eater hovering like a toy balloon a couple of feet above his shoulder. He took a diagonal course to the power station. Nick Vaughn was waiting there, his expression no longer a mocking one, but a look now of dazed disbelief.

He glanced at Stasek, then at the alien. "You sure this thing isn't going to hurt the converter?" Vaughn asked.

Stasek shook his head. "He just wants to mooch a meal," he said. "Let him in there and let him tap off some energy. We've got a tame one, I think. If he sticks around, we'll have our first chance to learn something about these critters."

Vaughn nodded mutely. He opened a passageway, and Stasek led the energy-eater down into the depths of the station. Beyond, within a bottle of magnetic force, a fusion reaction blazed and strained like a pinioned giant. The energy-eater drifted gaily into the heart of the converter. Vaughn looked at dials.

"I'll be damned," he muttered. "He's *feeding*."

"Sure he is," Stasek said. "I convinced him that it might be just as much fun to eat off a man-made sun as out of the regular kind. And he agreed.'

"How'd you work it, though?"

Stasek grinned. "I lost my temper, that's how. It happens that I've got a pretty low boiling point."

THE END

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