

THE BOOK OF SABERHAGEN

By Fred Saberhagen

FIRST A WORD FROM THE AUTHOR...

So here are some stories, written over a period of about thirteen years, from when I first began to sell up to 1973. I like them all, and I hope you will agree with me on some of them at least. I've struggled with them all, too, bringing them into being, and it was a pleasure to relive those earlier struggles while getting them ready for this book. Not that very much has been changed, even in the earlier stories. Here and there I've cut out some words that strike me now as useless, translated miles into kilometers (we'll all be using metric, long before we start out for the stars) or pruned away a bit of outdated slang or jargon. In the earlier stories there are some things that I would do differently today, or perhaps not be interested in doing at all, but on the whole I still enjoy them, or I wouldn't attach my name.

Writing science fiction is for me the finest job in the world, and I intend to do a lot more of it in the next thirteen years and after.

—Fred Saberhagen

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It used to be the usual thing for the lecturer popularizing astronomy to try to bring home to his audience the scale of astronomical distances by saying they would need three weeks to fly to the moon by airplane (if intervening air were available), three years (or whatever) to reach Mars by the same means, and so on. I don't know that these imaginative exercises were ever of much help to me in trying to realize the distances involved—just looking up and out at night does that, in my case, almost frightening well—but they did eventually provide the idea for my first published story.

THE LONG WAY HOME

When Marty first saw the thing it was nearly dead ahead, eight hundred thousand kilometers away, a tiny green blip that repeated itself every five seconds on the screen of his distant search radar.

He was six and a half billion kilometers from Sol and heading out, working his way slowly through a small swarm of rock chunks that swung in a slow sun-orbit out here beyond Pluto, looking for valuable minerals in a concentration that would make mining profitable.

The thing on his radar screen looked quite small and therefore not too promising. But, as it was almost in his path, no great effort would be required to investigate. For all he knew, it might be solid germanium. And nothing better was in sight at the moment.

Marty leaned back in the control seat and said: "We've got one coming up, baby." He had no need to address himself any more exactly. Only one other human was aboard the *Clementine*, or, to his knowledge, anywhere within a couple of billion kilometers.

Laura's voice answered through a speaker, from the kitchen two decks below. "Oh, close? Have we got time for breakfast?"

Marty studied the radar. "About five hours if we maintain speed. Hope it won't be a waste of energy to decelerate and look the thing over." He gave *Clem's* main computer the problem of finding the most economical engine use to approach his find and reach zero velocity relative to it.

"Come and eat!"

"All right." He and the computer studied the blip together for a few seconds. Then the man, not considering it anything of unusual importance, left the control room to have breakfast with his bride of three months. As he walked downstairs in the steadily maintained artificial gravity, he heard the engines starting.

A few hours later he examined his new find much more closely, with a rapidly focusing alertness that balanced between an explorer's caution and a prospector's elation at a possibly huge strike.

The incredible shape of X, becoming apparent as *Clem* drew within a few hundred kilometers, was what had Marty on the edge of his chair. It was a needle fifty kilometers long, approximately, and about a hundred meters thick—dimensions that matched exactly nothing Marty could expect to find anywhere in space.

It was obviously no random chunk of rock. And it was no spaceship that he had ever seen or heard of. One end of it pointed in the direction of Sol, causing him to suggest to Laura the idea of a miniature comet, complete with tail. She took him seriously at first, then remembered some facts about comets and swatted him playfully. "Oh, you!" she said.

Another, more real possibility quickly became obvious, with sobering effect. The ancient fear of the Alien that had haunted Earthmen through almost three thousand years of intermittent space exploration, that had never been realized, now peered into the snug control room through the green radar eye.

Aliens were always good for a joke when spacemen met and talked. But they turned out to be not particularly amusing when you were possibly confronting them, several billion kilometers from Earth. Especially, thought Marty, in a ship built for robot mining, ore refining, and hauling, not for diplomatic contacts or heroics. And with the only human assistance a girl on her first space trip, Marty hardly felt up to speaking for the human race in such a situation.

It took a minute to set the autopilot so that any sudden move by X would trigger alarms and such evasive tactics as *Clem* could manage. He then set a robot librarian to searching his microfilm files for any reference to a spaceship having X's incredible dimensions.

There was a chance—how good a chance he found hard to estimate, when any explanation looked somewhat wild—that X was a derelict, the wrecked hull of some ship dead for a decade, or a century, or a thousand years. By law of salvage, such a find would belong to him if he towed it into port. The value might be very high or very low. But the prospect was certainly intriguing.

Marty brought *Clem* to a stop relative to X, and noticed that his velocity to Sol now also hung at zero. "I wonder," he muttered. "Space anchor...?"

The space anchor had been in use for thousands of years. It was a device that enabled a ship *to* fasten itself to a particular point in the gravitational field of a massive body such as the sun. If X was anchored, it did not prove that there was still

life aboard her; once "dropped," an anchor could hold as long as a hull could last.

Laura brought sandwiches and a hot drink to him in the control room.

"If we call the Navy and they bring it in we won't get anything out of it," he told her between bites. "That's assuming it's—not alien."

"Could there be someone alive on it?" She was staring into the screen. Her face was solemn, but, he thought, not frightened.

"If it's human, you mean? No. I *know* there hasn't been any ship remotely like that used in recent years. Way, way back the Old Empire built some that were even bigger, but none I ever heard of with this crazy shape..."

The robot librarian indicated that it had drawn a blank. "See?" said Marty. "And I've even got most of the ancient types in there."

There was silence for a little while. The evening's recorded music started somewhere in the background.

"What would you do if I weren't along?" Laura asked him. He did not answer directly, but said something he had been considering. "I don't know the psychology of our hypothetical aliens. But it seems to me that if you set out exploring new solar systems, you do as Earthmen have always done—go with the best you have in the way of speed and weapons, Therefore if X is alien, I don't think *Clem* would stand a chance, trying to fight or run." He paused, frowning at the image of X. "That damned *shape*—it's just not right for anything."

"We could call the Navy—not that I'm saying we should, darling," she added hastily. "You decide, and I'll never complain either way. I'm just trying to help you think it out."

He looked at her, believed it about there never being any complaints, and squeezed her hand. Anything more seemed superfluous. "If I was alone," he said, "I'd jump into a suit, go look that thing over, haul it back to Ganymede, and sell it for a unique whatever-it-is. Maybe I'd make enough money to marry you in real style, and trade in *Clem* for a first-rate ship—or maybe even terraform an asteroid and keep a couple of robot prospectors. I don't know, though. Maybe we'd better call the Navy."

She laughed at him gently. "We're married enough already, and we had all the style I wanted. Besides, I don't think either of us would be very happy sitting on an asteroid. How long do you think it will take you to look it over?"

At the airlock door she had misgivings. "Oh, it *is* safe enough, isn't it? Marty, be careful and come back soon." She kissed him before he closed his helmet.

They had moved *Clem* to within a few kilometers of X. Marty mounted his spacebike and approached it slowly, from the side.

The vast length of X blotted out a thin strip of stars to his right and left, as if it were the distant shore of some vast island in a placid Terran sea, and the starclouds below him were the watery reflections of the ones above. But space was too black to permit such an illusion to endure.

The tiny FM radar on his bike showed him within three hundred meters of X. He killed his forward speed with a gentle application of retrojets and turned on a spotlight. Bright metal gleamed smoothly back at him as he swung the beam from side to side. Then he stopped it where a dark concavity showed up.

"Lifeboat berth... empty," he said aloud, looking through the bike's little telescope.

"Then it is a derelict? We're all right?" asked Laura's voice in his helmet.

"Looks that way, yeah, I guess there's no doubt of it. I'll go in for a closer look now." He eased his bike forward. X was evidently just some rare type of ship that neither he nor the compilers of the standard reference works in his library had ever heard of. Which sounded just a little foolish to him, but...

At ten meters' distance he killed speed again, set the bike on automatic stay-clear, made sure a line from it was fast to his belt, and launched himself out of the saddle gently, headfirst toward X.

The armored hands of his suit touched down first, easily and expertly. In a moment he was standing upright on the hull, held in place by magnetic boots. He looked around. He detected no response to his arrival.

Marty turned toward Sol, sighting down the kilometers of dark cylinder that seemingly dwindled to a point in the starry distance, like a road on which a man might travel home toward a tiny sun.

Near at hand the hull was smooth, looking like that of any ordinary spaceship. In the direction away from Sol, quite distant, he could vaguely see some sort of projections at right angles to the hull. He mounted his bike again and set off in that direction. When he neared the nearest projection, a kilometer and a half down the hull, he saw it to be a sort of enormous clamp that encircled X—or rather, part of a clamp. It ended a few meters from the hull, in rounded globs of metal that had once been molten but were now too cold to affect the thermometer Marty held against them. His radiation counter showed nothing above the normal background.

"Ah," said Marty after a moment, looking at the half-clamp.

"Something?"

"I think I've got it figured out. Not quite as weird as we thought. Let me check for one thing more." He steered the bike slowly around the circumference of X.

A third of the way around he came upon what looked like a shallow trench, a little

less than two meters wide and about half a meter deep, with a bottom that shone cloudy gray in his lights. It ran lengthwise on X as far as he could see in either direction.

A door-sized opening was cut in the clamp above the trench.

Marty nodded and smiled to himself, and gunned the bike around in an accelerating curve that aimed at the *Clementine*.

"It's not a spaceship at all, only a part of one," he told Laura a little later, digging in the microfilm file with his own hands, with the air of a man who knew what he was looking for. "That's why the librarian didn't turn it up. Now I remember reading about them. It's part of an Old Empire job of about two thousand years ago. They used a somewhat different drive than we do", one that made one enormous ship more economical to run than several normal-sized ones. They made these ships ready for a voyage by fastening together a number of long narrow sections side by side, how many depending on how much cargo they had to move. What we've found is obviously one of those sections."

Laura frowned. "It must have been a terrible job, putting those sections together and separating them, even in space."

"They used space anchors. That trench I mentioned? It has a force-field bottom, so an anchor could be sunk through it; then the whole section could be slid straight forward or back, in or out of the bunch... here, I've got it, I think. Put this strip in the viewer."

One picture, a photograph, showed what appeared to be one end of a bunch of long needles, in a glaring light, against a background of stars that looked unreal. The legend beneath gave a scanty description of the ship in flowing Old Empire script. Other pictures showed sections of the ship in some detail.

"This must be it, all right," said Marty thoughtfully. "Funny-looking old tub."

"I wonder what happened to wreck her."

"Drives sometimes exploded in those days, and that could have done it. And this one section got anchored to Sol somehow—it's funny."

"How long ago did it happen, do you suppose?" asked Laura. She had her arms folded as if she were a little cold, though it was not cold in the *Clementine*.

"Must be around two thousand years or more. These ships haven't been used for about that long." He picked up a stylus. "I better go over there with a big bag of tools tomorrow and take a look inside." He noted down a few things he thought he might need.

"Historians would probably pay a good price for the whole thing, untouched," she suggested, watching him draw doodles.

"That's a thought. But maybe there's something really valuable aboard—though I won't be able to give it anything like a thorough search, of course. The thing is anchored, remember. I'll probably have to break in anyway to release that."

She pointed to one of the diagrams. "Look, a section fifty kilometers long must be one of the passenger compartments. And according to this plan, it would have no drive at all of its own. We'll have to tow it."

He looked. "Right. Anyway, I don't think I'd care to try its drive if it had one."

He located airlocks on the plan and made himself generally familiar with it.

The next "morning" found Marty loading extra tools, gadgets, and explosives onto his bike. The trip to X (he still thought of it that way) was uneventful. This time he landed about a third of the way from one end, where he expected to find a handy airlock and have a choice of directions to explore once he got inside. He hoped to get the airlock open without letting out whatever atmosphere or gas was present in any of the main compartments, as a sudden drop in pressure might damage something in the unknown cargo.

He found a likely looking spot for entry where the plans had told him to expect one. It was a small auxiliary airlock, only a few meters from the space-anchor channel. The force-field bottom of that channel was, he knew, useless as a possible doorway. Though anchors could be raised and lowered through it, they remained partly imbedded in it at all times. Starting a new hole from scratch would cause the decompression he was trying to avoid, and possibly a dangerous explosion as well.

Marty began his attack on the airlock door cautiously, working with electronic sounding gear for a few minutes, trying to determine whether the inner door was closed as well. He had about decided that it was when something made him look up. He raised his head and sighted down the dark length of X toward Sol.

Something was moving toward him along the hull.

He was up in the bike saddle with his hand on a blaster before he realized what it was—that moving blur that distorted the stars seen through it, like heat waves in air. Without doubt, it was a space anchor. And it moved along the channel.

Marty rode the bike out a few meters and nudged it along slowly, following the anchor. It moved at about the pace of a fast walk. *Moved*... but it was sunk into space.

"Laura," he called. "Something odd here. Doppler this hull for me and see if it's moving."

Laura acknowledged in one businesslike word. Good girl, he thought. I won't have to worry about you. He coasted along the hull on the bike, staying even with the apparent movement of the anchor.

Laura's voice came: "It is moving now, toward Sol. About ten kilometers, per hour. Maybe less—it's hard to read, so slow."

"Good, that's what I thought." He hoped he sounded reassuring. He pondered the situation. It was the hull moving then, the force-field channel sliding past the fixed anchor. Whatever was causing it, it did not seem to be directed against him or the *Clem*. "Look, baby," he went on. "Something peculiar is happening." He explained about the anchor. "*Clem* may be no battleship, but I guess she's a match for any piece of wreckage."

"But you're out *there*!"

"I have to see this. I never saw anything like it before. Don't worry, I'll pull back if it looks at all dangerous." Something in the back of his mind told him to go back to his ship and call the Navy. He ignored the inner voice without much trouble. He had never thought much of calling the Navy.

About four hours later the incomprehensible anchor neared the end of its track, within thirty meters of what seemed to be X's stern. It slowed down and came to a gradual stop a few meters from the end of the track. For a minute nothing else happened. Marty reported the facts to Laura. He sat straight in the bike saddle, regarding the universe, which offered him no enlightenment.

In the space between the anchor and the end of the track, a second patterned shimmer appeared. It must necessarily have been let "down" into space from inside X. Marty felt a creeping chill. After a little while the first anchor vanished, withdrawn through the force-field of the hull.

Marty sat watching for twenty minutes, but nothing further happened. He realized that he had a crushing grip on the bike controls and that he was quivering with fatigue.

Laura and Marty took turns sleeping and watching, that night aboard the *Clementine*. About noon the next ship's day Laura was at the telescope when anchor number one reappeared, now at the "prow" of X. After a few moments the one at the stern vanished.

Marty looked at the communicator that he could use any time to call the Navy. Faster-than-light travel not being practical so near a sun, it would take them at least several hours to arrive after he decided he needed them. Then he beat his fist against a table and swore. "It can only be that there's some kind of mechanism in her still operating." He went to the telescope and watched number one anchor begin its

apparent slow journey sternward once more. "I don't know. I've got to settle this."

The doppler radar showed X was again creeping toward Sol at about ten kilometers an hour.

"Does it seem likely there'd be power left after two thousand years to operate such a mechanism?" Laura asked.

"I think so. Each passenger section had a hydrogen power lamp." He dug out the microfilm again. "Yeah, a small fusion lamp for electricity to light and heat the section, and to run the emergency equipment for..." His voice trailed off, then continued in a dazed tone: "For recycling food and water."

"Marty, what is it?"

He stood up, staring at the plan. "And the only radios were in the lifeboats, and the lifeboats are gone. I wonder... sure. The explosion could have torn them apart, blown them away so..."

"What are you talking about?"

He looked again at their communicator. "A transmitter that can get through the noise between here and Pluto wouldn't be easy to jury-rig, even now. In the Old Empire days..."

"What?"

"Now about air—" He seemed to wake up with a start, looked at her sheepishly. "Just an idea bit me." He grinned. "I'm making another trip."

An hour later he was landing on X for the third time, touching down near the "stern." He was riding the moving hull toward the anchor, but it was still many kilometers away.

The spot he had picked was near another small auxiliary airlock, upon which he began work immediately. After ascertaining that the inner door was closed, he drilled a hole in the outer door to relieve any inside pressure tending to hold it shut. The door-opening mechanism suffered from a cramp no doubt induced by twenty centuries of immobility, but a vibrator tool shook it loose enough to be operated by hand. The inside of the airlock looked like nothing more than the inside of an airlock.

He patched the hole he had made in the outer door so he would be able—he hoped—to open the inner one normally. He operated the outer door several times to make sure he could get out fast if he had to. After attaching a few extras from the bike to his suit, he said a quick and cheerful goodbye to Laura—not expecting his radio to work from inside the hull—and closed himself into the airlock. Using the vibrator again, he was able to work the control that should let whatever passed for hull atmosphere into the chamber. It came. His wrist gauge told him pressure was

building up to approximately spaceship normal, and his suit mikes began to pick up a faint hollow humming from somewhere. He very definitely kept suit and helmet sealed.

The inner door worked perfectly, testifying to the skill of the Old Empire builders. Marty found himself nearly Upside down as he went through, losing his footing and his sense of heroic adventure. In return he gained the knowledge that X's artificial gravity was still at least partially operational. Righting himself, he found that he was in a small anteroom banked with spacesuit lockers, now illuminated only by his suit lights but showing no signs of damage. There was a door in each wall.

He moved to try the one at his right. First drawing his blaster, he hesitated a moment, then slid it back into its holster. Swallowing, he eased the door open to find only another empty compartment, about the size of an average room and stripped of everything down to the bare deck and bulkheads.

Another door led him into a narrow passage where a few overhead lights burned dimly. Trying to watch over his shoulder and ahead at the same time, he followed the hall to a winding stair and began to climb, moving with all the silence possible in a spacesuit.

The stair brought him out onto a long gallery overlooking what could only be the main corridor of X, a passageway twenty meters wide and three decks high; it narrowed away to a point in the dim-lit distance.

A man came out of a doorway across the corridor, a deck below Marty.

He was an old man and may have been nearsighted, for he was unaware of the spacesuited figure gripping a railing and staring down at him. The old man wore a sort of tunic intricately embroidered with threads of different colors, and well tailored to his thin figure, leaving his legs and feet bare. He stood for a moment peering down the long corridor, while Marty stared down momentarily frozen in shock.

Recovering, Marty pulled back two slow steps from the railing, to where he stood mostly in shadow. Turning his head to follow the old man's gaze, he noticed that the force-field where the anchors traveled was visible running in a sunken strip down the center of the corridor. When the interstellar ship of which X was once a part had been in normal use, the strip might have been covered by a moving walkway of some kind.

The old man turned his attention to a tank where grew a mass of plants with flat, dark green leaves. He touched a leaf, then turned a valve that doled water into the tank from a thin pipe. Similar valves were clustered on the bulkhead behind the old man, and pipes ran from them to many other plant-filled tanks set at intervals down the corridor. "For oxygen," Marty said aloud in an almost calm voice, and was startled at the sound in his helmet. His helmet airspeaker was not turned on, so of

course the old man did not hear him. The old man pulled a red berry from one of the plants and ate it absently.

Marty made a move with his chin toward the airspeaker switch inside his helmet, but did not complete the move. He half lifted an arm to wave, but awed fear held him, made him back up slowly into the shadows at the rear of the gallery. Turning his head to the right he could see the near end of the corridor, and an anchor there, not sunken in space but raised almost out of the force-field on a framework at the end of the strip.

Near the stair he had ascended was a half-open door, leading into darkness. Marty realized he had turned off his suit lights without being conscious of it Moving carefully so the old man would not see, he lit one and probed the darkness beyond the door consciously. The room he entered was the first of a small suite that had once been a passenger cabin. The furniture was simple, but it was the first of any kind that he had seen aboard X. Garments hanging in one corner were similar to the old man's tunic, though no two were exactly alike in design. Marty fingered the fabric with one armored hand, holding it close to his faceplate. He nodded to himself; it seemed to be the kind of stuff produced by fiber-recycling machinery, and he doubted very much that it was anywhere near two thousand years old.

Marty emerged from the doorway of the little apartment, and stood in shadow with his suit lights out, looking around. The old man had disappeared. He remembered that the old man had gazed down the infinite-looking corridor as if expecting something. There was nothing new in sight that way. He turned up the gain of one of his suit mikes and focused it in that direction.

Many human voices were singing, somewhere down there, kilometers away. He started, and tried to interpret what he heard in some other way, but with an eerie thrill became convinced that his first interpretation was correct. While he contemplated going back to his bike and heading in that direction, he became aware that the singing was getting louder. And therefore no doubt closer.

He leaned back against the bulkhead in the shadow at the rear of the gallery. His dark suit would be practically invisible from the lighted corridor below, while he could see down with little difficulty. Part of his mind urged him to go back to Laura, to call the Navy, that these unknown people could be dangerous to him. But he could not bring himself to leave without seeing more. He grinned wryly as he realized that he was not going to get any salvage out of X after all.

Sweating in spite of his suit's coolers, he listened to the singing grow rapidly louder. Male and female voices rose and fell in an intricate melody, sometimes blending, sometimes chanting separate parts. The language was unknown to him.

Suddenly the people were in sight, first only as a faint dot of color in the distance.

As they drew nearer he could see that they walked in a long neat column eight abreast, four on each side of the central strip of force-field. Men and women, apparently teamed according to no fixed rule of age or sex or size—except that he saw no oldsters or young children.

The people sang and leaned forward as they walked, pulling their weight on heavy ropes that were intricately decorated, like their clothing and that of the old man who now stepped out of his doorway again to greet them. A few other oldsters of both sexes appeared near him to stand and wait. Through a briefly opened door Marty caught a glimpse of a well-lighted room holding machines he recognized as looms only because of the half-finished cloth they held. He shook his head wonderingly.

All at once the walkers were very near; hundreds of people pulling on ropes that led to a multiple whiffletree made of twisted metal pipes, that rode over the central trench. The whiffletree and the space anchor to which it was fastened were pulled past Marty—or rather the spot from which he watched was carried past the fixed anchor by the slow, human-powered thrust of X toward Sol.

Behind the anchor came a small group of children, from about the age of ten up to puberty. They pulled on ropes, drawing a cart that held what looked like containers for food and water. At the extreme rear of the procession marched a man in the prime of life, tall and athletic, wearing a magnificent headdress. About the time he drew even with Marty, this man stopped suddenly and uttered a sharp command. Instantly the pulling and singing ceased. Several men nearest the whiffletree moved in with quick precision and loosened it from the anchor. Others held the slackened ropes clear as the enormous inertia of X's mass carried the end of the force-field strip toward the anchor, which now jammed against the framework holding anchor number two, forcing the framework back where there had seemed to be no room.

A thick force-field pad now became visible to Marty behind the framework, expanding steadily as it absorbed the energy of the powerful stress between ship and anchor. Conduits of some kind, Marty saw, led away from the pad, possibly to where energy might be stored for use when it came time to start X creeping toward the sun again. A woman in a headdress now mounted the framework and released anchor number two, to drop into space "below" the hull and bind X fast to the place where it was now held by anchor number one. A crew of men came forward and began to raise anchor number one...

He found himself descending the stair, retracing his steps to the airlock. Behind him the voices of the people were raised in a steady recitation that might have been a prayer. Feeling somewhat as if he moved in a dream, he made no particular attempt at caution, but he met no one. He tried to think, to understand what he had witnessed. Vaguely, comprehension came.

Outside, he said: "I'm all right, Laura. I want to look at something at the other end and I'll come home." He scarcely heard what she said in reply, but realized that her answer had been almost instantaneous; she must have been listening steadily for his call all the time. He felt better.

The bike shot him fifty kilometers down the dreamlike length of X toward Sol in a few minutes. A lot faster than the people inside do their traveling, he thought... and Sol was dim ahead.

Almost recklessly he broke into X again, through an airlock near the prow. At this end of the force-field strip hung a gigantic block and tackle that would give a vast mechanical advantage to a few hundred people pulling against an anchor, when it came time for them to start the massive hull moving toward Sol once more.

He looked in almost unnoticed at a nursery, small children in the care of a few women. He thought one of the babies saw him and laughed at him as he watched through a hole in a bulkhead where a conduit had once passed.

"What is it?" asked Laura impatiently as he stepped exhausted out of the shower room aboard the *Clem*, wrapping a robe around himself. He could see his shock mirrored now in her face.

"People," he said, sitting down. "Alive over there. Earth people. Humans."

"You're all right?"

"Sure. It's just—God!" He told her about it briefly. "They must be descended from the survivors of the accident, whatever it was. Physically there's no reason why they couldn't live, when you come to think of it—even reproduce up to a limited number. Plants for oxygen—I bet their air's as good as ours. Recycling equipment for food and water, and the hydrogen power lamp still working to run it, and to give them light and gravity... they have about everything they need. Everything but a space-drive." He leaned back with a sigh and closed his eyes. It was hard for him to stop talking to her.

She was silent for a little, trying to assimilate it all. "But if they have hydrogen power couldn't they have rigged something?" she finally asked. "*Some* kind of drive, even if it was slow? Just one push and they'd keep moving."

Marty thought it over. "Moving a little faster won't help them." He sat up and opened his eyes again. "And they'd have a lot less work to do every day. I imagine too large a dose of leisure time could be fatal to all of them.

"Somehow they had the will to keep going, and the intelligence to find a way of life that worked for them, that kept them from going wild and killing each other. And their system evolved, and worked for their children and grandchildren, and after that..." Slowly he stood up. She followed him into the control room, where they

stood watching the image of X that was still focused on the telescope screen.

"All those years," Laura whispered. "All that time."

"Do you realize what they're doing?" he asked softly. "They're not just surviving, turned inward on weaving and designing and music.

"In a few hours they're going to get up and start another day's work. They're going to pull anchor number one back to the front of their ship and lower it. That's their morning job. Then someone left in the rear will raise anchor number two. Then the main group will start pulling against number one, as I saw them doing a little while ago, and their ship will begin to move toward Sol. Every day they go through this they move about fifty kilometers closer to home.

"Honey, these people are walking home and pulling their ship with them. It must be a religion with them by now, or something very near it..." He put an arm around Laura.

"Marty—how long would it take them?"

"Space is big," he said in a flat voice, as if quoting something he had been required to memorize. After a few moments he continued: "I said just moving a little faster won't help them. Let's say they've traveled fifty kilometers a day for two thousand years. That's—somewhere near thirty-six million kilometers. Almost enough to get from Mars to Earth at their nearest approach. But they've got a long way to go to reach the neighborhood of Mars's orbit. We're well out beyond Pluto here. Practically speaking, they're just about where they started from." He smiled wanly. "Really they're not far from home, for an interstellar ship. They had their accident almost on the doorstep of their own solar system, and they've been walking toward the threshold ever since."

Laura went to the communicator and began to set it up for the call that would bring the Navy. She paused. "How long would it take them now," she asked, "to get somewhere near Earth?"

"Hell would freeze over. But they can't know that anymore. Or maybe they still know it and it just doesn't bother them. They must just go on, tugging at that damned anchor day after day, year after year, with maybe a holiday now and then... I don't know how they do it. They work and sing and feel they're accomplishing something... and really they are, you know. They have a goal and they are moving toward it. I wonder what they say of Earth, how they think about it."

Slowly Laura continued to set up the communicator.

Marty watched her. "Are you sure?" he pleaded suddenly. "What are we doing to them?"

But she had already sent the call.

For better or worse, the long voyage was almost over.

Each science fiction writer tends, I suppose, to work mostly in a rather small number of "worlds" of his own devising, each world being (usually) a future that can be more or less reasonably extrapolated from our own unlikely reality. Here's a look into one of my earliest worlds, that of the Space Force.

PLANETEER

During the weeks that the starship *Yuan Chwang* had hovered in close Observation of the new planet Aqua, ship's time had been jockeyed around to agree with the suntime at the place chosen for first landing.

Boris Brazil saw no evidence of sane thinking behind this procedure; it meant the planeteers' briefing for the big event was set for 0200, and he had to get up in what was effectively the middle of the night—a thing to which he had grown accustomed, but never expected to learn to enjoy. Leaving his tiny cabin in a state of disorder that might have infuriated an inspecting officer—had there been an inspecting officer aboard interested in the neatness of cabins—he set forth in search of chow.

Brazil was tall and bony, resembling a blond young Abe Lincoln. He rubbed sleep from his eyes as his long legs carried him toward the mess hall. A distracting young squab from Computing sailed past him in the opposite direction, smiling.

"Good luck," she said.

"Is the coffee that bad?" It was the best facsimile of a joke he could think of this early.

But the girl hadn't been talking about coffee. Chief Planeteer Sam Gates had picked Brazil to go along on the first landing attempt, he learned when he met Gates in the chow line.

He saw by the small computer clipped to Sam's belt that the other man had been up early on his own, double-checking the crew chief and maintenance robots who were readying their scoutship. Brazil felt vaguely guilty—but not very. He might well have been just another body in the way.

Sam Gates stood in the chow line swinging his arms and snapping his fingers, chewing his dark moustache as he usually did when nervous.

"How's it look?" Brazil asked.

"Oh, free and clear. Guess well have ground under our feet in a few hours."

Most of the *Yuan Chwang's* twenty-four planeteers were in the chow line, with a fair number of people from other departments. The day's operation was going to be a big one for everybody.

Trays loaded with synthetic ham, and a scrambled substance not preceded by chickens, Gates and Brazil found a table. Ten scoutships were going down today, though only one would attempt to land; most of the night shift from all departments seemed to think it was time for lunch. The mess was filling up quickly.

"Here comes the alien," said Gates, gesturing with his fork.

Brazil raised his eyes toward the tall turbaned man bearing a tray in their direction. "Hi, Chan. Pull up a chair."

Chandragupta was no more an alien here than any other Earthman; his job had earned him the nickname.

"Good morning," said the Tribune with a smile, sitting down with Gates and Brazil. "I hope my people treat you well today." He had not yet seen one of "his people" and possibly never would; but from the moment high-altitude reconnaissance had established that intelligent life at an apparently primitive technological level existed on Aqua, his job had taken on substance. He was to represent the natives below in the councils aboard the *Yuan Chwang*, to argue at every turn for what he conceived to be their welfare, letting others worry about the scientific objectives that had brought the exploration ship so far from Earth, until he was satisfied that the natives needed no help or the mission was over.

"No reason to expect any trouble," said Brazil. Then, wondering what reaction he might provoke from his messmates, he added: "This one looks fairly simple."

"Except we know there are some kind of people down there," Gates said mildly. "And people are never as simple as you'd like them to be."

"I wonder if they will need my help," said Chan, "and I wonder if I will be able to help them." The job of Tribune was a new one, really still experimental. "In a few hours perhaps I will know."

"We're not trying to conquer them, you know," said Brazil, half amused and a little offended by Chan's eagerness to defend against his shipmates some people he had never seen.

"Oh, I know. But we must be careful not to conquer them by accident, eh?"

When Brazil got up to leave the mess, he could feel the eyes on his back, or thought he could. Here go the heroes, he thought. First landing. Hail, Hail.

And deep inside he felt a pride and joy so fierce he was embarrassed to admit it to himself—to be one of the first Earthmen stepping onto this unknown world.

Briefing was normal for a mission this size. The twenty planeteers who were going down into atmosphere, plus two reserve crews, slouched in their seats and scribbled notes and now and then whispered back and forth about business, concentrating so intently on the job at hand that an outsider might have thought them bored and distracted.

Captain Dietrich, boss of the *Yuan Chwang*, mounted the low dais in the front of the briefing room. He was a rather small man, of mild and bookish appearance. After working with him for a while, one tended to treat cautiously all small men of mild and bookish appearance.

Tribune Chandragupta entered the briefing room through the rear door. The captain eyed him thoughtfully. This was the first voyage on which he had been required to carry a Tribune; the idea had been born as a political move in the committee meetings of Earth Parliament, and had earned certain legislators reputations as defenders of liberty.

Captain Dietrich had no detectable wish to conquer anyone, having of course passed the Space Force psych tests, and he was willing to give the Tribune system a trial. After all, he could always overrule the man, on condition he thought it necessary for the safety of members of the expedition—though he was the only one aboard who could do so. But it seemed to the captain that this placing of a civilian official aboard his ship might be only the start of an effort by the groundbound government to encroach upon what he considered to be the domain of the Space Force. Every time he went home he heard complaints that the SF was growing too powerful and cost too much.

"Militarism," they would say, over a drink or anywhere he met civilians. "We've just managed to really get away from all that on Earth, and now you want to start all over, on Mars and Ganymede and this new military base on Aldebaran 2."

"The Martian colony is hardly a military base," he would remind them patiently. "It now has its own independent civilian government and sends representatives to Earth Parliament. The Space Force has practically pulled out of Mars altogether. Ganymede is a training base. Aldebaran 2 you're right about, mostly; and we do have other military bases."

"Aha! Now how do we know that none of these outlying bases or colonies will ever threaten Earth?"

"Because all spaceships and strategic weapons are controlled by the SF, and the SF is controlled by the psych tests that screen people trying to enter it. Admittedly, no system is perfect, but what are our alternatives?"

"We could cut down on this space exploration, maybe stop it altogether. It's devilish expensive, and there seems no hope it will ever relieve our crowding on Earth. What do we get out of it anyway that makes it really profitable?"

"Well," Captain Dietrich might say, "since you talk of militarism, I will ignore the valuable knowledge we have gained by exploration and answer you in military terms. We have the ability to travel hundreds of light-years in a matter of months, and to melt any known planet in minutes, with one ship delivering one weapon. How many races do you think live in our galaxy with similar capabilities?"

No Earthmen had met any but primitive aliens—yet. But people had begun to comprehend the magnitude of the galaxy, where man's hundred-light-year radius of domination gave him no more than a Jamestown Colony.

"Assume a race with such capabilities," the captain might continue, "and with motivations we might not be able to understand, spreading out across the galaxy as we are. Would you rather have them discover our military base on Aldebaran this year, or find all humanity crowded on one unprotected Earth, perhaps the year after next?"

Dietrich got a wide range of answers to this question. He himself would much prefer to meet the hypothetical advanced aliens a thousand light-years or more from Earth, with a number of large and effective military bases in between.

But right now it was time for him to start briefing his planeteers, who probably knew as much about Aqua as he, who had never driven a scoutship into her upper atmosphere.

"Gentlemen, we've found out a little about this planet, the only child of a Sol-type sun, after watching it for six weeks. One-point-one AU from its sun, gravity point-nine-five, diameter point-nine, eighty-five percent of surface is water. We won't try breathing it for some time yet. Full suits until further notice.

"What land there is, is probably quite well populated with what we think are humanoids with a technical level probably nowhere higher than that of medieval Europe. Several rather large sailing ships have been spotted in coastal waters. There are only a couple of long paved roads, and none of the cities are electrically lit on nightside. We don't think anyone down there can have spotted us yet."

Most of his audience looked back at him rather impatiently, as if to say: We know all this. We're the ones who found it out.

But the captain wanted to make sure they had all the basic facts in proper focus. "Our mission is to make contact with the natives. To establish a temporary scientific base on the surface for seismic studies, biological studies, and so forth—and of course to learn what we can from and about the intelligent inhabitants."

The captain raised his eyes and spoke as much to the Tribune as to his planeteers. "There seems very little chance of any permanent colony being established here, due to the native population on a very limited land area. This same factor would seem to preclude our establishing the temporary base in some remote area, without knowledge of the natives. So we will have to deal with them somehow from the start.

"I've never believed in the god-from-the-sky approach, and as you know, SF policy is to avoid it if possible. It falsifies from the start a relationship that may become permanent, even if we now intend it to be temporary. And he who takes godhood upon himself is likely to have to spend more time at it than at the business for which he came, and to assume responsibility for far-reaching changes in the native history."

The captain paused, then looked at another man who stood waiting to speak, paper in hand. "Meteorology?"

"Yes, sir."

On a wall appeared a photomap of the island that had been picked for the first landing attempt, an irregular shape of land about a hundred and fifty kilometers long by twenty wide. Air temperature at dawn in the landing area should be about fifty degrees F, the water a little cooler. There might be enough fog to aid the landing scoutship in an unseen descent

Meteorology also discussed atmospheric effects on communication between scouts and the mother ship, and predicted the weather in the landing area for the next day. He paused to answer a couple of questions, and introduced Passive Detection.

The PD man discussed Aqua's Van Allen belts, magnetic field, the variety and amount of solar radiation in nearby space, and that to be expected on the surface. He spoke of what the natives probably burned for heat and light in the nightside cities, and confirmed the apparent absence of any advanced technology.

Biology was next, with a prediction that the island would show diverse and active life. It was near the tropics in the spring hemisphere, and green with vegetation. Scout photos showed no evidence of very large animals or plants. Some areas appeared to be under cultivation.

Anthropology took the dais to speculate. The people of Aqua were thought to be humanoid, but in the photos anything as small as a man was at the very limit of visibility, and the estimate of the beings' appearance was based on lucky shots of dawn or dusk shadows striding gigantic across more or less level ground. There was some massive construction, probably of masonry, in the one sizable city on the island. A seawall and a couple of large structures had been built on a finger of land that protected the city's small harbor, where sailing ships were visible.

Captain Dietrich came back to outline the patterns he wanted the non-landing

scouts to fly. "The target island is pretty well isolated from the planet's main land areas, so if we put a base here it should have a minimal effect on native culture. Also, if we botch things up here, we may be able to move on and try again without the natives in the new spot having heard of us." He looked around at his men; the idea was strongly conveyed to them that the captain preferred they not botch things up. "Chan—anything you want to say? No? All right, board your scouts."

Brazil strode beside Gates out the door in the rear of the briefing room, passing under the sign that read:

Maybe... Anything.

Maybe they're real telepaths down there. Maybe they're a mighty race now retired from active competition and preferring the simple life. Maybe...

Never mind. It was time to follow the planeteers' motto: Go Down and Find Out.

Gates and Brazil now faced a final quick Medical & Psych exam in a ship's corridor. Brazil had long since given up trying to startle the psych doc by giving to the inevitable weird question an even weirder answer.

"I'd swear you were sane if I didn't know you better," the doctor told him this time. "Pass on."

They fitted themselves into the suits of Armor, Light, Space, and Ground, that had been selected for this job. The suits included among their accessories flotation bubbles that when inflated enabled the wearers to maneuver with supposed ease through water. The suits now received a quick semifinal test.

Captain Dietrich was waiting in the berth that was almost filled by the fifteenmeter-long stubby bulk of scoutship *Alpha*. Gates and Brazil juggled checklists and fishbowl helmets to offer him each an armored paw to shake. The captain said something about good luck.

The two planeteers climbed through the scout's hatch, twisting sideways with practiced movements to meet the ninety-degree shift in artificial gravity between mother ship and scout. Gates climbed on toward the control room while Brazil stayed to seal the hatch. On planet they would of course use an airlock.

Engines started. Ship's power off and disconnected. All personnel out of berth. Ready for sterilizing.

Lethal gas, swirling around the scout's hull, was mostly pumped away to be saved and reused. Then a blast of ultra-violate, more intense than the raw Sol-type sunshine outside, bathed the inside of the berth. No microorganisms must be carried down into atmosphere.

Strapped and clamped into control room chairs, ports sealed, watching the tiny world of the berth by video screen, Gates and Brazil were nearly ready. The berth door slid open on schedule, and what was left of gas inside went out in a faint puff of sudden mist.

The watery world that someone with little imagination had named Aqua, sixteen thousand kilometers away, filled the opening. A quarter of it was dayside, blue mottled white with patterned clouds; nightside was eerie with subtle atmospheric glows.

"Stand by one, Alpha," came over the radio. "A little trouble clearing Delta."

"Understand," said Sam Gates. "Hey, Boris, I like those tridi stories at home. The chap just drives his ship up to a new planet and lands. The faithful crew stands around scratching their heads. 'Well, what'll we do now?' says one. Then they wait for the hero to speak up."

" 'Let's get out and look around," said Brazil, grinning. " 'OK, but let's all be careful. Maybe we better close the door of the ship behind us."

Sam gave a rare smile. "And then one character takes his helmet off to eat a coconut. Only it turns out to be a chieftain's daughter."

"And they're all in the soup. They never seem to learn."

"Stand by, Alpha," said Operations over the radio, unnecessarily.

Gates pointed to the slim volume wedged under an arm of Brazil's chair, secured, like everything else aboard, against some possible failure of the artificial gravity. "What's the book this time?"

"Thoreau. I thought I might need a dose of philosophy if you get us stuck in the mud down there."

"Always meant to read the old nature-lover through someday." Gates nodded at the screens showing the waiting planet. "Wonder what he would have thought of all this."

Brazil looked at the image of the planet with the dawnline creeping imperceptibly across upper atmosphere as a rainbow of varying ionization and light pressure. He smiled at a sudden recollection, and quoted: "Walden Pond—let's see—'A field of water betrays the spirit that is in the air. It is continually receiving new life and motion from above... I see where the breeze dashes across it by the streaks or flakes of light. It is remarkable that we can look down on its surface. We shall, perhaps, look down thus on the surface of air at length, and mark where a still subtler spirit sweeps over it.' "

"He wrote that in the middle of the nineteenth century?" asked Gates, astonished.

"Let me see that book when you're done with it."

"You're clear for takeoff, Alpha. Good luck," said the radio.

Scoutship *Alpha* outraced the dawnline by an hour to the island and eased down on schedule, without hurry, into thicker and thicker air, until it entered predawn darkness and fog. Gates used his radar for the first time, to work his way down toward the water a few hundred meters off the rocky coast-tine.

Aqua was Brazil's ninth new planet. But I won't forget this one, he thought in some corner of his brain not used for watching instruments.

And he was right.

The plan called for an offshore landing unseen by the natives, the concealment of the scoutship under water but near land, and the going ashore of Gates and Brazil in protective suits to make contact with the local intelligent life. Tight-beam communication was to be maintained at all times with the *Yuan Chwang*. A small video eye rode above each planeteer's left ear; whatever the eye saw was transmitted to the mother ship.

The versatile and roughly humanoid robot that accompanied every scoutship (and followed men onto new planets, but rarely preceded them) would be left in the submerged scout, and would bring it to the human crew if they summoned it by radio.

The *Yuan Chwang* was not orbiting Aqua, but hovering and trying to keep its great bulk invisible, fifteen or sixteen thousand kilometers above the island. The other scouts were cruising in upper atmosphere in the general area of the target island, observing what they could.

Aboard *Alpha*, detection screens picked out what looked to Brazil like the infrared pattern of smoldering fires and fainter body heat of a small village where the recon photos had shown a village to be. Gates worked the scout by radar to an offshore point about a kilometer from the village, which lay on the shore of a small cove. He dipped the scout low enough to put a sonar probe under water and get a picture of the bottom.

"Nothing strange down there," said Gates. "Well go ahead."

Cutting in automatic stabilizers, he lowered the scout into and through choppy water and made slowly toward shore, while Brazil studied the ocean and bottom, trying to read half a dozen presentations at once.

Near the rocky upthrust of land, Gates let the little ship settle gently onto sandy bottom. He summoned the robot and told it to use enough drive to prevent the ship's sinking into the bottom. The robot got into the pilot's seat as the humans checklisted

themselves into helmets, out of the control room, and into the lock. They stood with legs spread and arms raised while gas and UV sterilized their suits and the chamber. Gates nodded and Brazil opened a valve to let alien sea into the lock; in a few seconds they stepped out of the world of checklists and into dark water. Brazil lingered to feel that the lock door was secured behind them, let gas into his flotation bubbles, and followed Gates up through the darkness. Once something like a luminous smoke ring curled greenly past them through the water.

"Can you bliphate the distance phlooh that?" asked a voice from the *Yuan Chwang*, half strangled by transmission through space, air, and water.

"Hard to say; I'd guess only a few meters," Gates answered, waiting until his head had broken surface and he had taken a look around. Brazil was right behind him; he could barely see Gates' helmet above the water three meters away. The rough rock face of the coastline was only a deeper darkness at one side. They paddled toward it; waves sloshed them against it; they gripped it and began to climb.

Earthmen emerged onto the land of a new world, looking more like primeval lungfish than lords of creation. They climbed rock uncertainly and slowly and halted at the top of a small cliff. The suits were engineered for easy movement and reasonable comfort for twenty-four continuous sealed-in hours in almost any environment. Old Planeteers sometimes said soberly that they needed a suit on to feel comfortable; but they usually preferred to take the suit off before sitting down to discuss how comfortably they wore it.

"Let's wait for a little more light," said Gates' radio voice.

Brazil sat down beside a large rock and tried to see what was on the inland slope away from the cliff.

The sun was not far below the hilly horizon now and a gray predawn light made the scene gradually intelligible. A faint excuse for a road wandered along a few yards away, roughly paralleling the shoreline; it might be a cattle path that led toward the village. Beyond the road were fields with a semicultivated look, holding orderly rows of squat bushes above a mat of low-growing vines that seemed to cover most of the ground in sight. Green hills rose beyond the fields.

The dawn brightened slowly. To Brazil, sunrises always brought awe, whether he saw them on an outworld, or on crowded Earth, or across the rusty deserts of the world to which his parents had emigrated and where he had been born. Sitting on this alien rock with sea water dripping from his armor, he thought: First Landing; it's like a First Morning. Let there be light.

"Light enough," said Gates. "Let's get started."

They walked on crunching vines to the road, heads swiveling constantly and air

microphones tuned to high sensitivity. Brazil caught himself listening for the apehowling that had accompanied each new morning on his last new planet. It wasn't good to carry such mental baggage on the job; he would have to unload it.

They paced along the faint road toward the village. The hard-packed brownish soil of the road held no informative prints of hooves or feet or wheels.

"Smoke ahead," Gates said suddenly. It was a barely visible vertical tracery in the sky, rising not far away.

The road curved around a craggy little hill; when they had rounded this, the village was before them. Large rowboats were beached on the sand of a small sheltered cove. Forty or fifty meters back from the water stood about twenty huts, built mainly from what looked like mats of the groundvine. A small stream trickled through the village, flowing from the direction of a structure like a low fortress, that stood beyond the huts and was much larger than any of them. Its dark walls of dried mud or clay were surrounded by a considerable space cleared of all vegetation.

Brazil turned his head to one side and saw his first native. His stomach went cold and he said to Gates: "On the rock up there. Look."

The native was undoubtedly humanoid and had apparently been dead a long time. He was bound somehow with vines to the crag that almost overhung the road, four or five meters above the Earthmen, and around his neck hung a placard that looked like cardboard, bearing a short inscription in bold characters resembling Arabic. He had been a tall man in life, by Earthly standards, and long strands of pale hair were still in evidence.

"Get this?" asked Gates of the observers in the sky.

"Affirmative. You're going on?"

"Don't see why not."

"We never mind these 'No Trespassing' signs," said Brazil, with an attempt at flippancy he didn't feel. Dead men were nothing new to him, but this one had a considerable resemblance to himself and had, so to speak, sneaked up on him.

There were no living people yet in sight, but there were shrill cries from the village, and a small flock of hawklike birds with oversized wings sprang up from among the huts. The birds were green and vivid orange against the misty sky and flew circling over the village.

"Let's go," said Gates.

They went down the sloping road toward the huts, trying to look confident but not frightening.

At an open gateway in the wall of the fortified structure a figure appeared, a red-

haired man dressed in dark jerkin and leggings and boots, with breastplate of silvery metal that matched the round helmet he carried in one hand. In the other was a spear. He stretched himself and yawned, and appeared to be trying to scratch his ribs with the helmet. He was still a good distance away and gave no sign that he had spotted two aliens in strange suits walking into his town.

The birds were more alert. The cries of the circling flock changed suddenly in tone, and in a moment it had become a living arrow launched at Gates and Brazil. The flock broke off just before contact, to circle the intruders in a blurred uproar of wings and claws, but several birds scraped the helmets, which were almost invisible in mild light, and came back to tear head-on at Brazil's apparently unprotected face.

The thud of impact was impressive; when Brazil's eyes opened from the reflex blink, the bird was flopping on the ground with something badly broken. He picked it up, intending to impress the natives with his friendliness by treating kindly their pet that had attacked him, and also to suggest to them that it was futile to attack; but it struggled and fought his armored hands so that he thought he was doing it more harm than good.

He set it gently down again as the first natives came blinking and shivering out of their huts to see what all the noise was about, some of them still pulling on scanty rags of clothing. They were all of a type with the body on the rock, blond, tall humanoids with deep chests and slender limbs; in the living people were visible a dozen small distinctions of facial and bodily proportion that added up to an obvious but not at first definable difference from any Earthman.

The red-haired man of the fortress had ducked inside the gateway, which was still open. A domestic-looking animal with plumes on its head looked out at the strangers with interest.

The blond natives stood together in front of their huts, as if waiting for a group picture to be taken, gaping at their visitors in silence. The watchbird flock still screamed and flew, now in widening circles, having given up assault at least temporarily.

Gates kept moving forward until he stood near the center of the cleared space between beach and huts. Brazil stopped beside him there and they stood almost motionless, smiling, arms spread with hands open, in the approved position for approaching Apparent Primitives who seem timid. The sun stood over the horizon now, dissipating the morning fog.

Brazil became aware that the whole crowd was watching *him*. Only now and then did one shoot a quick glance at Gates, as if puzzled about something.

Gates spoke via throat mike and radio, scarcely moving his smiling lips. "You look

like 'em, boy. I think you better play leader. They may never have seen anyone dark as me before."

Brazil made the practiced throat-muscle movement that switched on his airspeaker and opened his mouth to begin the greeting of his public with soothing sounds. He was interrupted by Sam's voice in his ear again. "Coming from the fort."

Six Apparent Primitives who looked anything but timid were marching in sloppy formation down the slope from the walled structure, straight toward the Earthmen, bearing spears and facial expressions that Brazil could not interpret as meaning anything good. They were all red-haired and armored, muscular, well-fed, and bulbous nosed, evidently of a different tribe or race than the blond hut-dwellers.

Brazil's bare foot audience watched the warriors' approach nervously and began to fade back into their huts. But one of the older men, who had been staring Brazil in the eye with an expression of intense and mounting emotion—the planeteer grew edgy at not being able to decide what emotion—now sprang forward to grab Brazil by the arm and harangue him with the first native speech he had heard, meanwhile looking at him with the gaze of a pleading worshiper.

The six red-haired warriors were very near and didn't look happy at all. They also seemed to be concentrating on Brazil.

With a cry as of great despair the old man tore himself away from Brazil and fled at top speed toward the huts. One of the approaching warriors threw his spear with a whipping, expert motion; it caught the old man in the back and sent, him dying on his face in the sand.

"Well, I'll be—" Boris Brazil roared out the first Earth words into the air of Aqua.

The red-haired warriors stood before him, eyeing him with what he interpreted as incredulous contempt. One of them barked something that he thought he could almost translate: '"What are you doing, you blond peasant clod, dressed up in that outlandish armor?" He probably looked more like a blond native in the suit, with his physical proportions somewhat concealed, than he would without it.

The one who had speared the old man started walking toward his victim, maybe to retrieve his weapon. Brazil started that way too, with no clear idea of what he was going to do, but with the feeling that the old man had appealed to him in vain for help.

As Brazil started to move, the five other spears were suddenly leveled at him. A hysterical blond boy ran out of a hut to kneel beside the old man and scream something that sounded nasty at the approaching warrior. Gates was standing motionless a few meters away. A spear thrust fast and hard against Brazil's chest with plain intent to kill, setting him back on his heels; a lordly voice from the *Yuan*

Chwang said in his ear, "This is not our affair." Brazil grabbed the thrusting spear in his left hand, jerked its owner forward off balance, and delivered with his armored right fist what seemed the appropriate greeting to an Apparent Primitive Attempting Murder of Earthman.

The blow knocked the man out from under his helmet and dropped him to the sand. Spears rocked Boris from all sides, clashed and slid around his helmet. He caught a glimpse of the sixth warrior kicking the boy, knocking him over, and pulling a short ax from his belt for a finishing blow.

The arm swinging back the ax suddenly released it; the weapon spun through the air to land some meters away and the warrior sat down suddenly and nervelessly. Sam Gates had decided it was time for stun pistols.

Before Brazil had reached the same conclusion, the four remaining spearmen had given up trying to stick him through his suit and were grabbing at his arms to hold him. Gates potted two more of them, in the legs, with silent and invisible force. The remaining two abandoned the fight and backed away toward their stronghold with spears leveled, shouting what was no doubt a call for reinforcements. The man that Brazil had felled got up and tottered dazedly after them.

"Let's get out of here," said Gates.

Brazil's eye swept around. The old man was dead, the spear still in him. The young boy who had been kicked was lying unconscious right in front of a warrior who was going to be considerably annoyed as soon as he felt a little better. Brazil scooped the child up and got him over his shoulders in a fireman's carry and looked at Gates, who gave a sort of facial shrug.

They strode at a good pace out of the village, with the watchbirds screaming a cheerful farewell. A few Reds were milling around the gateway of the fort as the Earthmen went over the rise and out of sight, but no organized pursuit was yet visible. Once out of sight of the village they began a steady loping run, the small body bouncing on Brazil's shoulders. Gates called for the robot to bring the scout up to the surface at the shoreline.

"This is the Tribune," said a voice. "What do you intend doing with that child?"

"Saving his neck," said Gates. "Maybe we can learn something from him too."

Brazil was gasping when he finished the climb down the rocks to the shoreline and set his unconscious burden—no, half conscious now, with a swelling lump on the forehead—down inside the airlock. The outer door shut behind Gates and the robot had the scout underwater and moving out to sea a moment later.

Entertaining an alien aboard a scoutship was something the Space Force had learned to plan for ahead of time. A door in the back of a suit locker led from the

airlock into the tiny Alien Room, into which Gates was now feeding atmosphere from outside, via snorkel and remote control. When the room was ready, Brazil carried the boy into it, sealing the door behind him. Gates could now decontaminate in the airlock, and go to the control room. Brazil would have to wear suit and helmet for a while yet.

Medical was already on the communicator in the Alien Room when Brazil turned to look at the screen, after putting the kid down on the bed-acceleration couch that took up most of the room, checking the air pressure and setting the temperature up a few degrees.

"Kid doesn't look too bad," Brazil told the doctor. He smiled reassuringly at the boy, who was now fully conscious and lay watching with wide eyes and a growing yellowish lump on his forehead. He might be ten or eleven years old, judged by Earth standards.

"Keep him quiet. Gates is going to get us some remote X-rays. You try for a blood sample as soon as possible. Do you think we'll have to feed him?"

"Yes. If we can keep him for a week or two we should get the language and a good line on the local culture. We've got synthetic proteins and simple sugars on the scout, of course, so I guess he won't starve—but I'll try for your blood sample first. And listen, this may be important—I'm turning off the video screen now. When we use it again, keep anyone with red hair off it. Use blond, noble, handsome people like me if possible."

Brazil started to call Sam on the intercom, but through a valve into the Alien Room came sterile blankets and a painless blood sample syringe, before he could ask for them.

Chandragupta's voice came into his helmet: "This is the Tribune. I have little complaint of your actions so far, except that striking that man with your fist at least bordered on the use of excessive force. But I must forbid you to keep that child any longer than is necessary for his own welfare."

"How long will that be, Chan?" asked Captain Dietrich's voice, getting no immediate answer. "Would the boy be welcomed home, or speared like that old man, or what? I think we'd better learn the language and customs before trying to decide. And as for Brazil's hitting that man—"

A debate went on. Brazil listened with one ear while he covered his guest with blankets and sat beside him, trying to inspire confidence.

"It's all right, sonny, it's all right." I hope. He patted the boy gently with his armored hand. That was the only treatment he dared attempt until he knew considerably more about the biology of his guest.

And the guest could be very valuable. Children made good subjects for First Contact as a rule, if they were not too young. Their minds adapted quickly to the alien. They caught on quickly to the game of language teaching. And they were likely to give an honest and direct view of their own culture.

Brazil handed the blood-sample syringe to the boy after locking the plunger. The kid took it after a brief hesitation, looked it over cautiously, then gave a sudden shy smile and said something that might have been a question. If his head was bothering him he gave no sign of it.

Brazil answered with some kindly nonsense and took the syringe back. He made a show of rubbing it on his own suited arm, turning his head to the other side as he did so. Then he turned the boy's head gently away and got his blood sample without fuss, on the first try. He valved the loaded syringe out into the airlock, where the robot came to load it into a courier tube that would carry it up to the *Yuan Chwang*.

Earth and Aqua life turned out to be too alien to one another for infectious disease to pose a problem either way. Brazil shed his suit with relief.

The courier tube returned before sunset with containers of vile-looking gunk that Supply swore would feed the boy, whose name was approximately Tim. Tim tasted the stuff but looked unhappy, so Gates went out spearflshing. Tim was pleased with some of the assortment and ate it raw, while turning down the rest in disgust. He seemed to be suffering no aftereffects from the kick in the head, but Brazil did his best to keep him quiet anyway.

For the next few days the scout stayed well out at sea, mostly submerged. Brazil spent most of his time in the Alien Room, pretending to learn Tim's language almost as fast as he could hear the words, while the linguistically expert brains, human and electronic, aboard the *Yuan Chwang*, looked and listened over his shoulder. They forgot nothing, and spoke into his ear, prompting him on what to say next.

Tim became restlessly active after getting over his first awed fascination with video screen, doors, acceleration couch, and plumbing. When told he was aboard a ship, he wanted to see it all. Brazil kept the robot, at least, out of Tim's sight, and had to struggle to learn more than he taught He played games with Tim to give him exercise, and to gather data on his physical strength and dexterity.

The hungry brains aboard the *Yuan Chwang* devoured Tim's language. Within two weeks they had fed it by memory tape to every planeteer. A few days of practice would give them command of it.

It was time for a major conference. The two planeteers on surface sat in with Captain Dietrich and the department heads above, via communicator, while Tim was confined discontentedly to the Alien Room.

"Gentlemen and ladies, we have a choice between two courses of action," the captain began. "We can try again to establish relations with the natives of this island, or pull out and start over somewhere else. I think we can agree that our only major problem on this island is likely to be intercultural."

No one disputed him. "I'd like to say that I hope we *can* find a way to set up a base on this island," said Biology. "That luminous water-ring was fascinating, though I'm not sure it's in my field. And that groundvine..."

"We can't complete our gravitic tables for this system without seismic measurements of the planet," put in Geology. "That island still looks like a good place to me."

"We've got the language here now," said Brazil. "Our First Contact tapes show the red tribe's speech is nearly the same as Tim's. And they're already trying to kill us on sight, so what can we lose by another try?"

Chandragupta said sharply: "The people of the island may lose, if we are not careful, Mr. Brazil. Indeed we may have caused substantial damage already, by inserting ourselves into a situation of considerable tension between two tribes—though any harm we may have done was accidental, and I do not blame anyone for it."

"Just what sort of damage can be attributed to our arrival?" asked the captain.

"I think I can explain what Chan means," said Sociology, clearing his throat. "The data we have from Tim fit in with what we 'saw on First Contact. Everything indicates that the island is ripe for civil war.

"The picture is this: a local settled tribe, fishermen and part-time farmers—the Blonds, as we have come to call them—invaded and conquered by a warrior tribe of the Viking type, probably fewer in numbers, The invaders seem to have come from the smaller islands farther north. Perhaps they were driven out themselves by someone else. Now they have settled down here as a ruling class. Tim says this invasion was a very long time ago, before he was born, but that his grandfather—the old man who unfortunately was killed during our First Contact—could remember a time when there were no Reds on the island. I'd guess the invasion was about fifty standard years ago. We've seen no evidence of intermarriage, although in fact we've seen none of the Red women or children yet."

"Tim talks of a day when his people will rise up and destroy the Reds," said Brazil. "The dream of his young life seems to be to find a way to slaughter them wholesale. He wants me to lead the revolution. Someone has talked a lot of war and rebellion to him, that's for sure.

"Tim's grandfather thought I was a tribal folk-hero, come back from the great beyond in strange armor to lead them out of slavery. That's what the old man was talking to me about; I suppose that's why they speared him. It's on the tape, of course. Now I can understand it." Brazil fell moodily silent.

"I suppose the First Contact incident might have touched off a full-scale Blond rebellion?" someone asked.

"If conditions had been just right, yes," said Sociology. "Apparently they were not."

Captain Dietrich spoke up: "During the last few days we've made numerous recon photo runs at high speed and comparatively low altitude. If there was any open warfare in progress, we'd almost certainly have seen it."

"How about that body lashed to the rock?" someone asked after a brief pause. "Have we learned anything on that?"

"Tim can't read or write," said Sociology, "so neither can we, yet. So we don't know what the placard hung around the fellow's neck says. Tim says the Reds put him up there because they were angry at him. Seems reasonable, if not illuminating."

"Captain, I wish we had made such photo runs as you now mention before First Contact," said the Tribune.

"We weren't sure of their technological level then," said the captain, a little wearily. "We didn't want them to spot us flying over. It's one of those choices you have to make. We didn't want to shock them by appearing as gods, remember?"

The discussion flowed on for a while. Finally Dietrich brought it back to his original question: "Shall we continue to try for a base on this island, or shall we move on?"

Chandragupta: "The question I must insist we try to answer, Captain, is this: How can we be helpful to the people of this island, where we have already interfered?"

The captain: "Chan, we didn't come all this way to open a social service bureau."

"I realize that, Captain." Grimly. "Nevertheless, I consider our effect upon the natives more important than seismic measurements. I would like to ask if you plan to conclude an agreement with the authorities controlling those Red soldiers, for a scientific base on the island?"

"I'm considering it."

"I believe our doing so would in effect recognize their authority to live as they do, holding another tribe in slavery."

Sociology raised his eyebrows. "It would be unusual if slavery could not be found

in some form at this level."

"Perhaps I should have been more precise. I consider it evil that a member of the ruling class should have it in his power to take at any time the life of one of the lower class, as we have seen here. I think we are now bound to try to correct such a condition. Of course we shall not be able, nor should we attempt, to establish our idea of a perfect society. But we must try to set these people on the road to greater freedom and justice." Chandragupta raised his voice above several protesting ones. "We are already committed to interference here, in my view. We must now see to it that the changes we produce are for the better."

The captain smiled faintly. "Are you arguing for the revolution now, Chan?"

"I think you know better." The Tribune was somewhat irritated. "We could hardly expect the total effect of a general armed uprising to be beneficial."

"Just what do you think we *should* do, then, to start these people on the road to greater freedom and justice, as you put it?"

Chandragupta sighed. "I think we must first investigate them further, to learn how best to help."

There was a little silence.

"Anyone have a further comment?" asked the captain. "All right, this is it. We continue work on this island. We try to stabilize native affairs on as just a basis as possible, and then deal for our base. Boris, you say Tim has relatives in an inland village who can hide him out from the Reds if need be?"

"So he tells me."

"All right. Take him to this inland village, tonight or tomorrow night. Talk with some of the adults there. Especially try to find out more about the political situation. Is there a Blond resistance group, how strong, and so on. Since we seem to be committed to some sort of interference here, we'd better get all the data we can, and quickly. Any questions?"

The following night was dark and foggy. Gates drove the scoutship silently and, as he hoped, invisibly over the island's hills toward the village of Tim's relatives. The boy acted as navigator, guiding an electronically presented green spot over a contour map of the island, with an air of sophistication. He had, he said, seen maps before, if not flying machines. But he was excited at the prospect of showing off Brazil in armor to people he knew, and telling them of the wonders he had seen. Brazil had given him orders to keep the scoutship's flying powers secret if possible.

Brazil changed the scale of the map to show only the area within a couple of

kilometers of the village. Tim guided Gates to a clear landing spot, out of sight of the village but within easy walking distance. Gates brought the scout down quickly, probing below with radar and infrared, until the little ship settled with a crackle of crushed vines into a tiny hollow between hills.

The cries and movement of small life alarmed by their landing gradually, quieted. There were no signs of human alarm.

Brazil suited up, for protection against dangers other than infection. He led Tim into the airlock, and paused for a final briefing.

"Now, who did we agree you should look for in the village?"

"First I will look for Sunto, who is one of my cousins. He hates the Reds and is not afraid of them. If he is not home I will seek Lorto or Tammammo, who are the junior headmen of the village. Only if I can find none of those will I talk to my female cousins, who do not understand these things. I will try to avoid Tamotim, who I think is still the boss headman here. He likes the Reds and tells them things. If I see no one who is safe to talk to I will come back here and we will talk over what to do next."

"And if someone stops you and asks you questions?"

"I will just say there is a strange man out here who wants to speak with someone from the village. I know what to do, you don't have to worry. I won't say you are our Warrior Spirit, or anything like that. Unless there are Reds in the village, who capture me; then I will cry out for Warrior Spirit and you will come and kill them, hey?"

"My name's not Warrior Spirit. And if you see any Reds, just come back." Brazil opened the lock's outer door and they stepped out and down into matted vines. "Remember, just say I brought you over the hills if anyone asks how you come to be here. No one else need know yet that my ship can fly."

"All right. Over that way is a path," said Tim, becoming oriented. "And that way is the village."

"Get going, then." Brazil sent him off with a gentle shove, and then stood quietly, testing the alien night with artificially aided senses.

The sound of Tim's bare feet faded quickly on the path.

"I'll take her up a ways," said Gates on radio.

"Good idea."

Brazil saw the dark bulk of the scoutship lift in silence that was almost eerie even to him, and drift up out of sight into fog and darkness. No stars to see tonight. Well, he had seen enough of them. For a while.

He moved off and found the path with his infrared lamp and waited just at one side

of it. He hoped the kid wouldn't run into any trouble. About five minutes passed before the glass of his helmet, set for infrared translation, showed him some large life moving toward him along the trail from the village. "One—two of them, Sam, coming this way."

"Affirmative, I have them now."

"Boro?" His native name, called in a soft voice from the darkness.

Brazil switched his air mike on again. "Right here."

Tim approached him. "This is Tammammo with me, Boro. He is a junior headman."

Brazil gave the second vague shape a slight bow, which Tim had told him was the ordinary greeting between equals. "Sam, keep a sharp eye out. We need to use a little light down here." Planeteers worked their air-mike switches for such asides as quickly and naturally as they used their tongues for speech.

"Understand."

Brazil turned on what he hoped was a dim and non-startling electric glow from a suit lamp, revealing a Tammammo bug-eyed at being called out of his hut at night to meet what he might think was the Warrior Spirit.

Boris greeted him in a matter-of-fact, businesslike way. Maybe the fact that he spoke the common language of the peasants put the junior headman more at ease.

Tammammo had heard a version of the First Contact incident which began with the Red garrison of the coastal village executing an old man for daring to worship the Sea God in a way reserved for rulers. Dying, the elder had called a curse upon their heads, whereupon the Warrior Spirit of the Blonds appeared, and slew sixty Reds with a sweep of his arm—or perhaps it had taken several arm-sweeps, the point was uncertain. A Red magician, called upon by the enemy, had evoked from somewhere a dark and evil spirit, also clad in armor. The Blond Warrior had departed to do battle with this other elsewhere, not wishing to devastate the entire island in the struggle, but he was expected to win and would return shortly to—and this point was whispered very cautiously—slay all the Red warriors and turn over their women and children to the Blonds as slaves.

Tammammo almost managed to look Brazil hopefully in the eye as he finished the tale.

Tim started to speak with the exasperated eagerness of a youngster to point out errors—or maybe in disappointment at being left out of the story altogether. But Brazil shushed him by putting a hand in front of his face. He spoke carefully to Tammammo.

"Junior headman—look at me carefully. I am only a man, nothing more. I am not a Warrior Spirit, or any kind of god. I am only a man from a far land, who looks like one of your people and wears armor that is strange to you. Now I wish to speak in private with the leaders of your people—not with the headman who tells everything to the Reds, but to the leaders of your own people, who may not be known to everyone. Do you understand me?"

"If you say you are a man, so be it." Tammammo seemed to be shivering with more than the night chill. "The leaders you speak of—I do not know anything about such matters, except for stories heard by all. There is a man in the village who might know. His name is Sunto. I can tell him what you want when I meet him. Will that please you?"

"It will. And I think there is no need for you to speak of me to anyone else."

"I will not! I will not!"

"Then send Sunto here to meet me at this time tomorrow night. One thing more, junior headman—this boy goes to live now with his relatives in your village. I want you, Tammammo, to see to it that no harm comes to him from the Reds. As I said, I am only a man, yet I can do many things. I would be quite angry if the Reds were to harm this boy. Do you understand?"

Tammammo indicated vehemently that he understood. Obviously he wished himself a thousand kilometers at sea, or anywhere out of this situation.

"Tim, keep out of trouble. Go, both of you, and send me Sunto here tomorrow night."

Evidently it was not a Blond habit to waste any time in farewells. Brazil watched them out of sight, realizing suddenly he was going to miss having the kid around. "OK, Sam, you can bring her down."

Trudging to where the scout was crackling down into vines again, Brazil paused and looked up with a sudden grin. "Hey, dark and evil spirit. How come you listen to what that Red magician says?"

"Shut up and get in."

Sunto appeared at the appointed place on the following night, escorted by Tim. This time the scout had not landed; Brazil was lowered the last few score meters by cable.

Sunto was less timid than Tammammo. He too had heard of the First Contact fight, but was shrewd enough to realize how events could change in the seeing and retelling. He professed no doubt that Brazil was only a man, and a friend of the

Blonds. Would he arrange a meeting with the Blond leaders? Certainly. Those leaders were meeting in the remote hills, three nights from now. Boro could come if he wished. There would be many large fires at the meeting place so it would be easy to find. Was Boro living in the hills now?

Did everyone know about this meeting? Brazil asked him. What if the Reds saw all those fires? Why had Tammammo been so timid in discussing Blond leaders?

Sunto did not seem to understand. He used several new words in trying to answer the questions. Eventually the idea came across that this was going to be a religious meeting, not political at all. He, Sunto, knew no more than that timid Tammammo about political matters. Of course the Reds would not interfere with this religious meeting; the Sea God would be angry with them if they did. True, the Reds controlled the Tower, but that didn't mean others couldn't hold meetings of this type, did it?

"Of course not," Brazil agreed soberly. He got a repeat on the time and place of the meeting, and went home to the scout.

They located the meeting without trouble, as Sunto had predicted. Brazil was lowered by cable again, a little distance away from the circle of fires in the hills near the center of the island. Gates held the scout overhead, ready for anything, while Brazil walked to the lighted area.

About fifty Blonds of both sexes were quietly busy with varied rituals within the illuminated circle. There were no detectable lookouts posted around the place, or any attempt at concealment.

Brazil watched for a little while, far enough away to be invisible to those near the fires. Then he walked slowly in on them, arms spread out in a gesture of peace. Gradually they became aware of him, the nearer people first. Within a few seconds all of them were standing still and watching. Then a few of them moved slightly, opening a lane from where Brazil stood to a place near the center of the circle. He could see now a low structure of stone that stood there, a couple of meters square. It might be an altar.

"Any advice?" he subvocalized to the watchers above.

"Best thing I can think of is to bow in greeting and tell them to proceed with what they're doing," said some anonymous expert. No one argued with him. The final decision rested, as usual, with the man on the spot, the planeteer.

He accepted the advice offered, and it seemed to go over well enough. The attention of the Blond group turned from him to the central altar, where a few men and women began to perform some simple rites. The others stood watching with folded arms. Brazil folded his. No one was sitting down, and he resigned himself to

what might be a long stand. He wished himself wearing Armor, Ground, Heavy, with powered legs that would let you nap standing if you wished.

Not that he wanted to nap now, although the ceremony had so far shown him nothing especially interesting. It had elements that Brazil had seen in life or on training tapes of a hundred primitive religions on a dozen planets.

But its climax was unique. A pair of muscular—deacons? Brazil could distinguish no one set apart as clergy—came from the darkness outside the waning firelight. They bore a large and heavy pottery vessel that wobbled in their grip as if it held a quantity of sloshing liquid. Someone held a torch to illuminate the altar top. A slender tower about fifty or sixty centimeters high had been built of small flat pebbles, surrounded by a low wall of similar construction.

The men with the jar approached the rear of the altar and raised the vessel toward it, as a woman thrust a trough into position. They tipped the big jar evenly. What looked like clear water sluiced out of it, guided by the trough toward the pebble-tower. For a moment Brazil thought the little structure might withstand the flood, but some vital part of the base gave way suddenly. The men continued to tilt the vessel smoothly until it was empty. The tower toppled, taking with it part of the surrounding wall. It was washed piecemeal from the sloping altar by the last of the flood.

It hit them hard, Brazil could see, looking from one Blond face to another in the firelight. None of them stirred for a long minute. Plainly the collapse of the tower had some evil significance. Tower? Sunto had mentioned a tower, connected with the Sea God, and controlled by the Reds.

The Blonds gradually shook off some of their gloom. Again they were turning toward Brazil.

"Ceremony didn't turn out too well, I think," said the voice from the *Yuan Chwang*. "Just hope they don't blame it on you."

Once more everyone was watching Brazil, except for a couple of men who had begun to dismantle the altar. Might as well get started, he thought. He could pick out no one as leader, and so spoke out loudly to the group: "I am a man who has come from a far land, and I would learn what I can about the people here."

The faint stir and whispering among them ceased, and all watched him with guarded faces. There was only the fire glow and crackle, and the twittering background of animals or insects.

"This—" Brazil realized he had no certain word for ritual. "What you have done at this meeting is strange to me. If I can do so without giving offense, I would learn about it. Will someone here tell me?"

A light dear voice came from somewhere in the background: "Are you he of whom

it is said, that he slew sixty Reds with a sweep of his arm?"

"It is said, but it is not true. I fought with six of them, but slew none."

"You fought with six of them, yet none of them slew you." The still anonymous voice used a more subtle grammar than Tim had taught and had a slightly different accent. With his limited experience in listening to the natives, Brazil could not identify it as male or female. But it smelled of authority to him.

"My armor is strong," he said, answering the implied question. "And I had help from one who is wrongly called a dark demon, who is only a man like me, my countryman and friend."

"So have I heard it." The speaker moved forward slowly into brighter firelight—a woman. Not a girl, and not an old woman, nor middle-aged. Not the kind that a man will follow with his eyes from the first glance, but the kind he will turn to see again a quarter-minute later, and remember. So Brazil thought of her at first sight, and only remembered with a start the subtle unearthliness of her face and body.

"So have I heard it, from those who were there and saw with open eyes." She came close to Brazil, dressed as simply as the others. She studied him. "You speak with the tongue of a simple Blond peasant."

"It was one such who taught me."

"You learned well. What is your name?"

"In your tongue it is best said as Boro. And what is yours, if I may ask without giving offense?"

She smiled. "Certainly, there has never been a god so fearful of giving offense. My name is Ariton. Tell these people whether you are god or man. I fear some of them will still not believe what you told Sunto."

Brazil loudly pledged again his membership in humanity.

Ariton waved her hand, and her people turned away. Most of them went to sit in a circle around where the altar had been. They began a low-voiced chant.

She walked with Brazil a little away from the group, and tried to answer his questions about the ceremony he had just witnessed. Her explanation was unintelligible with new words at first; finally he got her to simplify it enough for him to understand that the tiny tower on the altar had been an analog of a full-sized structure in the island's chief city. The big Tower was sacred to the Sea God. Now it was monopolized by the Red priests, and beside it the king of the Reds, Galamand, had built a castle. At mentioning the king's name, Ariton moved her foot as if grinding something into the dirt beneath her heel. Tim had sometimes done that when speaking of the Reds.

"And what did the water-pouring mean?"

"Maybe something bad." She looked at Brazil thoughtfully and raised a hand to touch his transparent helmet. "I have seen—before," she said, using a new word that he thought meant glass, from the context. "Now I will ask a question. Why could not the Reds slay you?"

"My armor is stronger than it looks."

"And why did you slay none of them?"

"There was no need."

"Those of my people who watched with open eyes say that you were angry at the killing of an old man you did not know. Why?"

Brazil pondered. "There was no need for his slaying, either, that I could see."

"Strong Red warriors could not hurt you with their spears," Ariton said thoughtfully. "And when they tried to seize you they were struck down by cramps and sickness, like swimmers who have entered cold water with full bellies. So the Sea God might..."

"But it was not the Sea God. Shall we sit down here?" He gallantly let her have the low boulder that presented itself, and crunched his armored seat down into groundvine. The suit was a load to stand around in, even at point-nine-five gravity.

"Where is your dark companion now? And your ship?"

"He is not far. And our ship is near the island." Some water from the altar flood had run into the nearest fire, and the light grew dimmer yet. There was no word in Brazil's ear from above.

"It might be thought that you and your friend are only castaways."

He took the suggestion calmly. "It is not so. Our ship is near, with others of my people aboard. My countrymen and I travel to learn about new lands that none of us has seen before. We would like to live on this island for a little while, perhaps a few years, on some land your people do not use. We do not want to boss your people, or take anything we do not pay for."

"I have no land to give anyone, while there are Reds on the island." Ariton's voice was sharp.

"Some of my people will talk to the Reds, too, about using land. But we will not trade with a tribe that holds another tribe in slavery."

She was puzzled. "But who does not own slaves, if he can? If we could enslave the Reds, we would. Do you own no slaves at home?"

"It has been very many years since my tribe held slaves. A tribe becomes stronger when it does not depend on them. My people have traveled far and looked at many tribes, and it is always so."

"But if all were free to choose, who would do the mean and dirty work of slaves by choice?" Ariton looked at him searchingly.

Brazil gave a faint sigh. "True, someone must do such work—sometimes someone must be forced to do it. But even such lowly persons should be treated as members of the tribe, and not killed or beaten as animals would be."

"And if there are two tribes, as on this island?"

"Two tribes can live together as one, if their leaders are wise and strong."

"That is a strange thought to me. But then I have never traveled in the far parts of the world." Ariton meditated for a few moments before she spoke again. "Will you, Boro, go to speak with the Red King about this matter of land? You still look like a Blond, so maybe the Reds will try again to kill or imprison you."

Brazil thought it over. "I may be the one who goes. It is only chance that I look like a Blond. My shipmates are of varied appearance; some of them resemble Reds." He thought to himself: What planeteers looks most like a Red? Foley, but his hair isn't nearly the right shade. A little dye will fix that, if need be.

"I will go with you, when you go to speak to Galamand," Ariton announced.

Brazil was surprised. "Can you walk into his castle at will?"

"I think Galamand will see me if I call on him." Ariton smiled. "I am a high priestess of the Sea God."

Another conference began as soon as Brazil was hoisted home to his scoutship.

"Religion may give us a way to promote unity here," said Sociology. "Since Reds and Blonds both worship the same Sea God."

"We have that Tower located, by the way," put in Captain Dietrich. "And what's probably the Red king's castle, or at least his summer home. It seems too far from fresh water to withstand a siege. Where's that chart? Here, on this peninsula that protects the harbor at Capital City, a large stone structure. Right next to it, on the side toward the ocean, is the tallest building on the island, a tower about thirty meters high. Then there's a seawall running the length of the peninsula, for protection against waves and maybe against invaders.

"Foley, you and Brazil will be visiting Galamand as soon as we can locate him. Get your hair dyed to match the Reds'. Maybe we can at least put over the idea that it's possible for Red and Blond to cooperate."

"I trust everything possible will be done to avoid another fight." Chandragupta wore a frown.

"We'll try," the captain said. "Is anyone against sending a delegation to Galamand as soon as possible?" It seemed that no one was.

"Should we take Ariton along, as she suggested?" Gates asked the conference.

"It might make us seem to be committed as her allies against the Reds."

"No doubt that's what she wants."

"But it would bring the two leaders face to face, with us present."

Planeteer Foley, hair reddened, was flown down and transferred to scoutship *Alpha*, which lay out at sea again. Gates intended to hold himself in reserve, on the scout.

Hoping to find out where the king was, and to arrange to take Ariton to the planned meeting, Brazil almost literally dropped in, shortly after sunset one evening, on the hill village where she had told him she could usually be found.

No Reds were in evidence. Again a flock of watchbirds assaulted Brazil with futile energy. The Blond natives stared at him with some awe, but little surprise. They directed him to a building set against a hill.

It was a low structure of groundvine mats and rare wooden poles. Carved or molded masks hung in profusion at the doorway, the first artwork of any kind Brazil had seen on the island, except for the decorated armor of the Reds. He stood at a gateway in a low surrounding fence and called a greeting to the dark and open doorway of the house. In a few moments, a Blond man unusually tall and carrying an oil lamp, emerged from the rambling building. He stood studying Brazil emotionlessly.

"I am looking for Ariton," Brazil repeated. The towering Blond somehow made him feel for a ridiculous moment like an adolescent suitor come to call on his girl and greeted by her older brother.

"Ariton has gone to Capital City," the man said finally. "To meet you or your countrymen there when you go to visit the king of the Redmen." Again the grinding foot-motion at mention of Galamand. This man conveyed a suggestion of insolent freedom and power to Brazil. It was impossible for him to think of this man or Ariton as slaves.

"Is Galamand now in his castle beside the Tower of the Sea God?" Brazil asked.

"Yes." The Blond man paused, then seemed to reach a sudden decision involving Brazil. "Come with me." He beckoned with his lamp and led the way into the house.

They followed a passage leading back toward the hillside. The open rooms they passed contained things unknown to Brazil, things carved and feathered and stained. More temple than home, certainly.

"Here." The Blond turned aside suddenly, and stooped to roll up a floor mat. Buried among mats of ground vine that filled a hole evidently of considerable depth were row upon row of spears, simply made but strong and sharp.

"When your king comes to this island," said the Blond, showing powerful white teeth above his beard, "he will find ready help to topple the Reds from power. Not all my people are willing to live the lives of animals. Long have we planned and waited. The Reds are fewer than us. Each year they stay more within their forts and their walled city, and each year hurt us more, with killings and beatings. We will be ready to help you."

Brazil took a deep breath. "If you want to help me help your people, you will not rise armed against the Reds. You will agree to live with them as one tribe, when they also agree."

The man stared at Brazil for a long moment, then gave a short and nasty laugh. "When they say that will be the day when they are helpless."

"Remember what I say, if you wish your own people well," said Brazil, turning to leave. "Let there be no armed rising against the Reds."

"Not yet," said the Blond in a cold voice. "Not yet for a little while."

Brazil and Foley stood among tall bushes and grass on a hillside with a fair view of the town whose name translated into Capital City, just after sunrise on the next morning. They wore heavy ground armor, in camouflage colors. They studied the city before them, adjusting their heavy glass faceplates for telescopic vision.

Capital City was plainly divided into two sections. The Reds dwelt on a hill at the far side of the harbor from the watching planeteers, in an area surrounded by a defensive wall. Their buildings were of stone or mud brick, and a number of Blond servants could be seen going about menial tasks.

In the Blond section, on lower ground and closer to Brazil and Foley, no Reds were visible except for an occasional squad of patrolling soldiers. These stuck close together, looking grimly over their shoulders. The houses were built mostly of dried groundvine mats, though some mud bricks were used.

Beyond the Blond section were the docks. The water of the harbor was studded

with the low shapes of fishing boats, and, larger, a few of Galamand's war galleys.

"Well—shall we march?" asked Foley.

"Might as well. I expect Ariton will know we're here before we've gone very far."

Brazil moved his legs. The suit servos drew power from the tiny hydrogen fusion lamp in the backpack; the suit legs churned the massive shape ahead. The wearer had the sensation of moving in light summer clothing, but he could plow through heavy bush and small trees if he chose. Brazil and Foley had no wish to leave a trail of destruction, so they picked their way with care to the nearest road and set out toward town.

Ariton met them in a narrow street before they were well inside the town. She stared hard at Foley when Brazil introduced him, but gave him a common greetingword in a pleasant voice. "Sunto is waiting with a boat in the harbor," she told them. "It is the shortest and easiest way to Galamand's building."

The planeteers followed her through narrow, winding streets toward the harbor, ever a center of apathetic, curious, hopeful, or poker-faced stares from the Blond slum-dwellers. None of the Red patrols came within sight, which suited Brazil fine.

Sunto was waiting at a low dock, in a crude and lopsided rowboat fashioned of reeds. "Hope the blasted thing can hold us," said Foley on radio. "It'd be a long swim from the middle of the harbor."

The sun was still bright in the morning sky, promising a warm day. Galamand's castle rose forbidding across the harbor, beyond the fishing boats and the moored biremes of his navy. Above and beyond the castle rose the slender stone Tower of the Sea God.

The rowboat held up as Sunto propelled it across the calm water of the harbor, straight toward the landing steps at the base of the castle. Reds appeared on the steps, watching. Their number grew as the boat approached.

"Galamand will have heard of you, of course," said Ariton.

"I think he will be eager to see you for himself. Of course he may decide to kill you." She observed them.

"I don't think he will harm us," said Foley. From inside heavy ground armor they could remonstrate gently but confidently with Galamand while he boiled them in oil or his cohorts attempted to bash in their faceplates with axes. It would require a local Archimedes and considerable time and effort for any technologically primitive power to do them serious damage. But Ariton wore not much of any clothes at all. Foley asked her: "Do you think you will be safe?"

"The priestess of the Sea God is safe even from Galamand," she answered

absently. Brazil thought she was worried, but not about herself.

He scanned the ranks of grimly watching Reds as they neared the landing steps. "Is Galamand among those?"

"I do not see him. No doubt he awaits you in the great hall inside."

The boat wallowed up to the landing. Ariton nimbly hopped out and made it fast with a rope of vine. A couple of Red soldiers halfheartedly leveled spears in her direction, but no one moved to stop her. Brazil arid Foley disembarked and stood quietly, giving the Reds the chance to look them over and make the first move if they felt like it. There were no Red women or children in sight.

Ariton moved her hand in an intricate gesture, in the air above Sunto's head, then touched his head briefly. "Now they will not bother him—for a while," she said to Brazil. "Well, let us go on and try to see the king."

A sword-bearing Red who might be an army officer stepped forward. "King Galamand has been told that you are here. Stand and wait." He eyed Foley with unconcealed and unfriendly curiosity.

Some of the Red troops looked Brazil over and commented among themselves with openly truculent contempt. His blondness was plainly visible through the faceplate. He looked back at them, deadpan, and unobtrusively moved to inflate his suit's flotation bubbles. Giant red swellings ballooned around his shoulders and torso. The soldiers stared and fell silent.

A few minutes passed. Brazil was deflating his bubbles as a more elaborately costumed Red appeared, and imperiously beckoned the delegation to follow him into the castle.

The few Blonds visible inside the walls had the look of the lowest of slaves. Now a few Red women and children were in evidence, but these retreated rapidly out of sight of the visitors. The complex of walls and buildings making up the stronghold had been built of heavy stone, with little if any mortar used.

The great hall was a high chamber about thirty meters by ten, dimly lit by smoking torches and small, high windows. It was crowded by Red men of varied appearance. Across the far end of the room stood a solid wall of tall soldiers bearing shields and leveled spears.

"Stand and wait here," said the distinguished Red who was acting guide, indicating a spot not far from the leveled spears. He disappeared into the crowd at one side.

Brazil and Foley turned casually around as they waited, studying the chamber and the Reds in it. No attempt had been made to surround the visitors closely. The door by which they had entered still stood open. Ariton stood waiting between the planeteers, with utter calm.

Another important-looking Red appeared before them; but it was somehow obvious that he was not the king. He held his hands clasped before him and owned a nose remarkable in size even for one of his tribe. "Do you bear weapons?" he demanded, looking from Foley to Brazil.

"We do," said Foley, "and we are not the only men here who bear them." He tried to give his speech the accent of a Red.

"You must give me your weapons," said the chamberlain. "Then you may advance and prostrate yourselves before the king."

"We will greet the king in all friendliness," said Foley. "But the law of our own nation forbids us to do him homage, or to give up our weapons."

The chamberlain hesitated a moment, then began to screech at the Earthmen threateningly. He raved and glared and waved his arms, jabbering so fast he became almost unintelligible. Yet Brazil got the impression the man was trying to avoid direct personal insult. It was a masterful performance of denouncing their disrespectful behavior but not themselves.

"Let's wait him out," Brazil subvocalized to Foley via radio. "Maybe they just want to see if we bluff. It wouldn't do for the king himself to try and fail."

The planeteers stood silent a full thirty seconds longer, glaring stony-eyed back at the speaker. The harangue gave no sign of slackening. "Better squelch him," Brazil said at last. Evidently the torrent of words was going to continue until they reacted to it in some way. Brazil did not now want to give the impression that Earthmen had infinite patience. The squelch might be better accepted coming from the "Red" planeteer.

"Silence!" Foley bellowed, after turning up his airspeaker volume. He got what he called for with magical suddenness. Ariton wore a pleased smile.

"We have come here to talk with a king, not to listen to you," Foley went on. "If King Galamand is not pleased to receive us today, we will return tomorrow. Our business is important."

"Get out of the way," said a firm voice from behind the wall of soldiers. "Let them come here."

The ranks of soldiers opened, but stayed within spear-thrusting distance on either side. Brazil, Ariton, and Foley advanced toward the man who sat alone upon an elaborately carved chair.

The man upon the throne was not ordinary. A vast scar sliced across his face, nearly obliterating one of his eyes. He was approaching middle age, not big for a

Red, but thick-limbed and strong. Upon his breastplate was worked in relief an image of the Sea God's Tower.

Foley opened his mouth, doubtless meaning to register a complaint about the way the chamberlain had spoken to them. "Greetings, great king," was all that came out. Galamand's bright blue eye seemed to nail him with more effect than if there had been two.

"Greetings, great king," said Brazil. Ariton stood between the Earthmen, saying nothing but watching Galamand haughtily.

The king ignored her and spoke to the armored planeteers, looking from one to the other. "I bid you welcome," he said perfunctorily. "Does your king send greetings to me?"

"He does indeed," said Foley. "And would send you gifts, as is our custom. But in some lands it is considered an insult to present such gifts immediately."

The king raised an eyebrow, and his mouth twisted slightly. Brazil spoke up: "Oh, there are such lands, King Galamand. Not many, but a few."

The blue eye fixed on his. "I thank your king for his greetings. Is he Red or Blond?"

"Neither," said Brazil, truthfully enough. "In our country men of different colors live together peacefully."

The king nodded toward Ariton. "You bring this woman with you. Why?"

"I have come with these my friends, to speak for my people," she said, flaring up at him. "And I speak also to the Sea God, as you well know."

Galamand seemed faintly amused. "Do you speak against me to the Sea God, woman? Your words are not strong enough. The Tower still stands against the waves. The sea-sound is faint in my ear, and soothing as I go to sleep at night. Will you arouse the Sea God to destroy me?"

Brazil heard the faintest stir and mutter among the soldiers on either side; evidently the king's words might be thought a provocation to the god. Galamand swept his blue eye around, but said nothing to his men.

He spoke again to the planeteers: "And you are this woman's friends?"

"We would be friends with Red and Blond alike."

Galamand digested the statement swiftly and without comment, and changed the subject. "Your ship is swift and hard to see; my ships have circled the island every day since you first appeared, and have not found it. Now I admit this puzzles me."

Brazil answered: "As you say, great king, our ship is elusive and very swift. It is

not the wish of our king that our first visits here be seen by many ships upon the sea."

"And why do you come here at all?"

"We seek always the knowledge of new lands, oh king," said Foley. "Some twenty or thirty of us would like to live on this island for a year or two, on some small area of land that you who live here now do not need. We are willing to pay for this privilege. But we do not want to deal with a government engaged in civil war, under which two tribes contend against each other; or with a king who holds another tribe in slavery."

"No one contends against me here and lives." Galamand spoke quietly and distinctly. He gave Ariton his twisted grin and asked: "Is it not so?"

It stung her deeply, and her voice rose loud: "Your day is not forever, Redman. One day your children will be our slaves, if you beget any before you die. We will—"

Brazil's voice rose over hers. "That is not what we want! That would yet be war and slavery."

Both native rulers looked at him, for the moment united against the outsider. Then Galamand asked quietly: "How would you have us live?"

"As one tribe."

Galamand narrowed his operational eye and scratched his beard. "You spoke of payment, for the use of land. What do you mean to offer?"

Foley answered: "To the ruler of a peaceful land we would offer, to begin with, a great quantity of cord, much stronger and more lasting than your vines, to make excellent fishnets, oh king."

"And weapons?" The king's voice was casual and gentle.

"A quantity of swords and spears might be included—"

"You do not carry swords or spears."

"We carry them for trade." They could be made up.

Galamand's blue eye did not waver from Foley's face, but his right arm shot out toward the nearest guard, and his fingers snapped. The haft of the guard's spear was instantly in his grip. The king stood up and thrust the spear, butt first, toward Foley, at the same time holding out his left hand open.

"If you are men who deal in spears, then I will trade with you. I offer in trade this good Red spear, for that weapon you wear at your side."

Foley assumed a deeply troubled expression. "Oh great king, we have no wish to anger you. But we must refuse to trade our weapons. If we did so, the anger of our

king would fall heavily upon our heads. And against his anger we have no defense."

"And against mine?" Galamand's voice was still gentle. So is a lion, when not hungry or offended.

"We have our weapons, which we cannot trade, great king," said Brazil, with punctilious courtesy. The blue eye lanced at him and he looked right back down the shaft of it, while from the corners of his eyes he watched the spearmen carefully. Galamand too must have received accurate intelligence about the First Contact, if he could identify the butt of a stun pistol as a weapon.

Galamand grounded the butt of the spear and stood drumming his fingers on the shaft. "Fishnets," he said meditatively. "Your great king has then no weapons to spare? I would reward you well if you were to convince him that he has; or if you were to act, shall we say, on your own..." He reached into a pouch at his belt and brought out a lustrous pearl-like jewel, bigger than a grape.

Foley shook his head slowly. "Oh king, it cannot be. If you offer us the riches of the whole island, still we will give or trade to you no weapons, save such as you can make yourselves."

Galamand tossed the spear back to the soldier and seated himself again. "And your armor? I admit I have not seen such glass."

This time Brazil joined in the headshaking.

"Strange men," Galamand mused. "You say you will not trade with a ruler who holds another tribe in slavery. I will not ask you why. I have not asked for any trade with you that would pay me in fishnets, and I want none. While the waves spare the Tower, the Sea God supports me. I am king upon this island. My slaves are my slaves. When you are willing to trade something worthwhile for the use of my land, you may come back again and speak with me."

"Suggestions?" Brazil radioed.

"Leave without argument," said a voice from above. "We can analyze what we've got and try again."

Ariton stood proudly erect while Brazil and Foley bowed deeply to the king, who told them with a straight face that he was providing them with an escort back to their ship, that no harm should come to them on the way.

"They'll see the scout unless we can shake them," Brazil radioed, starting out of the throne room.

"Guess we'll have to give them a minimum marvel to look at," said Gates's voice. "There's a suitable deep cove just outside the city, about four kilometers from where you are. Just walk south along the shore; I'll bring the scout up partly out of the water

for you to get in, and let them get a good enough look to be sure it's a ship and not a sea monster. OK?"

"Good idea," said Captain Dietrich. "A submarine will startle them some, but it should further convince them we're not spirits who just materialize."

Ariton walked with the planeteers out of the castle; they stopped at the landing steps to pick up Sunto, who was much relieved to see them. When told they were leaving by land, Sunto climbed out of his half-waterlogged rowboat, and said to a Red soldier standing guard nearby: "I leave to you as a gift the noble craft which you have praised so highly." And he ground his foot against the stone stair. The Red glowered but said nothing.

The walk out of the city was uneventful. Within an hour the four of them stood on the steep sloping shore within the chosen cove, with Galamand's heavily armed honor guard watching very carefully from a little distance and a Red galley casually standing by offshore.

Foley was telling Ariton that a ship would soon come to take Brazil and him on board, but she and Sunto would have to stay on shore. She agreed calmly, and watched the horizon for the, ship, with some puzzlement.

Brazil turned to Sunto. "The Tower of the Sea God is very important to your people and the Reds, is it not?"

"Yes." Sunto did not seem especially interested in the subject. "It is our old belief that as long as the Tower is not destroyed by the waves of the sea, the Sea God smiles upon the rulers of the island, whoever they be."

"What if the waves should knock the Tower down?"

Sunto smiled wryly. "Then I think you would see upon this island the one tribe for which Ariton says you asked the king. For the Tower to be so destroyed would mean the Sea God thinks the rulers of the island evil. The destruction of his own Tower is to be his last warning before he overwhelms with waves the entire island, slaying everyone on it and carrying the evildoers down to be frozen forever in the ice at the bottom of the sea."

"Get more on this!" said an excited radio voice. "Foley, ask Ariton about the tower; she should be a real authority. Gates, hold that scout underwater for a minute."

Brazil asked Sunto: "Do you think the Sea God will ever destroy the Tower?"

Sunto looked out at the ocean soberly; it was dull and placid in the sun. "May I never see the day—but I am a practical man. Whoever is king will surely see to it that the seawall of large rocks is kept strong at the base of the Tower, to break the force of the waves. Someday, perhaps, a very great storm... but there are great storms every

year. The Tower has stood for many years."

"Is the season for great storms coming soon?" Brazil felt the vague beginnings of what might be a valid idea.

"No, it is just past. Now is the time of the steady-but-not-too-strong winds."

"That checks," said Meteorology from above.

Sunto continued: "Also, the Tower stands on a straight shoreline, and the Sea God hurls his waves most strongly, against the points of land that jut out into his domain."

"That is true in all lands," said Brazil absently. He had just the start of a plan to scare these people into cooperating, by making the Tower seemed threatened by a storm. It might be just possible to induce a violent storm. But what would it do to the rest of the island? The scheme seemed worthless... "That is true in all lands. As it is true that the waves come in nearly parallel to the shore, no matter from which point at sea the wind is blowing. And the reason is the same..." Brazil fell silent, as if in a sudden dream.

"Why, that is so, but I have never thought about it," said Sunto in surprise. "Truly, the waves are like women, for men watch them long and understand them but little."

"... that they travel more slowly as the water beneath them grows more shallow," said Brazil with a faraway look. He gave a sudden laugh at the sight of Sunto's startled face. "Waves, I mean, not women. Sunto, tell me this. If the Tower were destroyed by some means other than the waves, what then?"

Sunto gave the Blond equivalent of a shrug. "Why, the Tower would simply have to be rebuilt, and the king would gain merit in the Sea God's eyes by rebuilding." He thought for a moment. "Maybe the Red King would rebuild it on some inland hill, where no wave could ever reach it, and so make his rule safe."

Brazil nodded as if satisfied.

Twenty minutes later he sat with Foley in scoutship *Alpha*, gratefully peeling off chunks of armor. They faced on a segmented screen the debriefing assembly of their peers and bosses, electronically gathered to analyze the visit to Galamand. The astounded natives who had watched the two planeteers enter the submarine craft were by now no doubt attending their own conferences on the subject.

"First, tell me this," Brazil invited, eyes alight with an idea. "Does it seem likely that a massive assault of ocean waves on this Tower might make these people willing to try getting along together, at least for a while?"

"I would say yes, based on what Ariton told me," said Foley.

"It might well give us a start in the right direction," said Sociology cautiously.

"An assault of ocean waves, you say." Captain Dietrich frowned. "Not of forcefields, explosives, chemicals, or sonic vibrations."

"Captain, I think there's a chance it can be done with this scoutship, and not by directing any of those modern weapons against the Tower."

"I am afraid I would have to forbid the use of such weapons against the natives, on principle," said Chandragupta grimly.

"The idea is not to wreck the Tower," said Brazil, "but to make the natives think that the Sea God has decided to wreck it."

"That Galamand's no fool," said Gates. "He's probably thinking up antisubmarine devices already. And how are you going to stir up suitable waves with a scoutship?"

"I'm not going to stir them up, exactly. And I don't think Galamand will notice a submarine acting a good many kilometers out at sea."

"Brazil, are you drunk?"

"No, on duty. Another reason for getting this situation settled. Now we'll need some information from Oceanography. And a weather forecast of such massive solidity that we can all lean on it—one that includes a steady ocean breeze here."

Trofand, Red priest of the Sea God, and chief caretaker of the Tower, was awakened by the sound of the waves, to which he always listened with half an ear even when asleep. The sound was now too loud for his liking.

He arose from his pallet and was dressing in the stone-damp darkness of his chamber in the Tower's base when he received a shock. A streaming puddle of cold sea water flowed against his bare foot on the floor. He hastened to light a candle from the smoldering brazier that fought uselessly against the permanent dampness of his bedchamber.

By candlelight he saw with distress that water was entering in multiple thin streams through chinks in the massive masonry of the inner Tower wall. It was something that happened only in the heaviest storms. The booming roar of the waves pounding the heavy seawall outside seemed to be increasing, and now brought him to the beginning of real fright. In ten years in the Tower he had never heard it so loud. A mighty storm must be raging, though the season for them was past, and the weather signs had given no indication of any approaching tempest.

Trofand was nearly dressed when an underling came with a torch, pounding on the door and opening it with a minimum of courtesy. "My lord, the waves, the waves! They are very bad."

"I have ears, fool. Someone should have called me sooner. What are the signs of the storm's length?"

"My lord, there is no storm."

Trofand started an angry retort to the foolish statement, but something in the pale frightened face before him made him pause. Fastening his belt, he led the way out of the chamber to the stair that climbed to the Tower's top.

It was true, he realized, emerging into the predawn darkness atop the Tower. The sky was clear. The wind was steady in direction from the sea, but it was not strong. The surf at the Tower's foot should be fairly gentle.

He thought he felt the stones of the Tower quiver underfoot with each leisurely watery smash.

An assistant was at his elbow, speaking with a worried voice. "My lord, what shall we do? The signs are that the wind will rise throughout the day, and remain steady in direction. If the waves become yet higher—"

"If they do, we will deal with them. The Sea God is not our enemy. Go rouse out the Tower slaves. Conscript more if need be. Have them stand by the fresh slabs of rock, ready at dawn to strengthen the seawall. Then go you to offer the day's sacrifice to the Sea God. But do not take too long about it."

"I obey." The man was gone in an instant, down the stair. Other junior priests of the Tower huddled about Trofand in the chill night, in the light of a dim torch, looking to him for guidance.

Well, I was right about that, Trofand said to himself. He was thinking of the extra stones, weighing many tons apiece, that he had long ago ordered to be kept on rollers in the courtyard. They were constantly ready to be moved to reinforce the seawall in case a storm of unprecedented violence should threaten the Tower.

Now, another question: should he order the king awakened? After all, the Tower seemed in no immediate danger, and Galamand might grumble if he were waked up for something unimportant. But he might have the man boiled alive who failed to wake him for a real emergency. It was not a hard decision to make. "You—go rouse the king. Tell him I say that waves threaten the Tower. Tell no one else."

"I obey."

King Galamand was beside Trofand within a few minutes, looking over the parapet and frowning at the strange intensity of waves that were driven by such a modest wind. He observed the preparations that had been made to reinforce the seawall at dawn, and then turned and struck his fist against the parapet. "You did well to call me. But these stones have stood throughout my lifetime, and I say that they

will stand yet a good while longer." Trofand saw him outlined against the first gray light in the east.

The Blond slaves, whipped on by overseers, now began to roll the mighty rock slabs into position to reinforce the seawall. It would be dangerous work. But slaves could be replaced, while the Tower—

There was an outcry somewhere inside the Tower, In a minute an exhausted runner appeared, helped up the stairs by others. In near panic he leaned against the stones beside the king. "My lord, the seawall—the wall away from the Tower, up and down the peninsula—"

"Is it breached by waves? Where?"

"No, my lord." A gasp of breath. "I came along the wall, after carrying your message conscripting slaves—"

"Well?"

"Elsewhere, my lord, the waves are small. Only here at the Tower do they rise abnormally, as if in raging anger. As if the Sea God has grown angry and—uh!"

Galamand's vicious backhand blow knocked the man sprawling. "Enough! Do not preach the anger of the gods at me, or I will show you what anger is! I am the king!"

The king turned away to peer, with Trofand and the others, at the waves beating against the seawall at a distance from the Tower. The fast-brightening dawn revealed that the messenger had spoken the truth.

The news was out, Brazil saw, as he strode along the seawall road toward the Tower and the fortified complex of Galamand's castle. A puzzled Ariton walked between him and Foley. Reds and Blonds stood in little groups along the wall, commenting on the waves that were assaulting the base of the Tower. Faces turned toward them as they passed, but never turned back again to the greater wonder of the waves.

Each long swell marched in from the clear horizon of the ocean, foaming up and curling over as the depth of the water below approached the height of the wave, to smash itself finally against the rocks piled in shallow water at the base of the seawall. But in the sea before the Tower, each incoming rise of water seemed to squeeze itself together along its long axis, rising to at least three times the height of the waves elsewhere, before it piled up in a foaming fury of discriminating violence against that part of the seawall.

Ariton paused at her first sight of this, whispering something that might have been a prayer. "You knew of this?" she asked Brazil. "This is why you brought me here?"

"I'm taking you to talk to Galamand," Brazil evaded. "I think if you and he can't come to some agreement soon, there won't be any Tower left for either of you to use. You have lived near the sea all your life. You know the strength that is in large waves."

"What, do you mean?" She stared at him, half afraid. "Do you speak for the Sea God?"

"We are only men," he answered innocently. "But do I not understand your gods correctly? Is it not so that the Sea God may destroy his own Tower when there is great strife in the land and evil rulers, as a final warning before he destroys the entire island?"

After a long moment she took her eyes from Brazil's face and turned toward the Tower. "Come, whoever you are. It is my place to be there now."

"Is this really going to work?" Foley radioed while they walked. "I mean that Tower isn't built out of pebbles, exactly. And it's stood through a lot of storms."

"On Earth," answered Brazil in professorial accents, "wave forces have been measured at over thirty tons per square meter. Engineers will not build a shoreline structure on Earth without carefully considering local conditions regarding the effect we are now employing. Besides, the idea is to scare Galamand and the lady here into cooperating, not to actually wreck the Tower. That would probably kill someone, and I hate to think what might happen in the panic."

At the castle gate, the guards were almost looking over their shoulders at the Tower as they halted the three visitors and sent word to Galamand of their arrival. Within a few minutes a guide appeared to escort the visitors to the bare top of the Tower.

Brazil could see by the flags above the castle that the wind had increased slightly and was holding a steady direction, as Meteorology had promised. If only we were gods enough to control the weather in an area of a few square kilometers, thought Brazil. We can come a hundred light-years to stick our noses into our neighbors' business, but if the weather doesn't quite suit our schemes we can only wait until it does.

Galamand scoured them with his single eye when they had climbed the stairs to the Tower's top. The king paused in his pacing amid a group of high-ranking Reds. "Come you to preach the Sea God to me also?" he inquired in an ominously quiet voice.

Ariton looked about her. "Where is Trofand?"

"He has gone to offer sacrifice in the chapel below," said the king, a tinge of amusement in his voice. He leaned against the parapet with thick arms folded and his

back to the sea as if in contempt. "He has rather suddenly remembered to take his religious obligations seriously."

"Human sacrifice?" asked Brazil. He hadn't thought of this possibility.

"He considers that course," said Galamand. "But I think the Sea God has lives enough for one day." He moved his head to indicate that they should look over the parapet.

In the cold boiling hell of surf at the Tower's foot a hundred Blond slaves or more struggled on the slippery rocks, straining on levers and vine ropes to move an enormous block of stone into the surf at a place where the waves had weakened the wall. With each torrential ebb and surge of water, Brazil saw, a pale object in the surf was drawn out and hurled in near the rocks, buried in foam and tossed up again—a fish-pale thing that had blond hair and no longer any face. And there was another—and another...

No Blond slave or Red overseer took any apparent notice of the drowned men, much less attempted to pull them from the sea. Every living man down there was concerned too intently with his own footing on the treacherous rock.

"Take it easy, old man," said a voice inside Brazil's helmet Oh, this Brazil is a wonder, a red-hot planeteer, said a louder voice inside his mind. Just trust him to come up with a great scheme to set everyone on the road to happiness without bloodshed. That's important, no bloodshed. Well, you can't see any blood down there, can you?

Now that's enough. Shut up and get to work, there's a job to finish. "Why does the surf attack only the place of the Tower, oh king?" he asked, turning, stony-faced.

The blue eye studied him. "Had I a ship so cunningly built as to travel under water, I might discover why." Galamand turned to his aides. "Send boats and divers out beyond the white water. See if anything strange lies under the surface."

"The old boy's uncomfortably shrewd," said Foley on the radio. "Doesn't seem likely they'll search the bottom eight kilometers out and eighty meters deep, though."

Boats and divers soon appeared in the sea a few hundred meters out from the Tower, and made a show of investigating underwater conditions. It was not a really dangerous job for such skillful sailors and swimmers, out there where there were no rocks to be dashed against. But the Red seamen seemed to approach the job with a vast reluctance. Their faces turned often toward the Tower, as if in hope that the king would recall them.

Time passed. By noon the wind was obviously gaining strength again.

"I go to join Trofand in the chapel," said Ariton to the king, as if daring him to stop

her. He pulled at his beard and appeared not to hear.

When she had gone he ordered food brought to him. His aides grew continually more gloomy. They looked often at the king, but sought to avoid his eye.

Galamand was amused to see the planeteers drink their lunch from tubes inside their helmets. He asked if their suits had sanitary facilities too, and roared with laughter when he was told they had. But the laughter had a forced sound in the wind.

The wind grew yet stronger, though it was still far from a gale. Down below, a wave got under a forty-ton slab of rock just right and skipped it like a flat chip against the base of the Tower itself. Stones split and flew; one fragment spun almost to the Tower's top.

The next wave poured through the gap in the seawall, like the paw of a giant beast forced into a hole to grope for prey. The next tore free another huge stone from the edge of the hole. The bones of the Tower quivered.

Slaves and masters at the Tower's foot scrambled desperately to move another massive rock into a defensive position. Brazil saw it was a futile thing for creatures weak as men to attempt. One roaring curl of water caught a Red, who dropped his whip and grabbed at the slippery rock to save himself. Brazil saw the upturned face, the eyes seemingly looking straight into his own, the mouth open as if to yell. The next wave tore the man away and dragged him out of sight.

Galamand was roaring orders for more slaves to be brought. "You have strange powers and weapons," he demanded suddenly of Foley. "Can you help me now?"

Brazil pulled himself out of a hideous fascination with what was happening down below.

"And if we can?" asked Foley.

"It might be that the agreement you sought with me could be quickly reached." The wind tore at Galamand's words, and shot spray past his head, here thirty meters above the normal sea. A small wave-tossed rock clattered against the parapet, as if shot from a giant's sling.

"Then order those men from the sea down there," Brazil demanded. "And give your word to make of Red and Blond one tribe!"

"Then you can cure this," barked the king. "And it may be you have caused it!" The other Reds glared at the Earthmen; some weapons were drawn. Then cries came from the stairway, distracting attention.

Ariton and Trofand were suddenly at the top of the stair, in ceremonial robes half sodden with sea water.

"My king, the Sea God pours his wrath into the very chapel. I—" Trofand jumped

back, as if he thought the king's sudden lunge was directed at him. But Galamand seized Ariton, had her arm twisted behind her back and his dagger at her throat in a moment.

"Sacrilege! Sacrilege!" howled Trofand. The other Reds looked on, wavering, wide-eyed, undecided.

The king swung Ariton to face the planeteers. "Now, aliens," he roared. "Cause the waves to cease, and quickly, or I will butcher this so-called queen with whom you ally yourselves. You seek to put her on a throne, but I alone am king. And so I will remain!"

"My lord." Ariton's low voice stopped the king in surprise. Doubtless it was the first time she had used any title of respect to him. "My death will not save our island. But I will marry you and bear your sons, if that be the only way to save it. And we will live here as one tribe."

For the first time in his experience, Brazil saw Galamand taken aback. But it was only for a moment.

"No, I'll not have it! I am the king here, I alone. Not you, or the aliens, or the Sea God himself, can order me, do this, do that!"

Trofand moaned and covered his face; every other Red was visibly shaken by the king's defiance of the god. Brazil felt a sudden turn of sympathy for Galamand, losing to forces he could not comprehend, cutting himself off now from his own followers. Be ready for the moment...

The sea-flung stone, the size of a grapefruit, actually missed Galamand's helmeted head by only a few centimeters, and flew on to bounce off the opposite wall and down the stairway. The jolt from Brazil's quick-drawn stun pistol took the king in the head about one second later, when all eyes were on Galamand. No native doubted that the rock had grazed the king's helmet and caused his sudden collapse. Brazil's pistol was reholstered as quickly as it had been drawn.

The Red priests and soldiers stared at the fallen ruler in awe. Plainly he had been struck down for blasphemy. None of them moved to aid him. Foley went to him, pulling out his first aid kit and beginning a quick radio conference with the medics of the *Yuan Chwang*. The stun-jolt should wear off in a matter of minutes; a carefully chosen tranquilizer administered now should ease the situation then considerably.

A Red officer of apparent high rank spoke almost imploringly to Trofand. "We will obey you, my lord. Is there any way to save the island?"

The priest looked uncertainly at Ariton. Brazil asked her: "Will you now marry the king, as you offered, and so unite your people with his?"

She rubbed the arm that Galamand had twisted, and frowned. "There is no need for that now. The Sea God has rejected him. With your help, I will be ruler—"

"Do you want the Tower to stand?" Brazil cut her off brutally. "Remember, too, that the Red soldiers are still strong, and perhaps not eager to serve you."

She nodded, meekly wide-eyed for once.

Brazil turned to Trofand. "Can the marriage be performed as soon as the king awakens?"

"If he can be made to agree to it; I see that the Sea God has spared his life, for now his eyelids move."

"I think he can be made to agree," said the high-ranking officer, grimly. "I think it is time we had a certain heir to the throne, and also an end to this unprofitable fighting in our own land."

Brazil switched off his airspeaker, with throat muscles beginning to quiver with the relaxation of tension. "Sam, start cutting down that hump. But stand by to rebuild, until I give you the word that the honeymoon has started."

Eight kilometers out at sea and eighty meters below the surface, scoutships *Alpha* and *Omicron* braced themselves on water-filled space, and thrust noses equipped with jury-rigged bulldozer blades against the mound of mud and sand rising from the bottom, the mound they had carefully constructed in the same manner the day before. It was not much of a mound for size, really, and unimpressive-looking to any but an oceanographer. But it shallowed the water above it, and so it slowed the waves, refracting those from one certain direction, focusing them as a lens treats light, causing them to converge on one small area eight kilometers away...

Boris Brazil opened his eyes. He had not been asleep. He was slouched in an easy chair in an alcove of the recreation lounge aboard the *Yuan Chwang*, and Chandragupta was standing looking down at him.

"Do you mind if I ask what you see behind your eyelids, my friend?" the Tribune asked.

Brazil was not quick to answer.

"Perhaps you see drowned men." The Tribune sat down facing Brazil and spoke with quiet sympathy. "My friend, you have what must be one of the most difficult jobs in the known universe; you must be a researcher, a diplomat, a fighter, a linguist, and a survival expert, by turns or all at once. And I know I have left out many things. I think you do very well in your job, considering that you are no more than human. We all agreed that your plan of threatening the Tower with waves should be tried. I

still think it was good. It has set the islanders on the road to unity, and so no doubt averted more suffering than it caused."

"Thanks, Chan." Brazil stretched, and uncoiled slowly from the chair. A little humor came back into his face. "I'm going to play it as lazy as I can for a couple of days." He straightened his off-duty semi-uniform and said, half to himself: "Maybe I'll just mosey over toward Computing and check out—something. Hmm—"

"Boris?" Foley's voice was heard before he came into sight. "There you are. Scout just sent back word from over nightside: they spotted one of those luminous waterrings over there; this one's fifteen kilometers across. Our regular standby crew is out, so Gates wants you in the briefing room on the double. Oh yeah—" Foley gave an uncertain smile. "He says: 'What would Thoreau have to say about that?' "

Brazil's answer was probably inaccurate.

After Orwell's 1984, what more can a writer say about power and its abuses? Plenty, it seems to me. The subject is practically inexhaustible, as large as mankind itself.

VOLUME PAA-PYX

When he was alone in his office with the prisoner, the director said: "Now, what is this secret you can reveal to my ears alone?"

"Are you sure none of them are listening?" The prisoner was a young man with seedy clothing and an odd haircut. As he spoke, he managed to grin in a conspiratorial way, as if he already shared some vital and amusing secret with Director Ahlgren.

And this is about the average of the Underground, thought the director, studying his victim with distaste. And in the next room Barbara waited her turn at being interrogated. How could *she* have ever become connected, however indirectly, with the ideals or the people of this Underground represented before him?

"None of them are listening," said the director, who took daily steps to discourage that sort of thing among his subordinates. It was not entirely unheard of for a Party member to turn traitor and join the Underground. "Quickly now, what have you to tell me?"

"This—I will act as a double agent for you," volunteered the young wretch, in a stage whisper, maintaining the idiotic grin. His voluntary muscles were still mainly paralyzed from the stun pistols of the Political Police, and so he sat propped erect in his chair by a stiff pillow the director kept handy for such use.

Director Ahlgren frowned thoughtfully. He took a cigarette from a box on his plain but highly polished desk. "Care for one?"

"No, no. Do you understand what I am offering you? I am a highly trained agent, and I will betray them all to you, because you are the strongest here, and I must serve the strongest." The young man nodded earnestly, as if he hoped the director would imitate the movement and so agree with him.

The director puffed smoke. "Very well, I accept. Now you must show me that you will really do what you say. Tell me the address of your contact cell."

The young rebel contorted his forehead, in an apparent effort to conceive a stroke of Machiavellian strategy.

Ahlgren pursued him. "I know each cell of the Underground has its contact with the rest of the organization through one other cell and that you know the address of yours. How can I trust you as a double agent if you won't tell me that much?"

"Wouldn't any of the others tell you? My dear comrades from my own cell?"

All the dear comrades seemed to have taken memory-scrambling drugs, as captured rebels often did, though the director sometimes thought it a superfluous action on their part.

"None of the others offered to act as a double agent." Ahlgren was trying to humor this babbler out of the one piece of valuable information he was likely to possess.

"Our comrades in the contact cell will have heard about the arrests this morning," said the prisoner with a sudden happy thought. "They'll have moved already anyway."

Quite likely true, Director Ahlgren knew. "So it can't hurt them if you tell me," he encouraged.

The prisoner pondered a moment longer, then named an address in a quiet residential section about a quarter of an hour's walk from the Party Building.

"Anything else you can tell me?"

Careful consideration. "No."

PolPol Chief Lazar and a couple of guards came into the office quickly after the director touched the signal button.

"Take him down to conditioning," said the director, leaning back in his chair. He felt his head beginning to ache.

The rebel screamed and rolled his head, about the most violent motion he could make, as the two PolPol guards caught him gently by the arms and lifted him from his chair.

"Traitor! You are the traitor, not I! You have betrayed my confidence, your own honor, you—" He seemed suddenly to realize what was going to happen to him. "Conditioning! No, not my mind, not my mind! Can't you beat me or something instead? I won't be meee any lonnnggerrrr..."

The screaming died away down the corridor outside the office.

"Careful with him!" Lazar called sharply to the guards, from the doorway. "Don't let his legs bump, there! You bruised that man this morning; we want no more of that."

He came back into the office, closing the door, viewing Ahlgren with the proper expression of respect. "Would you like me to conduct the next interview, sir?"

"No. Why do you ask?"

"I thought you might feel a certain reluctance, sir. I understand you knew the young lady years ago."

"Before I joined the Party. Yes, quite right, I did." The director arose from his chair and walked toward the wide window, past the bookshelves that almost filled one wall, giving the office the air of a study and concealing his secret exit.

From the window he looked put upon the sunset that reddened the sky over his prosperous city, whose bright lights were coming on against the dusk.

I understand Lazar, he thought, because he is ambitious, as I am. Or as I was. Under one of the old dictatorships, I would have had to fear such ambition in a subordinate and consider taking steps against him. But I need not fear Lazar, because the Party claims his perfect loyalty, and he can do nothing against me until I begin to fail the Party. And is that time perhaps drawing near? Will my secret exit always be only a private joke?

Watching his own eyes in the half-mirror of the window, the director told himself: Someone must govern, and the worldwide Party does better than the old systems did. There are no wars. There is no corruption, and no real struggle for power among Party members, because there is practically no disobedience in the carefully chosen ranks. The mass of the citizens seem content with their bread and circuses. There is only the Underground, and maybe some kind of Underground is necessary in any society. "Lazar."

"Sir?"

"How do we do it? How do we attain such perfection of power that the essence of power is enough, that we have no need to constantly threaten or stupefy the citizens?"

The gay and active city below was brightening itself against the gathering night. No giant signs proclaimed the glories of the Party. No monolithic statues deified the

World Directors, past or present. The Party was invisible.

Lazar seemed a bit shocked at the question. "The selfless obedience of each individual is the life and strength of the Party, sir." A phrase from the catechism.

"Of course... but look, Lazar. That Citizens Policemen directing traffic down there. He wears a stun pistol, because of nonpolitical criminals he must sometimes deal with; but if one of your PolPol agents were to walk up to him and arrest him, the odds are he would offer no resistance. Now why? The Citizens Police are as well armed and I think more numerous than your men."

Lazar studied the traffic cop below through narrowed eyes. "I can't remember when we've had to arrest a Citizens Policeman."

"Neither can I. The point is—how do we do it?"

"Superior dedication and discipline will prevail, sir."

"Yes." But the parroted phrases were no real answer. The Citizens Police were presumably disciplined and dedicated too. Lazar was unwilling or unable to really discuss the subject.

Such questions had not occurred to Ahlgren himself until quite recently. He could not remember ever seriously considering the possibility of himself opposing the Party in any way, even before that day five years ago when he had been accepted as a member.

"And we of the Party control the means of Conditioning," said Lazar.

"Conditioning, yes." Barbara. He had to fight to keep anything from showing in his face.

He knew there was not one person in the gay and bright-lit city before him who could not be brought to the basement of this building at any time, at a word from himself, to undergo Conditioning. The Ultimate Pain, he had heard it called by Party theorists. But it needed no dramatization.

The citizens had a slang term for it that he had heard somewhere: brain-boiling.

The office intercom sounded on the director's desk. "Chief Lazar's office would like him to come in, if possible." Tight security. No details would be spoken unnecessarily over even the director's line. No risks would be taken at all.

He was faintly relieved. "Your office wants you for something; I won't need you here any longer. Good job today."

"Thank you, sir." Lazar was gone in a moment.

Ahlgren was alone in his soft-lit office. His eyes ranged along the bookshelves. The Party put no restrictions on reading. Aquinas—some of the Eastern philosophers

—Russell. The encyclopedia, with the gap where that one volume had been missing for a week. Volume P. What the devil could have happened to it? Was there a kleptomaniac on his staff? It seemed absurd for anyone to steal an ordinary book.

But he was only procrastinating. He went to sit again at his desk, leafed through papers. Bulky contracts and specifications for the new water supply for his city. And the Citizens Council had voted a new tax; he would have to hire collectors. Too much nonpolitical work, as usual, and now for the hundredth time. She had spoken in public against the Party this morning in the presence of a PolPol officer, the Underground flaring up again, and—

He keyed the intercom and ordered, "Bring the girl in," without giving himself any more time to think about what he was going to have to do.

He sat waiting, his head aching, trying to hold nerves and face and hands steady. The PolPol report on Barbara was on his desk, mixed up now with the waterworks, and he read it.

She came into the office quietly, between the blank-faced uniformed PolPol women. She walked unaided and Ahlgren felt a faint, smothered gladness that it had not been necessary to stun her.

"Leave us," he told the guards, who instantly obeyed. Would it look suspicious for him to want to be alone with another prisoner? It didn't matter—in a few minutes he would send her to Conditioning, because he had to send her; there was nothing else the Party could do with her. He felt his heart sinking.

He met her eyes for the first time and was vastly grateful to see no terror in them. "Sit down, Barbara."

She sat down without speaking and watched him as if more sorry for him than for herself. It was her look of that day years ago when he had told her of losing a job... If I had married her in those days, he thought, as I almost did, and never joined the Party, I would now be sitting in some outer office waiting, desperate to do anything to spare her the Pain, but helpless. Now I sit here, representing the Party, still helpless. But no, if I had married her I would have found some way to keep her from this.

"I'm sorry, Barbara," he said finally. "You know what I must do."

The waiting, unchanging sympathy of her eyes wrenched at him. She had never been beautiful, really, but so utterly alive...

"I—would like you to come back when you are—recovered," he heard himself maundering. "You'll be all—"

"Will you be able to marry me then?" Her first words to him burst out in a voice

near breaking, like a question held in too long, that she had not meant to speak aloud.

He sat up straight in his chair, feeling as if the world had suddenly shaken beneath him. "How can you ask me that? You know I can't marry—I have chosen the Party!" He gripped the desk to stop his hands from trembling; then he realized that she must only be making a desperate attempt to save herself from Conditioning.

"In the name of the Party, sir," said City PolPol Chief Lazar in a hushed and slightly awed voice, shaking the hand thrust toward him by District Director Perkins. They stood in a small room in the basement of the Party Building in Ahlgren's city. One-way glass in a wall showed a view of a Treatment Room where Conditioning was sometimes practiced.

"Lazar, I've studied your record." Perkins' handshake was massive, like his bearing. "I think you may be taking over in this city very soon, so I had you called down here to watch something. The doctors called me in the District Capital last night about Ahlgren, and we've arranged a little test for him today—he doesn't know I'm here, of course. We should be able to see the climax, if things go as planned."

"I—I hardly know what to say, sir."

Perkins eyed him shrewdly. "Think you're the one being tested? No, son, not today. But it won't hurt you to see this." He frowned. "Ahlgren started out well in the Party, too. Seemed to have a fine future ahead of him. Now..." Perkins shook his head.

A door leading to a corridor opened and a man dressed in the green smock of a doctor stuck his head into the room. "Would you mind if I watched from here, sir?"

"No, no, come in. Lazar, this is Citizen Schmidt. Doctor Schmidt, I should say, hey?"

Lazar acknowledged the introduction perfunctorily. A loyal non-Party citizen was neither a political danger nor a competitor for advancement, and therefore almost totally uninteresting.

Lazar turned to study the Treatment Room through the one-way glass. It was not impressive, except for the treatment table in the center, a low monstrous thing of wires and power. There were soft lights, chairs, a desk in one corner, and above the desk a small bookshelf. Lazar could see that one book had been placed behind the others, as if someone had tried to hide it. Looking closer, he made out that it was part of an encyclopedia.

Volume Paa-Pyx.

Ahlgren was holding Barbara by the wrists; he pulled her around the desk and

kissed her. His decision had been made with no real struggle at all. Maybe he had made the decision weeks or months ago, without knowing, and had just been traveling with the Party on inertia. Barbara trembled and tried to pull back and then let herself go against him. She was not merely acting to save herself now, she could not be.

"They say life can be good again after Conditioning, Barbara," he whispered to her. "They say many regain full normal intelligence. They say—no, I could never send you to that! Not you, not that!"

"Oh, Jim, Jim." Years since anyone had called him by that name. Or was it so long? A half-memory came disturbingly and fled before he could grasp it. But then a real memory came plainly to him, bringing with it a plan of action that was at least better than nothing: the memory of the address the young rebel had spoken to his ears alone

"Listen!" He grabbed Barbara's arms and held her away from him. "There may be one chance, just one small chance for us."

"What?"

"The Underground. I have an address."

"No, Jim. You can't do that." She backed away, looking toward the door as if she heard the guards coming to seize them both.

"Why not? Don't you understand what Conditioning means? Don't you understand what you are facing?"

"Yes, but..." Indecision showed in her voice and manner. "I don't know if I should try to tell you."

"Tell me what? Don't you realize what you're facing?"

"Yes, but you..."

"Me?" So she could think of his welfare first, even while she faced the Ultimate Pain. She must have loved him all these years. "I've had enough of the Party anyway." The words came so easily and sincerely to his lips that he was surprised as if by hypocrisy in himself, but it was not that. Somehow in the past few minutes his whole outlook on the world had shifted abruptly; the change must have been building for a long time.

His mind raced ahead, planning, while Barbara watched his face intently, one hand held up to her mouth.

He pulled a stun pistol out of his desk, checked the charge, and thrust it into his belt. "Follow me. Quickly."

A section of the bookcase swung outward at his touch. He led Barbara into the narrow passage in the wall and indicated an unmarked phone set into a small niche. "Private line to District HQ. This may buy us a little time."

She reached out tentatively as if to restrain him, but then clenched her fingers and made no objection.

He picked up the phone and waited until he heard someone on the other end, then said: "Ahlgren here. Rebel plot. They've infiltrated. I must flee." He hung up. Of course District HQ would doubt the message, but it should divide at least for a time the energies of the Party that would now be arrayed against him—and against the frightened girl with him. He led her now to a tiny secret elevator that would take them down to street level. In revolt against the authority he had so long accepted, he felt less alone than he had for years.

They emerged into open air by coming out of the wall in a little-used entrance to a rather shabby apartment house a block from the Party Building, after Ahlgren had studied the hallway through a peephole to make sure it was unoccupied.

He had discarded his insignia inside the secret passage; his jacket hid the butt of the pistol in his belt. If no one looked too closely at him, he might pass in the halfdark streets for a plainly dressed citizen.

They walked the side streets toward the Underground address, not going fast enough to attract attention. Barbara held his arm and from time to time looked back over her shoulder until he whispered to her to stop it. Other couples strolled past them and beside them; the normal evening life of the city progressed around them as if the Party and the Underground were no more than fairy stories.

The young rebel might have told someone else the address, before or after Conditioning had wrenched and battered his mind out of human shape. Ahlgren could not rely on the place being even temporarily safe. Barbara and he could only pause there in their flight, warn any Underground people they could find, and try to flee with them to some place of slightly less danger, if any existed. It was a weak chance, but their only one. There had been no time at all to plan anything better. Rebellion against the Party had burst in Ahlgren with the suddenness of a PolPol raid. His very lack of preparation for this step and his good record to date might make District think for a long time that he was indeed the victim of infiltrating Underground plotters.

The address proved to be that of a middle-sized, unremarkable building in a lowerclass residential area, two or three apartments over a quiet-looking small tavern. A single front entrance, divided inside, where stairs led up to the apartments and two steps led down to the level of the tavern.

A couple of male patrons looked around from the bar with mild interest as Ahlgren

and the girl entered. They and the bartender seemed nothing but solid citizen types.

While Ahlgren hesitated, uncertain of what to say or whether to speak at all, the bartender said suddenly: "Oh, that bunch. They're upstairs." The man's face assumed an unhappy look.

Ahlgren took no time to worry about whether he and Barbara were such obvious rebels already, or how the bartender fitted in. The PolPol might be right on their heels. He only nodded and led Barbara up the stairs.

There were two doors at the top; he chose at random and knocked. No answer. He tried the other. After at least a minute of feverishly quiet rapping on both doors, one opened enough to reveal a thin man with a suspicious stare.

"Let us in," Ahlgren whispered desperately. "It is vital to the Underground." The PolPol might close in at any moment; he had to take the chance and speak plainly. His hand was under his jacket on the butt of his stun pistol and his foot was in the door.

"I don't know what you mean," said the thin man tonelessly.

"Look at me! I am the director of this city. I have deserted the Party."

The man's eyes widened and there were excited whisperings in the room behind him. "Let them in,. Otto," said a voice.

Ahlgren pushed his way into the room, dragging Barbara with him. A fat man sat at a table with a bottle and glasses before him, and a little pile of dingy books and folders on the floor at his feet. A pair of unwholesome-looking women sat on a sagging couch along one wall. A door with a homemade look in another wall seemed to lead into the other apartment. Evidently the Underground used the whole second floor.

Ahlgren wasted no time with preliminaries. "Listen to me. The PolPol may be on their way here now. Get out while you can and take us with you. Have you got some place to run to?"

The fat man regarded Ahlgren owlishly and belched. "Not so fast. How do we know—"

There was a glare of searchlights against the dirty windows, through the drawn shades, a booming amplified voice: "Ahlgren, come out peacefully. We know you're there. Ahlgren, come out."

He gripped Barbara and looked into her eyes. "Try to remember me after the Pain."

"Oh, Jimmy, Jimmy, you don't know, you don't understand!"

The four Underground people had burst into passionate argument, but were doing

nothing purposeful. Ahlgren dragged Barbara downstairs. The PolPol would have the building surrounded, but they would expect him to try to fight them off on the stairs, perhaps to escape over the roofs as rebels often did.

The lights were out in the tavern. The two patrons were standing behind the bar, the attitude of their vague shapes suggesting that they were waiting as interested spectators. The windows were too glared with searchlights, and the barkeep stood in the middle of the room glaring at Ahlgren.

"Ahlgren! Come out peacefully and no one will be hurt! Your case will be fairly heard!"

"Why don't you just do like the man says?" the barkeep suggested angrily.

What was wrong with these people? Didn't they realize-but he had no time. "Shut up. Where does that back door lead?"

"Nowhere. I keep it locked." The barkeep swore. "Hope they don't smash the place, but they sure as hell will if you don't go out. Sure, they say, we pay compensation, but look how long it takes. Sure, the glass they put in won't cut nobody, but I gotta sweep it up and put up plywood panels. Why don't you just go out?"

"Take it easy, Sam," said one of the patrons behind the bar, with a chuckle. Barbara was babbling too, something she was sorry for, or sorry about.

A window smashed in and a PolPol officer stood outlined in the frame, flashlight sweeping the room. The director shot first. The invisible soundless beam doubled up the man; the falling flashlight spun its beam crazily through the room. Ahlgren picked up a stool to batter at the rear door. It was the only way left.

"That don't go nowhere, I told ya! Stop! Why did I ever sign up?" The barkeep moaned, grabbing at Ahlgren to keep him from smashing at the door with the stool.

Ahlgren let him have the stun beam at close range.

It didn't bother the man in the least.

"Not on *me*, friend, not on *me*. Tickle all you want," the barkeep said in obscure triumph, pulling the stool away from Ahlgren, whose grip on it had loosened in surprise.

The director felt the paralyzing tickle of a beam stab his own side; he had time to see Lazar grinning in at a window before sinking to the floor and into unconsciousness.

He was slumped in a chair propped up by a stiff pillow when awareness returned. There was a sense of strangeness in his mind that he could not fully account for by what he remembered happening. Drugs? They were seldom used on anyone.

It was a Treatment Room; they were not going to waste any time. Lazar's face looked down at him, grinning, as Be had seen it at the tavern window. Two or three of the green-smocked doctors who always administered Conditioning stood beside the monstrous table, watching him and waiting. And Barbara. She stood free in the background, not stunned or restrained in any way.

Lazar caught the direction of his gaze. "Oh yes, the young lady's been most helpful to us. It was in large part her idea—"

"Pease." The doctor's voice had an edge to it. "I must insist, sir, that you not interfere with treatment."

"Very well." Lazar's grin was wider than ever. He touched Ahlgren's shoulder as one might pat a dog about to be gassed. "I was comfortably set to watch this show when you made me get up and work for it. But it'll be worth the trouble. Good luck in your new life." He went out jauntily.

Ahlgren let his eyelids close; he could not look at Barbara. She was whispering with a doctor. He prayed to the God of his childhood to let the Pain come quickly and bring complete forgetfulness.

A doctor was in front of Ahlgren. "Open your eyes. Look at me. Trust me. Never mind who's watching or that you think you've been betrayed. We didn't plan that, but it can't be helped now. I want you to do something and it won't hurt. Will you try?" The doctor's eyes burned down. His voice compelled.

Ahlgren was held. "Try what?" he asked.

"What do you think?" the doctor asked patiently. "Can't you remember?"

Remember? What was there to remember? Ahlgren's eye roved the room, fell upon the little bookshelf above the desk in one corner, and slid away again. But he supposed there was no escape from—what?

"You can get up if you like now, Jim. Move around."

He tried his legs, and they pushed him erect. His arms functioned; movement took an effort but was not painful. How long had he been out from the stunning?

He found himself approaching the little bookshelf, while the doctors and Barbara watched silently. She was crying quietly; too late now. But he couldn't hate her.

Obeying an impulse, he reached behind the little row of books and pulled out what he saw with a shock was Volume P. "Who hid this here?" he demanded. "I've been looking for it."

"Don't you remember, Jim?" asked a doctor gently. "You pushed it back there the

last time. Now shall we try reading some things again?"

The sense of strangeness had deepened until there was no standard left by which to judge the strangeness. That doctor had a cursed familiar way of talking to the director of a city, even to an arrested director, but the director opened the book. He would show them; there was no subject he couldn't read about.

He found the place he thought they wanted, and began to read aloud, "Pain, the Ultimate," but all that followed was "see Conditioning."

"No, Jim. Turn further back. Let's try again where we were last time. Do you remember?"

Ahlgren turned pages, suddenly fearful that something unfaceable was coming. Paine, Thomas. Lucky man, bound up safe in a book.

"Party, the?" he asked, looking around at the doctors. He thought he remembered reading this article once; much of it had been only a jumble of nonsense. High-priced encyclopedia, too.

"No, not just now. Turn back to where we were last time, remember?"

Ahlgren knew it had to be done. For some reason. His hands began to tremble as he turned the pages. Pe. Pi. He was getting closer to something he didn't want to find.

Po. He dropped the book, but made himself pick it up again. Barbara gave him a violent nod of encouragement. She was still almost crying over something. Women. But this time she was here to help him and he was going to succeed.

He turned a few more pages and there it was. Something he had tried to face before—how many times?—and had always forgotten about after failure. His eyes scanned the clearly printed symbols, but something in his brain fought against interpreting them.

"I can't read it. It's all blurry." He had said that before.

Barbara whispered: "Try, Jim. Try hard."

Ahlgren stared at the page in an immense effort, failed, and relaxed for a moment. The title of the article suddenly leaped into focus for him:

POSSEMANIA

He held up the book and began to read aloud in a quavery voice: "—From the Latin, *posse* power, plus *mania*. Of all mental diseases doubtless the most destructive, in terms of the total suffering inflicted upon humanity throughout history; and one of the most resistant to even modern therapy."

Why had they wanted him to read this? And why had it been difficult? An awful

idea loomed on the horizon...

"'Unique among diseases in that its effects are put to practical use by society, it in fact forms the basis of modern government (see Party, the).'"

Ahlgren faltered and looked around him uncertainly. He felt sweat beginning to bead his forehead. The article went on to great length, but he flipped pages rapidly back to find Party, the.

He skimmed rapidly through a few paragraphs, then read aloud in an impersonal, shrill, hurried tone: " 'Those with this pathological lust for power over others generally find means to satisfy it in any society; ours is the first to maintain effective control over its members who are so afflicted. Now, the victims of the disease are necessarily detected during the compulsory annual psychological examination. If immediate therapy fails to effect a cure, as it usually fails, mental Conditioning is applied to initiate or strengthen the delusions, welcomed by the patient, that the Party has the rest of the citizenry at its mercy and—' "

"Take your time, Jim."

" '—and that—that Conditioning is a painful, crippling punishment used by the Party itself to erase thoughts of political opposition.' "

The world was turning under Ahlgren. He forced himself to read on, slowly and sanely. Could this be truth?

"Following what is now to him the only practical course, the victim is guided to apply for Party membership as those found to be compulsive rebels and/or punishment-seekers are shuttled to the complementary organization (see Underground, the). He is of course invariably accepted, and is assigned, depending on his skills, to the Administration or the Political Police (see PolPol)."

Again pages fluttered under Ahlgren's fingers. PolPol.

"—stun pistols locked at low neural frequencies that produce only a tickling sensation, to which all Party and Underground members are Conditioned to respond by going into psychic paralysis, unless in a situation where it would be physically dangerous to do so."

Ahlgren skipped from article to article, his mind grabbing recklessly at the words that had been forbidden him.

- "—Most people generally ignore the activities of both Party and Underground, except as occasional sources of unexpected amusement."
- " '—Underground members captured by the Party are quickly turned over to the government doctors for Conditioning. They are treated and sent out again to a different area, believing themselves rebel couriers or escapees. At each capture they

are tested to see if their disease has abated to within the reach of therapy."

"—The PolPol raid the same houses over and over, being Conditioned to remember no such addresses and keep no records of them. Property owners are compensated for damage incurred. Personal injury in these activities is extremely rare, and accidental when it does occur, due to the Conditioning of both Party and Underground people against it.' "

" 'Party members composing the Administration perform most of our essential government functions, being constrained by their Conditioning against any abuse of power, corruption, or dishonesty."

Ahlgren felt cold sweat all over him. His headache was gone but his throat felt raw. How long had he been reading aloud?

"That's fine, Jim, that's fine!" a doctor said. "Can you go on a little further?"

It took a giant's effort. Yet it was something that must be done.

"'By the interaction of Conditioning with the disease, the victim is prevented from apprehending the true state of affairs. He is, for example, unable to read this very article with any true comprehension. If read aloud to him, it will not make sense to his mind; he will interpret it to suit the needs of the moment, then quickly forget it. Indeed, this article and similar writings are frequently used as tests to determine a patient's progress..."

Ahlgren's hand holding the book dropped to his side. He stood swaying on his feet, utterly weary. He wanted only sleep, oblivion, forgetfulness.

A doctor carefully took the book from him, found the place, and read: "

"When continued therapy has brought a Party member near the point of cure, as is finally possible in about half of all cases, a realization of the true state of affairs becomes possible for the patient.' That's you now, Jim. You're over the hump. Understand me? You're getting well!"

Director Ahlgren was weeping quietly, as if from weakness and exhaustion. He sat down on the edge of the treatment table and the doctors gathered around him and began to fit the attachments of the table to him. He helped them; he was familiar with the process.

"I think this'll be the last, Jim. We're going to de-Condition you this time. Then one more subconscious therapy—" The doctor's voice came through speakers...

... into the next room, where Perkins, Lazar, and Dr. Schmidt watched and listened.

Lazar stared through the one-way glass, gripped by vast elation. The director's chair was his! The girl in the Treatment Room had thrown her arms about Ahlgren; perhaps she regretted that she had been used against him. She should be grateful. It was not often that a mere citizen had such a chance to help the Party.

Dr. Schmidt was saying something to Lazar. "What?"

"I said, would you tell me what you thought of the material the former director read aloud just now?"

Lazar frowned. Why, it had been something—unpleasant. He turned to Perkins, giving up the problem with relief to his superior.

"What he read was a lot of subversive nonsense," Perkins rumbled, after a thoughtful pause. "It amounted to a confession of guilt."

"I see," said Dr. Schmidt. He looked a little sad. "Thank you, gentlemen. Shall we go?"

Perkins was staring with bright and hungry eyes at the motionless form of former Director Ahlgren on the table. "Too bad we have to inflict such pain," he said.

He was coming out of pleasant sleep, and the first thing he did was reach out and find her hand. He looked up at her face. He remembered now—she'd said she'd wait... five years before.

"Was it your idea?" he asked. "To help last night yourself?"

"No, the doctors suggested it, darling. They thought you were approaching a crisis... but it's all right now."

"Then stop crying," he told her. "Every time I look at you, you're crying. Think I want to watch you cry all the time?" But she was half laughing too, so it really was all right.

He lay in peace. The weight of mountains had been lifted from his soul.

His mother was bending over him anxiously. He saw there was morning light coming into a hospital room.

"Son, are you all right?"

"I'm fine, Mother. No pain." Barbara, looking happy, was still here, or here again.

His father came in, a little older and grayer than he remembered, shaking his head in the familiar way at his mother's ignorant worry about the supposed pain of Conditioning.

"It was on the Party news just now," his father said, grinning. "You were

denounced for traitorous activity yesterday and purged last night. The usual appeal—for the citizenry to treat you kindly and not blame your new personality for your acts of treason. I think we can manage that somehow."

Jim Ahlgren looked around at the three of them. He said softly: "I've been gone a long time."

There is a doctrine among teachers (I'm not one, but I know a few) that students must be challenged to get them to put forth their best efforts. One wonders what might be accomplished if this were ever really tried.

SEVEN DOORS TO EDUCATION

The thing came down into atmosphere over Lake Michigan at a velocity that should have built shock waves before it; there were none. Radars at the Nike and fighter-interceptor sites along and near the shoreline swept their beams toward the thing in the course of their normal search routine. The hurtling electromagnetic pulses were detoured precisely around the thing, to resume on the other side their straight and echoless flight. The thing was quite unseen.

The descending mass, roughly spherical, scores of meters in diameter, slowed its plunge through the early summer night of North America. It hit the lake with hardly a splash, many kilometers from shore.

Not for the first time did it find concealment in the waters of Earth. A few people of Earth had been aware of it. Now none of them remembered it.

A June day in Chicago can be uncomfortably hot. This particular day was too miserable, in the opinion of twenty-year-old Pete Kelsey, for him to spend it all sorting mail inside the Main Post Office. Not if he could find a way out Besides the heat, it was one of those days when he just didn't feel like working. He didn't quite know why. The job was really all right, though it didn't pay too much. If he stuck with it, he would be able to retire in his early forties.

But today Kelsey's morning, spent running a canceling machine, had been generally unpleasant; and he suspected from the way the mail was running that he would be assigned in the afternoon to a dim acre of the eighth floor, where long-neglected bags and piles of low-class mail awaited a slackening of the first-class flow. It would be hot and chokingly dusty there. Kelsey decided to wangle half a day of his accumulated vacation time.

In an hour and a half he was in his rooming house on the North Side. Half an hour after that he was sitting in swimming trunks on one of the massive rocks that guard land from lake along stretches of Chicago's park-and-bench shoreline, clothing piled

beside him, transistor portable blaring something with a beat.

He was almost alone, on the edge of the great city. The rocks rose like stairs for five or six tiers above where he sat near water level, shutting out the sight of green park and distant buildings. To right and left the rock rampart curved out and then away, at about a hundred yards from where he sat, putting him out of sight of the rest of the shoreline. Only two or three other people were in sight, strolling in the cool lake breeze or sunbathing.

If only some nice-looking babe would come along now, to stretch out on the rocks for some sun... well, he wouldn't hold his breath while waiting for her. The water looked inviting.

The beaches were not officially open yet. He could have gone to one anyway, but he didn't especially care for sand, or for wading a long way out to reach deep water. Here you could dive right in.

He did. The water was cold, making him gasp as he surfaced. "Better than air-conditioning," he told himself aloud, treading water happily. He stroked out a few yards from shore, an easy, confident swimmer.

When he felt the sudden tight grip on his foot his first unthinking reaction was: A joke. One of the guys from work, somehow... there was a sting at his ankle...

Kelsey had not had time to get really frightened. When he woke, he was calm, but bewilderment came quickly. He was still in swimming trunks, and wet.

He lay on his back on the floor of a small, square, windowless room, staring at a glowing ceiling that provided comfortable illumination. In the center of the ceiling was a metallic disc that looked like a closed door or hatch, with hinges at one side, and at the other small projections that might be an intricate latch.

He rolled over dazedly. He had been swimming, and now... an old man lay stretched beside him, eyes closed, breathing heavily, dressed in rags and thinly bearded. The old man's features were Oriental—Chinese, or maybe Japanese. Kelsey had never learned to tell the difference.

Kelsey stood up.

He felt fine, but where was he? Nothing looked familiar. The little room held no furniture. Floor and walls were some featureless neutral-colored stuff he could not identify. Set into one wall was a niche like a sort of berth, possibly just big enough for someone Kelsey's size to squeeze into. A transparent sliding door, now half open, separated berth from room.

He looked down at the old man, and found him scrawny and ugly and generally

unhealthy-looking. Maybe when the old man woke up he could tell what this was all about.

This was an odd, silent place. Kelsey paced around, somehow expecting every moment to get an explanation from somewhere. In one wall, just below the low ceiling, air circulated gently through a grille, with darkness behind it. In one corner of the floor, a six-inch hole showed the inside of a pipe, leading down into more darkness.

Kelsey investigated the berthlike niche; its door slid in grooves cut into a material that looked like rubber, but felt smooth as melting ice. In the top of the berth was another closed hatch, exactly like the one in the room's ceiling.

He sat on the edge of the berth, scratching his damp head, and regarding his unconscious companion. The utter craziness of the whole business began to soak in on him. He had been swimming... he remembered the grab and sting at his ankle. There was no mark, no soreness.

He looked up at the hatch in the ceiling. Was he in a submarine? He had never been aboard any kind of ship. He searched his memory for data from movie and television scenes; what he could remember didn't help any. He formed a vague picture of kidnapping Russian frogmen. He wished he could wake up and find this was all a dream.

The hatch in the ceiling was easy to reach, but getting it open was another matter. After trying for about a minute, Kelsey quit in annoyance and attempted to wake the old man.

The old guy didn't respond to gentle shaking. Was he drunk? Didn't some Chinese still use opium or something? Kelsey shook harder.

"Hey," he called self-consciously, his own voice sounding strange in the silence around him. "Wake up!" he said, louder. The old man's head wobbled on his thin neck with the shaking. He breathed. He stayed out.

Kelsey sat on the floor. Maybe the old guy was in bad shape. He would wait a while and try to think this out.

Without warning water began to fountain up from the pipe-opening in the floor, in a jet that carried to ceiling height and filled the room ankle deep in seconds.

After one paralyzed moment Kelsey jumped up and pounded on the ceiling hatch, yelling for help. The only answer was the continued splashing roar in the room.

Remembering the old man, Kelsey spun around. Rising water framed the wrinkled face. Kelsey jumped to him and lifted him, surprised at the weight he felt. He might have to keep the old man afloat with one hand while he tried to get the hatch open...

only now did he notice with horror the heavy metal chains that bound the old man's limbs, nearly concealed by the ragged garments. There would be no keeping him afloat!

Water lapped around Kelsey's knees. Was it going to fill the room? The old man... Kelsey thought of the berth. He dragged the thin, weighted body there, lifted and crammed it in, slid the transparent door shut. It looked like it might be waterproof.

There was no possibility of getting in himself, unless he left the old man out to drown—the thought flitted across his mind, found itself in alien territory, and fled.

Kelsey went back to the ceiling hatch, wading through water that was waist deep and still rising rapidly. He tried to work at the latch methodically, but panic grabbed at his fingers and made them fumble. The water reached his chest. Would it drain, out through the ventilator when it got high enough? Would it leave him any air space? He could drown in this room. He was going to drown in this room.

He looked around wildly. The old man lay peacefully behind his transparent door, like an exhibit in some reversed aquarium. There was another hatch in the berth, another way out... but no, the hatch in the berth was no different from this one, no use risking two lives.

"Help!" Kelsey shouted. The water had reached the ventilator and kept right on rising. Soon the room would be full; Kelsey was swimming now. "Help!" He twisted at the latch.

The latch stung his hand.

Kelsey woke up again. He lay with his eyes shut for a little while; there was something frightening he might see when he opened them. He could not remember at first what it was...

He sat up with a jerk. But he was not drowning now, although still wet and in swimming trunks.

The room was not the same one, but similar. Same glowing ceiling, same ventilator, but no berth. Again a closed hatch, or door, this time in one wall instead of the ceiling. Another hatch, in the floor, stood open. Kelsey crawled to it and looked down into the room where he had nearly drowned. It was empty of water now, but the floor still gleamed wetly. The sliding door to the berth was open; the old man was nowhere in sight.

Kelsey sat with his legs dangling through the open hatch, trying to make sense of it all. He couldn't remember climbing up from the lower room, or even getting the hatch open. The latch had stung his hand in a gentle way, leaving no mark or soreness, as

something had earlier stung his ankle. Each time he had been knocked out.

Had someone pulled him up here? He looked around nervously. Was he being watched from somewhere? He couldn't just sit thinking about it. He gripped the edge of the hatch and lowered himself easily back into the first room, noticing as he did so how well he felt physically. He examined the compartment where he had left the old man. Where the hatch had been in the top of it was now a flat metal plate that he could not move with his fingers. He pushed and pounded and yelled some more, with no result.

The ceiling-glow died suddenly in this lower room; the only light now shone down through the open hatch, from the room above. Was someone telling him to move up there?

He climbed up without difficulty; he went to the closed door in the wall and pushed at it uselessly. This one had no latch, but an opening that looked like an odd keyhole. In a small rack beside the door hung ten or twelve odd-shaped metal sticks.

Halfheartedly, Kelsey tried a few more yells and listened to the waiting silence. Well, he could sit around until something happened. Or he could continue to work on the door. He couldn't think of any other course.

He took some of the metal sticks from the little rack and studied them. They all looked as if they would fit the door's keyhole, but no two were shaped exactly alike. He chose one at random, and tried it in the door.

His hand got a nasty, grating shock, unlike the previous gentle knockout stings. He dropped the key and at the same instant heard water gushing up in the room below. Kelsey slammed the floor hatch down and sat on it. Should he try to stop the flood by putting another key in the door? His hand still tingled; he decided not. Was he being punished in some crazy way for trying to open the door, by someone controlling all this, or was he just caught in a chain of accidents?

Soon the muffled water-sound stopped. Gingerly he eased the hatch open; the bottom face of it turned up dripping wet. The room below was full and brimming over.

Could the room he was now in be flooded too? He closed the hatch and saw with horror that a little water came seeping up through it, as if the hatch were made of blotting paper. Yet it looked and felt like hard metal.

He decided to try the door again, shock or no shock. It was better than just waiting here, perhaps to drown if the water rose again.

He took another key. He decided to peel off his trunks and try using them for insulation when he held the key and tried it in the door... but maybe he could do better than that.

Wasn't one key enough to open a door? Why have so many in the rack? Starting to think, he really saw another detail for the first time: marked above the door was a small number 7. He had noticed it before without thinking about it; you saw numbers all the time, on doors and lots of other places. But maybe a key would be numbered 7. Sure enough, each key bore a small engraved number, but each was of two or three digits; there was no number 7.

Kelsey looked more closely at the door. Near the keyhole ran a series of numbers in the same neat engraving borne by the keys: 2 6 14 30. None of the numbers matched a key's number. Yet he thought there must be some connection. He sat comparing numbers for what seemed about five minutes before something clicked in his memory, taking him back to the intelligence tests he had experienced in high school. A series of numbers... complete the logical sequence, the instructions had said. It was one of those things that teachers thought up to make the smart kids feel good, he had told himself at the time, knowing that he himself wasn't a smart kid. He hadn't tried very hard at the test, feeling there was no point in it. But when they showed him the results, he hadn't done badly at all, in fact a little better than average all along the line. That surprised him. He had never wanted to do very well in school, because most of the kids he knew sort of sneered at guys who were brains, and the uncle he lived with was always talking down book learning and college guys who thought they knew a lot. His aunt had never said much about it one way or the other.

The numbers: 2 6 14 30. Complete the logical sequence. Well, it was worth a try. Six was 3 times 2. Fourteen was—no.

Each number was certainly larger than the one before it. Not double; 2 times 2 was 4, you had to add 2 more to get 6. Two times 6 was 12, you had to add...

"Yeah!" he said aloud. He ran through the whole series in his mind, twice, to be sure. He looked for, and found, a key numbered 62. There was nothing to be gained by waiting. He drew a deep breath and inserted it.

The door opened easily; there was no sting, and no sound of water from below. Kelsey let out breath with a relieved whoof.

The room beyond the door was quite similar to the one in which he stood. As he stepped through he found himself facing another door, this one with a number 6 above it. He was certain before he tried it that it was locked.

On the wall near door 6, beside a key rack, was a tiny shelf holding a stack of papers. Kelsey riffled through the papers. Pages from some kind of textbook on English. He thought that nothing he found could surprise him anymore.

Engraved beside the new door's keyhole was the word: ADVERB. Kelsey suspected there would not be a key marked ADVERB, and he was right But each key

did have a word on it.

Was some crazy schoolteacher running this place? He pictured some old maid, driven batty by years in a classroom, inheriting a fortune, and—nuts.

But memories of school returned once more, informing him that an adverb was one of those things called the parts of speech. He supposed that various teachers had tortured him with the parts of speech at least a hundred times during his twelve years of schooling. How could he ever need to know what an adverb was? Well, he did now.

Kelsey reached for the pages of English textbook and searched through them carefully until he found a list of words exemplifying the category ADVERB. None of the words on the keys were in the list. He would have to think about the category ADVERB and decide which key-word fitted it. He did.

Again the door opened easily for his chosen key. He was not surprised at the sight of another similar room, and the number 5 above another door. Almost jauntily he walked across the new room to study door number 5 for a small engraved symbol. He found the letter H, which might stand for a lot of things.

This time the shelf beside the door was large, holding books, wires, and glass in various shapes that reminded him of what he had seen in his occasional glimpses from the hallway of the high school chemistry lab. A small metal tub held a clear odorless liquid that might be water, judging from the lack of smell. Careful now, he warned himself. But he didn't feel thirsty yet.

There was no keyhole in door 5. A simple latch was sealed under a casing of some clear substance that resisted Kelsey's pushing fingers like iron.

He sighed. He would have to go by the book, and the books on the shelf were thick and formidable-looking volumes. A glance showed him they were physics and chemistry texts. He groaned.

From somewhere in the rooms behind him came a watery gurgle. Well, there was no use just sitting here, and nothing else to do but keep trying to figure a way out. This chemistry business here looked far too hard for him to solve, but it would at least give him something to do.

First, the symbol on the door. A book told him that H represented the element hydrogen. He discovered that it was possible to produce hydrogen from water, given electricity and suitable apparatus. These were provided, the electricity from an ordinary-looking wall outlet. On the shelf was a glass tube of peculiar shape that seemed designed to convey the newly released hydrogen to the seal holding the latch. The little tub was marked H₂O, which he learned meant water.

He went to work with containers and wires and electrodes, following a procedure

roughly outlined in the books. After several mistakes and one mild electric shock he had the apparatus working. The seal over the latch melted away like ice in July sunshine. Kelsey wondered idly what the seal was made from; but he didn't much care, as long as he had gotten rid of it

He had been briefly worried by the realization that the other gas produced, called oxygen, was escaping into the air of the room. He thought the name was familiar, but he wasn't sure until a book assured him that he had been breathing the stuff all his life.

Stepping into the next room, and facing door number 4, Kelsey felt almost at home. Before he could do anything else a great sleepiness rose up in him and overcame him. He stretched out on the floor, worried drowsily about the chance of another flood as he slept, and sank into oblivion.

When he awoke he sat up alertly, feeling good, remembering instantly all that had happened.

There was another shelf in this room, it was as big as the last, and he supposed the books and odd-looking junk on it would enable him to open door 4. But after getting to his feet and stretching, he paused to consider another puzzle first.

He felt refreshed and alert, as if he had just slept eight hours. He had spent an undeterminable time in getting through the other rooms, and lying unconscious in them. However long he had been in this place, he had had nothing to eat or drink since arriving. But he didn't want anything now. And another thing; there had been nothing like plumbing in any of the rooms, unless you counted the flooding pipe in the first. It seemed that he didn't need any plumbing.

He felt physically fine in every way. He didn't even want a cigarette. He had shaved in the morning (this morning? yesterday?) before going to work. He rubbed his face; it was still smooth.

His comfort was eerie, when he thought about it. It evoked forgotten ghost stories about people who had died without knowing it. Had he really drowned while swimming in the lake?

He breathed. His pulse beat. He kicked a toe rather incautiously against a wall and was painfully convinced of solidity. Were his bodily needs being taken care of while he slept? That was hard to believe; he thought any explanation for all this must be hard to believe. Yet one must be true.

Kelsey walked back through the rooms he had already traversed. Water now filled the second room to the edge of the open hatch in the wall. He would have to wade and dive if he wanted another look at the first room, but he saw no point in doing so. On impulse he scooped up water in his hand. It tasted all right.

But he wasn't thirsty.

Whoever was behind this, for whatever unimaginable purpose, seemed to be urging him forward with the threat of flood. There was no way out back here. Whether there would be any way out for him ahead... he told himself there must be.

Kelsey faced the locked door numbered 4. It had a keyhole, and engraved beside it was the word: ETRUSCAN.

Kelsey looked at the now-familiar rack of keys, and again felt the impulse to try one at random, to rush through doors—he didn't doubt there would be more of them —as quickly as possible, to get to the bottom of the whole situation. But at door 7, a random try had given unpleasant results. He would keep solving problems as long as he could, and then take chances guessing if he had to.

Now let's see about ETRUSCAN, he thought, whatever it means. Each key was numbered to correspond to one of the bits of junk on this room's shelf. The bits of junk were pottery, clay or stone, painted or carved in decoration, some whole, some only broken pieces.

There were what looked like textbooks on the shelf again, with covers and a lot of pages missing, as before. This time there were also thick notebooks. Kelsey picked up one of these and found it crammed with neat notes and drawings that were plain enough in detail—but what was it all about?

Grimly he began to study the mass of archaeological field notes, determined to find out which of the bits of junk was an ETRUSCAN. He read for what seemed a long time, standing there. He did not grow tired of standing, didn't even lean on the shelf. He noticed this but put it out of his mind.

It took a long time. But when the sleepiness came again, and he lay down on the floor, it was in front of a door marked 3.

He put aside speculation about how much time was passing, or what his situation was all about. "All right, I'll play your crazy game," he muttered aloud. He would just accept the absence of any physical need as a blessing, and keep working his way through doors.

He solved a problem in positional astronomy, learning to use mathematics that he had never dreamed existed. With the help of a computer that he had to learn to program, he navigated a dotlike spaceship symbol from planet to planet within a system represented by a tiny orrery. The solar system in the model had only six planets, none of them with a sizable moon, which facts suggested nothing to Kelsey.

He was satisfied when the scheduled journey was complete, and door 3 clicked open for him.

The test required to open door 2 appeared somewhat easier at first. The beginning to a musical composition was played repeatedly to Kelsey, through some invisible speaker. Pressing one of a series of numbered buttons brought him the sound of one of four conclusions, all quite similar. There were books on musical theory, and printed copies of each ending. He listened and studied until he felt sick of all music. Finally he made a choice.

He was mistaken.

The door refused the key. No shock bit at his hand, no sound of rushing water came from the rooms behind him. All was quiet, the eternal quietness of this place that might be expected to get on a guy's nerves but so far hadn't bothered him.

Evidently his mistake was not to be punished. Kelsey was suddenly angry, that someone could push him around like this, use him for a... a... guinea pig. The term floated into his mind; he wondered what it was, exactly, that scientists did with guinea pigs. When he got out of here he would look it up.

If he got out of here.

When! Now to get this damned door open. The temptation to choose one of the three remaining keys at random was strong; but no, he would try what he honestly thought to be the second most likely piece of music.

This time the key worked. Kelsey stepped through and waited for the sleepiness to come.

Door 1. He had anticipated it, in the back of his mind, for that now seemed many days. Would there be a final answer behind it? Or a door numbered 0? Or a trick? He went to work as soon as he woke up.

Kelsey built a cathedral. At least the structure somewhat resembled a Gothic church when he was through with it. He built it about three feet high, from blocks about a cubic inch in volume, that clung together like mortared masonry when he fitted one to another. He built it using tiny remotely controlled mechanical arms, another concept utterly new to him. They worked into a glasslike enclosure that prevented him from reaching directly the simple latch of door 1. In this room the latch was not on the door but on the wall a few feet away. A block in the mechanism kept him from quite reaching the latch directly with the arms.

He had a helper, for the first time. When he pressed a button a small machine ran from one corner of the enclosure as if anxious to assist him, climbed upon the blocks

until it reached the highest point of whatever pile or structure they formed, and reached a tiny arm as far as it could toward the latch.

Kelsey soon learned that the robot could not climb a tall narrow spire of blocks; he didn't have enough material to build a massive ramp or stairway. Besides the blocks, he had beams to work with, sticks of varied sizes and shapes, up to a few inches long. Each beam had the word TEMPORARY lettered on it. Kelsey soon found out what TEMPORARY meant in this case; if the little robot attempted to climb the structure while any of the beams were in place, the blocks immediately lost their cohesiveness and the whole structure collapsed.

A good many of his efforts collapsed from one cause or another, usually while the robot was climbing. The little machine hit the floor hard, but always bounced up and returned to its corner, like an undaunted boxer ready for the next round. Kelsey chuckled at the robot, tried to think of a name for it, and vowed he would have no less patience.

He built and rebuilt, without tiring. There were books on engineering and architecture; he studied them between attempts. What he needed was a tall structure, with a fairly large top for the robot to stand on while it reached for the latch. Since the quantity of blocks was limited, the structure would have to be mostly hollow inside. He used his little beams for temporary support, and discovered the beauty of the arch, and the use of the flying buttress to keep arch-supporting walls from collapsing outward.

There came a time when the robot climbed successfully and stretched itself upward, until the tip of one small metal arm reached the latch, curved over, and pulled precisely...

Click!

He had done it. Seven doors.

Kelsey felt excitement such that his hands should have trembled with it, but they remained steady and obedient as machines. Door 1 swung ajar for him now. He felt an impulse to take the robot with him, but it was still out of his reach behind the glass. And it now hung inanimate from the latch it had opened. It was only a machine.

Almost without pause Kelsey pushed open door 1 and stepped through. An unnumbered door faced him from the familiar place in the opposite wall, but something else grabbed his attention immediately—a ladder rose through a hole in the glowing ceiling, and down through the hole came a greenish wavery light that might be a water-mottled reflection of the sun.

Kelsey climbed quickly. Above the room the ladder curved off to become a sort of

stairway, inside a tube big enough to hold a crawling man. Climbing around a sharp bend in the tube, Kelsey felt an odd sensation, as if he had been turned upside down for a moment, lost his balance and his visual perspective. The feeling passed in an instant; he climbed on, into brighter light.

Some force held clear water up like a lid inside the upper end of the tube; it looked as if the upper end was just under the normal surface of a body of water, with bright light above, as if from a clear sunny sky.

Kelsey was quite practical about wonders by now. He poked a finger into the water-lid above his head, and withdrew it wet but undamaged. He crawled up through the water, and stopped with head and shoulders in the open air and sun, his weight still supported by the tube.

He had emerged into the familiarity of the Chicaco shoreline, to very nearly the exact spot where he had felt the grasp and sting at his ankle, a few yards offshore from the rocks. The sun was nearly overhead on a bright warm day. Piled as he had left it he saw his clothing. Above the gentle lapping of wavelets against rock he heard his transistor portable blaring something with a beat.

The same day!

Mechanically he pushed himself free of the tube and dog-paddled to the rocks. A couple of people were in sight, strolling or sunbathing. The same people. He remembered' them now. It was the same hour. Maybe the same minute.

His mind felt blank. He pulled himself up onto the rock and sat staring stupidly at the lake, which showed nothing of what lay beneath its surf ace. The grab at his ankle, the strange place, the old man, the flood, the tests, and the doors, one after another, all had no ties to his reality right now. He felt that in a little while he would convince himself that the whole thing had been a dream—but never quite convince himself entirely. To the end of his life he would carry the doubt, and the wonder...

Kelsey entered the water again. He swam out and groped down with his feet. The tube entrance was still where he had left it. Was it always here? Ridiculous. Swimmers and boaters and fishermen would run into it all the time. He ducked underwater and opened his eyes and tried to see the—place down there. Nothing was visible but the mouth of the tube, and a few yards of the tube itself in the green murkiness. He gripped the lip of the tube opening, a few feet underwater, and stared downward inside. He could see quite a way.

He came up for air. The thing, the system, whatever it was, whoever controlled it, had released him, hadn't it? He had studied and struggled his way out. What more did he want? Revenge? Maybe. He wanted something. He somehow believed that if he reported this to someone it would all be gone when they came to look for it.

He remembered the final, unnecessary door that he had seen down there. He looked around with longing at his familiar world, drew a deep breath, and went underwater.

Going down, Kelsey got the same queer sensation at the bend in the tube—as if he was being pulled in a hurry from one place to another. He ignored it and went on.

The room at the foot of the ladder was just as he remembered it. He faced one way and sighted through a line of open doors, through which he had worked his way to freedom. He faced the other way, toward the final door, unnumbered and unlatched.

Kelsey stood quietly for a moment with his hand on the door, then pushed gently. The door swung open. Nothing else happened. Light was dim on the other side. He stepped through and found himself facing a thick-looking transparent wall. He could dimly discern an unfamiliar shape moving in the vagueness beyond it

"And so the final test is passed," said a man's voice from a speaker over Kelsey's head, making him jump. "The will to open the unnecessary door is yours."

Kelsey backed warily away, and stood holding the door open. "All right—what's it all about?" he demanded. "Who are you?"

"I am an alien here. My shape is not yours. To see me now might disturb you."

It was quiet except for Kelsey's breathing. He found he believed what he had just been told. Outer space. Jokes about little green men. Not funny now. "What do you want?" he finally asked. "Why did you put me through all that?"

"I want to go home," said the voice, simply and eagerly. "I can do things that seem to you very wonderful, but one thing I cannot do without the willing help of another intelligent mind. That is to drive my ship through the great distances, to make timelike the great intervals, to get home—neither to die of old age myself on the way, or to find my world old and my people gone when I arrive... can you understand? I must pass many stars to get home."

"You want help; why don't you just ask?"

"Your societies must be left to themselves now, for a long time to come, not bothered from outside. This is very important. I must deal only with an individual.

"You have the ability to help me, proved by my tests. I have violated your rights and subjected you to strange pressures, but I assure you, you were never in real danger here. I ask your forgiveness; my need for help is great."

Something suggested to Kelsey that he turn around and scramble up the ladder as fast as he could. Somehow he didn't. "How come you need help?"

"There has been an accident—I am the only one of my kind left alive in this ship. I will explain it in detail if you wish."

"What happened to that old man?" Kelsey demanded suddenly.

"I created his apparent body from a material sensitive to mental forces, using specifications in your own mind. He appeared to you as a being you knew to be intelligent, yet one far from what you think of as your own kind. Still you took what you believed to be a serious risk in order to protect his life. If you elect to go with me, you will gain knowledge that is not well entrusted to one who holds the lives of other beings in contempt. The old man was your first test. He never existed as a person."

"You expect me to believe that—"

"Watch."

An opening dilated in a wall. An amorphous gray lump of stuff flowed out like a huge fat worm onto the floor. It rose, coloring and shaping itself into rags and chains and a smiling Oriental face. It nodded at Kelsey cheerfully; the rags and chains became the rich robe of a mandarin.

"I can speak through the mouth of this image, if you wish," the figure said.

"Better than TV," said Kelsey, sounding idiotic to himself. "Listen, how do you expect *me* to help you?"

"You can, if you are willing. Your mind is good; do not be afraid to let it reach out for things. The work on the trip will not be hard. There will be much time for fun, and I can promise you will not be bored. In four years you can be back on Earth, if you wish, though there is a planet in my home system with people very much like yours which..."

"Four years!" But what's the difference, Kelsey thought. I'm not going anyway.

"I regret so long a time. But I and my people will not be ungrateful; there will be compensations..."

"Wait a minute." Kelsey backed toward the ladder, the mandarin following him with cheerful eyes. "If you're from—where you say—how come you know so much about us here on Earth? Don't tell me you got it out of my mind, all those tests. I didn't know all that stuff to begin with."

The mandarin melted down to a gray puddle and began to flow away. "You are not the first being I have seized, tested, and interviewed on this planet," said the voice from the speaker. "More than nine hundred others preceded you. By now I know you people well enough to test you for ability to give the help I need. You are not the first to be suitable. But I hope you will be the first to accept."

Kelsey put a hand on the ladder. Why hadn't he just stayed on shore once he got away? But now he had to keep asking questions. "What's happened to the other nine hundred?"

"I do not mistreat them further. They are set free—as you are now—to return to their normal lives. I try to improve their health as some payment for my violation of their rights."

"You mean, if I had just walked away up there—"

"I would have bothered you no more. In a few minutes you would have forgotten the entire incident."

"Thanks," said Kelsey. He turned and went two steps up the ladder quickly, then turned again. "How did you give me all those tests in a few minutes?"

"If you come with me, you will learn that—and many other things."

"I see," Kelsey muttered. Four years out of a guy's life... but what am I thinking of? Better get out while I can.

He went up the ladder quickly. Tomorrow would be Tuesday. He would go to the post office, and sort mail. He would do more than that, damn it. He would visit some of the colleges and see what kind of evening classes they had.

But hadn't the alien said he would forget all about this ship a few minutes after he left it? Maybe he would simply slide back into his old life, and never know the difference. Well, he asked himself angrily, would that be so bad? Besides, a lot of people would miss me if I just took off for four years.

Who, really?

He believed the alien, somehow. If the guy had been lying, he would have named a shorter time than four years.

Kelsey reached the top of the tube, and paused with head and shoulders out of water. Miles to the southwest, now out of his sight behind rocks and park and distant skyscrapers, was the Main Post Office, from which he might retire in about twenty years. It was really a big place when you were standing near it, or inside it sorting mail. From here it was only a small, hidden box, blind and self-contained under the reach of all the sky.

"I'm ready. Can we move the ship now? Just by thinking about it?"

"Yes, for the machines will work with us. Relax. Now hold *this* pattern in your mind." A thing indescribable in Earthman's words came into Kelsey's consciousness. "Think about it until I come back with another."

"Got it."

At about midnight, each of the higher-frequency radars working in North America cast on its scope a burst of noise. A military alert was called, but nothing further out of the ordinary was observed.

And no one on Earth attributed the event to the making timelike of a great interval.

In one of Poe's short stories ("The Sphinx"), a man faints in terror because he misinterprets, as a giant monster crawling on a distant hill, what is actually an insect "... about the sixteenth of an inch in its extreme length, and also about the sixteenth of an inch distant front the pupil of (the observer's) eye." In other words, one's view of the universe is largely a matter of perspective. And if the whole universe is directly perceived as the largest object in the visual range, then it is perhaps to be expected that objects on the normal human scale will not seem to differ very much in size, one from another...

DEEP SPACE

One moment the *Hudson* was the solid world under the magnetic boots of his spacesuit, as he pounded in terror on the closed outer hatch of the airlock, and screamed a futile appeal into his helmet microphone. The next moment, hatch and ship were gone without fuss, as if they had never existed. Gone into that place or process that men called prime-space, and used without understanding. The ship's jump out of normal space left his suited body turning alone among the stars.

He had been working alone, standing out on the hull, adjusting the molecular pattern of an auxiliary field-pump. He had not spoken to anyone on radio for a minute or so. The warp-tool rested easily in the clawlike metal hands of his suit; a green light showed that the little ball-magnets in the tool were spinning and precessing properly. As far as he could tell, all systems were in great shape. Then—

The waist-high bulge of the field-pump had receded with smooth suddenness into the hull. The man had known the probable meaning of that—that a jump was imminent—and in the nightmarish seconds left had made a shuffling lunge for the automatically closing hatch. Too late. He had tried to thrust the end of the warp-tool into the swiftly narrowing gap to jam it open, but he had been not quite in time. The closing hatch strained at the obstacle momentarily, then cracked the casing of the tool and shot it out, as a man might shoot a seed from between his fingers.

He had two or three seconds after that to yell, and pound at the closed hatch with his suit's metal hands. If they heard him, inside, it was evidently by then too late to stop the impending jump. The ship vanished right from under his boots.

He was alone in deep space, many light-years from any sun. His body was turning

slowly, as a result of his last movement against the ship.

Drilled-in training stayed with him. Without having to think about it he slid an arm in from its spacesuit sleeve and switched his radio to emergency position; the coded distress signal was already hurling itself away from him at light-speed in all directions. Within about a second, he had done all that he could do for himself.

He fell.

Like all spacemen, he was used to the occasional absence of gravity. Working outside, away from a starship's artificial gravity, did not bother him; the magnetic boots gave a standing man an adequate sense of up and down. But now he only fell. It was a sensation that had become bearable to him, through training and practice, but hardly more than bearable.

The weightless falling sensation combined with the shock of what had happened to nudge him toward panic. But he fought it off, telling himself he had a chance, a good chance. It would take only a minute to figure the chances out.

The *Hudson* would come back for him, of course. If the crew did not already know that he had been left outside, someone was bound to notice within minutes that he was missing. It was incredible that the ship had jumped with him outside; some against-all-odds coincidence of mechanical malfunction and human error had victimized him.

The precise nature of that coincidence made no difference to him now. Neither did the distance of the *Hudson's* jump. Whether it had gone only a trillion kilometers or so, or several light-years, within twenty minutes or half an hour they would have started back for him.

On the return jump they would aim for their previous position—but how close could they come to it? He had a pretty good idea of the answer. If the *Hudson* popped back within a billion kilometers of him, it would be a very good shot.

All right, then. Figure forty-five minutes or an hour, and they would be back in normal space in his general area, searching. By then he would be waiting at the center of a sphere of radio distress signal that was approaching a couple of billion kilometers in diameter, and increasing that diameter by something like thirty-six million kilometers a minute. Not a small thing at all for them to search for. Stated in those terms, the facts were comforting.

Yet well he knew the vastness in which his billions of cubic kilometers of signal were—nothing.

He fought down fear, and loneliness, and falling sickness, holding to the idea that he was going to be rescued, concentrating on it as a certainty. He had plenty of air in his tanks.

Only—it was almost as if they had left him outside deliberately.

Forget that. That way lay panic and madness. Now it helped to look at the calmness of the stars. He was turning only slowly, and they held an ordered march across his faceplate of invisible glass. He was near the edge of Earth's galaxy, and the stars and glowing gas of it made an uneven line of rounded, snowy cliffs that rested on nothing. Away from the galactic plane, which was marked with dark streaks and masses of obscuring dust, the starclouds thinned out rapidly into looser agglomerations, globular clusters, scattered dustings and dots.

His body turned steadily in the multicolored ghost-light of all the distant suns. Blackness came into view—the Night that held the galaxy like a dust-speck, as the galaxy held him. Here and there were a few frontier galactic stars, and out beyond the pinhead ghosts of light, showing where other island universes had been—long ago. Then, turning, he once more faced the starclouds of galactic center.

Now he was calmer. He studied the dials on the little panel set in front of his chest inside the suit. They glowed soft green. The clock informed him that about five minutes had passed since the ship jumped, and the air gauge said that he had nearly six hours of life left in his tanks. A radio dial indicated that his transmitter was still putting out strongly.

Even five hours of air should be more than enough. The *Hudson* should be back in this area within an hour, and should have picked up his signal in another hour at worst. Then they would rush closer to him at nearly the speed of light, perhaps put out a boat, and pick him up. Say four hours for the whole thing. No need to worry about air. Unless something went wrong.

Calculations finished, he went back to watching the turning, steady-shining stars. The galaxy went round and round.

The *Hudson* seemed a little unreal to him now, as if it were something he had not seen for years. He thought of how the crew would be laughing in relief when they came to pick him up.

We had to come back, Sharp would say. You still owe me money, remember? Everyone would have a joke, except the captain, and whoever had caused the accident. Maybe it was no one's fault, just the damn drive. Sometimes the damn drive could do tricky things. He wondered if even the scientists really fully understood it yet.

Time was a slow thing, where he was now. But his little clock was a great help. It was not impressed by deep space, or falling, or anything else. Inexorably if slowly it consumed the minutes that separated him from safety.

His turning began to bother him. Now it seemed to make the weightless falling

worse, so he unhooked the flexible exhaust hose and jetted away most of his spin with air from his suit. Plenty of air. To stop the spinning took only a very little.

Time crept by. He felt patient, alert, almost comfortable. He stretched his legs and arms, and the metal claw-hands moved against the stars, blotting out distant clusters and nebulas. Someday well win, he thought. Someday we'll boss the whole works, all that out there. Because we'll take the inanimate stuff a bit at a time, like this clock, like the suit I wear, and make it serve us, make it fight on the side of life.

The man looked without awe at what he could see of infinity, and knew that he was ignorant and weak, but that he was not at that moment a bit afraid. He wanted to say it aloud, interrupt his coded distress signal, put his statement on a spreading record: I am not afraid.

But of course it would sound foolish when they heard it on the *Hudson*.

The minutes were eaten up and eaten up and eventually three hours had passed. It came to him that he was the only real being in the universe, that he had always been alone, that his ideas of other beings and worlds were only self-deception. He had heard this fallacious fantasy discussed somewhere, and knew there was a name for it He felt so good and confident now that he could let his mind play with such nonsense and not be bothered a bit. The falling was still a bother but he kept it under control. Things could be a lot worse.

He waited calmly. Soon they would come.

At last he thought he saw a tiny spherical silhouette against the clusters of one galactic arm. Slowly he turned; tensely he waited for another glimpse. There... yes... something! He turned again. Yes!

In a few brief minutes it came closer, until there was no longer room for doubt. The multi-million galactic suns made a gleaming spot on the featureless hull. The field-pumps were apparently still retracted, in jump position. That was unusual, but it meant little to the man—he scarcely noticed it, in his intense relief. He hadn't realized how worried he'd been, until the worry was gone.

He slid an arm in from its suit arm and pulled his helmet microphone into position. He couldn't keep from grinning and laughing; it was hard to speak plainly.

"Hey, about time!" he called. "I was getting lonesome."

He listened for a reply—but of course his receiver had been on all the time, in the short pauses between transmitted pulses. Why hadn't they already spoken to him? Something wrong with the radio? Not likely. And he could hear background noise without any trouble.

The Hudson seemed to be very close, only a few hundred meters away, the

apparent size of a golf ball at a few meters' distance. It seemed to be moving past him.

"Hey!" he shouted, blasting his own ears inside the helmet. "Come on!"

He waited and watched and listened. Couldn't they hear him? Had they all gone crazy? The ship was moving past him. He rotated away from the slow-moving, distant shape and lost it. He couldn't find it again. Something was badly wrong. He couldn't understand.

He shouted and shouted into his microphone, not knowing what he said. Had it been only a hallucination? Were they all dead on board? They couldn't be; they had come back and found him. In his slow turn he spotted the object again, once more between him and the bright bulk of the galaxy. He must be orbiting around it somehow.

With a shaky claw-hand he took the strong lamp from his helmet, turned it on and aimed it. At that distance the sharply focused beam spread out enough to illuminate the whole sphere brightly. No boat appeared, no hatch opened, nothing disturbed the smooth featureless metal. It seemed that he was orbiting the ship slowly—why should that be?—but he lost it again due to his own turning motion.

It came to him that what he saw was not the *Hudson* at all, but a ship of unknown aliens, who had stumbled upon a nothing out here in the middle of nowhere, and were circling around it suspiciously.

"Take me in!" he screamed. "I don't care who you are!" It was hard to think; if only the eternal falling would stop, just for a minute...

He unlimbered the exhaust hose again and jetted air to build a spin, searching all space with his light as he twirled. It must be the *Hudson*, and the boys were just having a joke, and he didn't mind really, because the joke would soon be over and they would let him in...

... almost as if they had jumped deliberately ...

He saw it again, saw with nightmare horror that it was farther away.

"Take me in!" he screamed. "Help meeee!" He chased the ship with the hose pointing behind him, jetting away good air. He was clumsy with the hose, making himself spin first one way and then another, but somehow he got closer.

... And inside the good thick hull there would be life and warmth and closeness and no-falling. What difference if it was a joke or they were all dead or alien monsters or whatever if he could reach the ship and make them let him in...

Suddenly it was in the full glare of his light, quite close, rushing at him with what seemed terrific speed. In blind panic he moved his hose and shot out of the sphere's

path, and lost it and looked for it again.

... falling, falling, hideous falling that never stopped ...

He thought he saw it, far away, and tried to chase it and lost it again. His air rushed swiftly away into vacuum. Where now? Quick, quick! over there... or was that a star...?

The little room off the *Hudson's* boat bay was still cold with the chill of the suit that had been brought in minutes before. The body had been removed but the bulky suit still lay open on the deck, snowy with what moisture it could condense out of ship's atmosphere. A man straightened up from the group around it, took a few steps to where the captain stood, and said into the silence:

"No sign of any hole. I guess he bled out every sniff through the exhaust tube." The speaker looked down at the deck, up and around. "Why?"

"I mean to find that out," was all the captain said. It had not been his fault, but he had just lost one of his crew.

Someone said: "He must have cracked up, shouting all that stuff about let-me-in, when we were still half an hour out."

"What's that?" the captain asked sharply. He had moved closer to the suit and was pointing at one of its feet, where encrusted frost was already beginning to melt away again. The suit expert reached cautiously for a little object that seemed fixed to the sole of one of the suit's magnetic boots. He brushed frost from the object and held it up.

"Anybody know what it is?"

"Oh!" said someone, at whom everyone turned to look. "I think it's one of those ball magnets. We carry them as replacements in Supply. You know, the ones in the warp-tools?"

The cold magnet rested in a man's hand. It was bright, spherical, featureless, about the size of a golf ball.

One of the things that becomes harder as the world goes on is to draw the lines between human and not-human, between life and not-life. At one time in the past the lines were perfectly plain, or seemed to be, for Western man. Can they become invisible in the future? Fiction, and science fiction especially, is a good tool for asking such questions, and probably no good at all for answering them.

The berserkers know this much, at least, of life. That it must be destroyed....

PRESSURE

The ship had been a human transport once, and it still transported humans, but now they rode like well-cared-for cattle on the way to market. Control of their passage and destiny had been vested in the electronic brain and auxiliary devices built into the *New England* after its capture in space by a berserker machine.

Gilberto Klee, latest captive to be thrust aboard, was more frightened than he had ever been before in his young life, and trying not to show it. Why the berserker had kept him alive at all he did not know, and he was afraid to think about it Like everyone else he had heard the horror stories: Of human brains, still half-alive, built into berserker computers as auxiliary circuits. Of human bodies used in the berserkers' experiments intended to produce convincing artificial men. Of humans kept as test-targets for new berserker death-rays, toxins, ways to drive men mad.

After the raid Gil and the handful of others who had been taken with him—for all they knew, the only survivors of their planet—had been separated and kept in solitary compartments aboard the great machine in space. And now the same berserker devices that had captured him, or others like them, had taken him from his cell and led him to an interior dock aboard the berserker, which was the size of a minor planet; and before they had put him aboard this ship that had been a human transport once, he had time to see the name *New England* on her hull.

Once aboard, he was put into a chamber about twenty paces wide and perhaps fifty long, four or five meters high. Evidently all interior decks and paneling, everything nonessential, had been ripped out. There was left the inner hull, some plumbing, artificial gravity, some light, and air at a good level.

There were eight other people in the chamber, standing together and talking among themselves; they fell silent as the machines opened the door and thrust Gil in with them.

"How do," said one man to Gil. The speaker was a thin character who wore some kind of spaceman's uniform that now bagged loosely on his frame. As he spoke he took a cautious step forward and nodded. Everyone was watching Gil alertly—just in case he should turn out to be violently crazy, Gil supposed. Well, it wasn't the first time in his life he'd been thrown in with a group of prisoners who looked at him like that.

"My name is Rom," the thin guy was saying. "Ensign Rom, United Planets Space Force."

"Gilberto Klee."

Everyone relaxed just slightly, seeing that he was at least fairly normal.

"This is Mr. Hudak," said Ensign Rom, indicating another young, onceauthoritative man. Then he went on to name the others, but Gil couldn't remember all their names at once. Three of them were women, one of them young enough to make Gil look at her with some interest. Then he saw how she kept half-crouching behind the other people, staring smiling at nothing, fingers playing unceasingly with her long and unkempt hair.

Mr. Hudak had started to ask Gil questions, his voice gradually taking on the tone used by people-in-charge conducting an examination. In school, Youth Bureau, police station, Resettlement, there was always a certain tone of voice used by the processors when speaking to the processed—though Gil had never put the thought in just those words.

Hudak was asking him: "Were you on another ship, or what?" *On* a ship. You were not a spaceman, of course, said the tone of authority now. You were just a boy being proc-essed somewhere; we see that by looking at you. Not that the tone of authority was intentionally nasty. It usually wasn't.

"I was on a planet," said Gil. "Bella Coola."

"My God, they hit that too?"

"They sure hit the part where I was, anyway." Gil hadn't seen anything to make him hopeful about the rest of the planet. At the Resettlement Station where he was they had had just a few minutes' warning from the military, and then the radios had gone silent. When the berserker launch came down, Gil had been out in the fields just watching. There wasn't much the people at the Station could do with the little warning they had been given; already they could see the berserker heat-rays and dust-machines playing over the woods, which was the only concealment they might have run to.

Still, some of the kids had been trying to run when the silvery, poisonous-looking dart that was the berserker's launch had appeared descending overhead. The Old Man had come tearing out of the compound into the fields on his scooter—maybe to tell his young people to run, maybe to tell them to stand still. It didn't seem to make much difference. The ones who ran were rayed down by the enemy and the ones who didn't were rounded up. What Gil recalled most clearly about the other kids dying was the look of agony on the Old Man's face—that one face of authority that had never seemed to be looking at Gil from the other side of a glass wall.

When all the survivors of the Station had been herded together in a bunch, standing in a little crowd under the bright sky in the middle of a vine-grown field, the machines singled out the Old Man.

Some of the machines that had landed were in the shape of metal men: some looked more like giant steel ants. "Thus to all life, save that which serves the cause of Death," said a twanging metal voice. And a steel hand picked a squash from a vine,

and held the fruit up and squeezed through so it fell away in broken pulpy halves. And then the same hand, with squash-pulp still clinging to the bright fingers, reached to take the Old Man by the wrist.

The twanging voice said: "You are to some degree in control of these other lifeunits. You will now order them to cooperate willingly with us."

The Old Man only shook his head, no. Muttered something. The bright hand squeezed, slowly.

The Old Man screamed, but did not fall. Neither did he give any order for cooperation. Gil was standing rigid, and silent, but screaming in his own mind for the Old Man to give in, to fall down and pass out, anything to make it stop...

But the Old Man would not fall, or pass out, or give the order that was wanted. Not even when the berserker's big hand came up to clamp around his skull, and the pressure was once more applied, slowly as before.

"What was on Bella Coola?" Ensign Rom was asking him. "I mean, military?"

"Not much, I guess," said Gil. "I don't know much about military stuff. I was just sort of studying to be a farmer."

"Oh." Ron and Hudak, the two sharp, capable-looking ones among the prisoners, exchanged glances. Maybe they knew the farms on Bella Coola had been just a sort of reform-school setup for tough kids from Earth and other crowded places. Gil told himself he didn't give a damn what anyone thought.

And then he realized that he had always been telling himself that, and now, maybe for the first time, it was the truth.

In a little while the prisoners were fed. A machine brought in a big cake of mottled pink and green stuff, the same tasteless substance Gil had lived on since his capture eight or ten days ago. While he ate he sat off to one side by himself, looking at nothing and listening to the two sharp guys talking to each other in low voices.

Rom was saying: "Look—we're in what was the crew quarters, right?"

"If you say so."

"Right. Now they brought me in through the forward compartment, the control room, and I had a chance to take a quick look around there. And I've paced off the length of this chamber we're in. I tell you I served aboard one of these ships for a year; I know 'em inside out."

"So?"

"Just this—" There came a faint scrape and shudder through the hull. When Rom

spaceborne again; the big machine's sending this ship somewhere, for some reason. That means we would have a chance, if only... Listen, the circuitry that makes up the brain that's controlling this ship and keeping us prisoner—it *has* to be spread out along that plastic bulkhead at the forward end of this compartment we're in. On the control room side another plastic slab's been installed, and the circuitry must be sandwiched in between the two."

"How can you know?" Hudak sounded skeptical.

Rom's voice dropped even lower, giving arguments most of which Gil could not hear. "... as well protected there against outside attack as anywhere in the ship... paced off the distance... overhead here, look at the modifications in the power conduits going forward..."

Hudak: "You're right, I guess. Or at least it seems probable. That plastic barrier is all that keeps us from getting at it, then. I wonder how thick..."

Gil could see from the corner of his eye that the two sharp guys were trying not to look at what they were talking about; but he was free to stare. The forward end of the big chamber they were in was a blank greenish plastic wall, pierced at the top for some pipes, and at one side by the door through which Gil had been brought in.

"Thick enough, of course. We don't have so much as a screwdriver, and we'd probably need a cutting torch or a hydraulic jack—"

Hudak nudged Rom and they fell silent The door forward had opened, and one of the man-sized machines came in.

"Gilberto Klee," it twanged. "Come."

Rom had been right, they were spaceborne again, away from the big berserker. In the forward compartment Gil had a moment to look out before the man-sized machine turned him away from a view of stars and faced him toward a squat console, a thing of eyelike lights and a radiolike speaker, which seemed to crouch before the front of the plastic wall.

"Gilberto Klee," said the console's speaker. "It is my purpose to keep a number of human life-units alive and in good health."

"For a while," Gil thought.

The speaker said: "The standard nutrient on which prisoners are fed is evidently lacking in one or more necessary trace ingredients. In several places where prisoners are being held symptoms of nutritional deficiency have developed, including general debility, loss of sight, loss of teeth." Pause. "Are you aware of my meaning?"

"Yeah, I just don't talk much."

"You, Gilberto Klee, are experienced at growing life-forms to be consumed by human life-units as food. You will begin here in this ship to grow food for yourself and other human life-units."

There was a pause that stretched on. Gil could see the Old Man very plainly and hear him scream.

"Squash would be good," Gil said at last. "I know how to raise it, and there's lots of vitamins and stuff in the kind of squash we had at the Station. But I'd need seeds, and soil..."

"A quantity of soil has been provided," said the console. And the man-sized machine picked up and held open a plastic case that was divided into many compartments. "And seeds," the console added. "Which are the ones for squash?"

When Gil was returned to the prison chamber other machines were already busy there with the modifications he had said would be needed. They were adding more overhead lights, and covering most of the deck space with wide, deep trays. These trays were set on the transverse girders of the inner hull, revealed by the removal of decking. Under the trays drainage pipes were being connected, while sprinklers went high overhead. Into the trays the machines were dumping soil they carted from somewhere in the stern of the ship.

Gil gave his fellow prisoners an explanation of what was going on.

"So that's why it took you and some of the other farmers alive," said Hudak. "There must be a lot of different places where human prisoners are being held and maybe bred for experiments. Lots of healthy animals needed."

"So," said Rom, looking sideways at Gil. "You're going to do what it wants?"

"A guy has to keep himself alive," Gil said, "before he can do anything else."

Rom began in a heated whisper: "Is it better that a berserker's prisoners should be kept—" But he broke off when one of the man-sized machines paused nearby, as if it was watching and listening.

They came to call that machine the Overseer, because from then on it never left the humans, though the other machines departed when the construction job was done. Through the Overseer the berserker-brain controlling the ship informed Gil that the other prisoners were there mainly as a labor pool should he need human help in foodgrowing. Gil thought it over briefly. "I don't need any help—yet. Just leave the people stay here for now, but I'll do the planting."

Spacing the hills and dropping the seeds was easy enough, though the machines

had left no aisles between the trays of soil except for a small passage leading to the forward door. The trays farthest forward almost touched the plastic bulkhead, and others were laid edge to edge back to within a few paces of the rear. The machines gave Gil a platform the size of a short surfboard, on which he could sit or lie while hovering a steady fifty centimeters or so above the soil. Hudak said the thing must work by a kind of hole in the artificial gravity field. On the platform was a simple control lever by means of which Gil could cause it to move left or right, forward or back. Almost as soon as the planting was done, he had to start tending his fast-growing vines. The vines had to be twisted to make them grow along the soil in the proper direction, and then there were extra blossoms to be pinched off. A couple of the other prisoners offered to help, despite Rom's scowling at them, but Gil refused the offer. You had to have a knack, he said, and some training, and he did it all himself.

The two sharp guys had little to say to Gil about anything anymore. But they were plainly interested in his surfboard, and one day while the Overseer's back was turned Rom took Gil hurriedly aside. Rom whispered quickly and feverishly, like a man taking what he knows is a crazy chance, fed up enough to take it anyway. "The Overseer doesn't pay much attention to you anymore when you're working, Gil. You could take that platform of yours"—Rom's right hand, extended horizontally, rammed the tips of its fingers into the palm of his vertical left hand—"into the wall. If you could only make a little crack in the plastic, a hole big enough to stick a hand through, we'd have some chance. I'd do it but the Overseer won't let anyone but you near the platform."

Gil's lip curled. "I ain't gonna try nothin' like that."

The thin sickly man was not used to snotty kids talking back to him, and he flared feebly into anger. "You think the berserker's going to take good care of *you*?"

"The machine built the platform, didn't it?" Gil demanded. "Wouldn't give us nothing we could bust through there with. Not if there's anything so important as you think back there."

For a moment Gil thought Rom was going to swing at him, but other people held Rom back. And suddenly the Overseer was no longer standing on the other side of the chamber with its back turned, but right in front of Rom, staring at him with its lenses. A few long, long seconds passed before it was plain that the machine was not going to do anything this time. But maybe its hearing was better than the sharp guys had thought.

"They ain't ripe yet, but we can eat some of 'em anyway," said Gil a couple of weeks later as he slid off his platform to join the other people in the few square

meters of living space left along the chamber's rear bulkhead. Cradled in Gil's arm were half a dozen dull yellowish ovoids. He turned casually to the Overseer and asked: "Got a knife?"

There was a pause. Then the Overseer put out a hand, from which a wicked blade extended itself like an extra finger. "I will divide the fruit," it said, and proceeded to do so with great precision.

The little group of prisoners had come crowding around, some interest stirring in their dull eyes. They ate greedily the little morsels that the Overseer doled out; anything tasted good after weeks or months of the changeless pink-and-green cake. Rom, after a scarcely perceptible hesitation, joined the others in eating some raw squash. He showed no enjoyment as the others did. It was just that a man had to be healthy, he seemed to be thinking, before he could persuade others to get themselves killed, or let themselves sicken and die.

Under the optimum conditions provided by the berserker at Gil's direction, only weeks rather than months were needed for the trays to become filled with broad roundish leaves, spreading above a profusion of thickening, ground-hugging vines. Half of the fast-growing fruit were hidden under leaves, while others burgeoned in full light, and a few hung over the edges of the trays, resting their new weight on the girders under the trays or sagging all the way to the deck.

Gil maintained that the time for a proper harvest was still an indefinite number of days away. But each day he now came back to the living area with a single squash to be divided by the Overseer's knife; and each day the fruit he brought was larger.

He was out in the middle of his "fields," lying prone on his platform and staring moodily at a swelling squash, when the sound of a sudden commotion back in the living area made him raise himself and turn his head.

The center of the commotion was the Overseer. The machine was hopping into the air again and again, as if the brain that controlled it had gone berserker indeed. The prisoners cried out, scrambling to get away from the Overseer. Then the machine stopped its mad jumping, and stood turning in a slow circle, shivering, the knife-finger on its hand flicking in and out repeatedly.

"Attention, we are entering battle," the Overseer proclaimed suddenly, dead monotone voice turned up to deafening volume. "Under attack. All prisoners are to be —they will all—"

It said more, but at a speed no human ear could follow, gibbering up the frequency scale to end in something like a human scream. The mad girl who never spoke let out a blending yell of terror.

The Overseer tottered and swayed, brandishing its knife. It. babbled and twitched

—like an old man with steel fingers vising his head. Then it leaned forward, leaned further, and fell on its face, disappearing from Gil's sight below the level of trays and vines, striking the deck with a loud clang.

That clang was echoed, forward, by a cannon-crack of sound. Gil had been keeping himself from looking in that direction, but now he turned. The plastic wall had been split across the center third of its extent by a horizontal fissure a couple of meters above the trays.

Gil lay still on his platform, watching cautiously. Ensign Rom came charging across the trays and past him, trampling the crop, to hurl himself at the wall. Even cracked, it resisted his onslaught easily, but he kept pounding at it with his fists, trying to force his fingers into the tiny crevice. Gil looked back the other way. The Overseer was still down. Hudak was trying the forward door and finding it locked. Then first he, and then the other people, were scrambling over trays to join Rom and help him.

Gil tested his platform's control and found that it no longer worked, though the platform was still aloft. He got up from it, setting foot in soil for the first time in a couple of months; it was a good feeling. Then he lifted the thin metal platform out of its hull and carried it over to where everyone else was already struggling with the wall. "Here," Gil said, "try sticking the corner of this in the crack and pryin'."

It took them several hours of steady effort to make a hole in the wall big enough for Rom to squeeze through. In a minute he was back, crying and shouting, announcing freedom and victory. They were in control of the ship!

When he came back the second time, he was in control of himself as well, and puzzled. "What cracked the wall? There's no other ships around, no fighting—"

He fell silent as he joined Hudak in staring down into the narrow space between the farthest forward tray and the slightly bulged-in section of wall where the strain had come to force the first crack above. Gil had already looked down there into the niches between wall and transverse girder. Those niches were opened up now, displaying their contents—the dull yellowish fruit Gil had guided into place with a pinch and a twist of vine. The fruit had been very small then, but now they were huge, and cracked gently open with the sudden release of their own internal pressure.

Funny pulpy things that a man could break with a kick, or a steel hand squeeze through like nothing.

"... But growth is stubborn, boys," the Old Man said, squinting to read a dial, then piling more weights onto the machine with the growing squash inside it, a machine he'd set up to catch kids' eyes and minds. "Can't take a sudden shock. Slow. But now,

look. Three hundred fifty kilograms pressure per square centimeter. All from millions of tiny cells, just growing, all together. Ever see a tree root swell under a concrete walk—?"

It was on Rom's and Hudak's faces now that they understood. Gil nodded to them once and smiled just faintly to make sure they knew it had been no accident. Then the smile faded from his face as he looked up at the edges of broken plastic, the shattered tracery of what had been a million sandwiched circuits.

"I hope it was slow," Gil said. "I hope it felt the whole thing."

There are some stories that seem ageless. This one was told over many a fire in the firelit world of ancient Greece, and has been retold innumerable times since—Sir Orfeo in medieval England, Christoph Gluck's 18th century Orfeo et Euridice, and Jean Cocteau's cinematic Orphée of 1950, to name a few variations. I expect that it will be retold, if not relived, again and again a hundred and a thousand years from now...

STARSONG

Forcing the passage through the dark nebula Taynarus cost the humans three fighting ships, and after that they took the casualties of a three-day battle as their boarding parties fought their way into Hell. The Battle Commander of the task force feared from the beginning to the end of the action that the computer in command on the berserker side would destroy the place and the living invaders with it, in a last *Götterdämmerung* of destructor charges. But he could hope that the damped-field projectors his men took with them into the fight would prevent any nuclear explosion. He sent living men to board because it was believed that Hell held living human prisoners. His hopes were justified; or at least, for whatever reason, no nuclear explosion came.

The belief about prisoners was not easily confirmed. Ercul, the cybernetic psychologist who came to investigate when the fighting was over, certainly found humans there. In a way. In part. Odd organs that functioned in a sort-of way, interconnected with the nonhuman and the nonalive. Most of the organs were human brains, which had been grown in culture through use of the techniques that berserkers must have captured with some of our hospital ships.

Our human laboratories grow the culture-brains from seedlings of human embryo tissue, grow them to adult size and then dissect them as needed. A doctor slices off a prefrontal lobe, say, and puts it into the skull of a man whose own corresponding brain part has been destroyed by some disease or violence. The culture-brain material serves as a matrix for re-growth, raw material on which the old personality can re-

impress itself. The culture-brains, raised in glass jars, are not human except in potential. Even a layman can readily distinguish one of them from a normally developed brain by the visible absence of the finer surface convolutions. The culture-brains cannot be human in the sense of maintaining sentient human minds. Certain hormones and other subtle chemicals of the body-environment are necessary for the growth of a brain with personality—not to mention the need for the stimuli of experience, the continual impact of the senses. Indeed some sensory input is needed if the culture-brain is to develop even to the stage of a template usable by the surgeon. For this input music is commonly employed.

The berserkers had doubtless learned to culture livers and hearts and gonads as well as brains, but it was only man's thinking ability that interested them deeply. The berserkers must have stood in their computer-analog of awe as they regarded the memory capacity and the decision-making power that nature had managed to pack into the few hundred cubic centimeters of the human nervous system.

Off and on through their long war with men the berserkers had tried to incorporate human brains into their own circuitry. Never had they succeeded to their own satisfaction, but they kept trying.

The berserkers themselves of course named nothing. But men were not far wrong in calling this center of their research Hell. This Hell lay hidden in the middle of the dark Taynarus nebula, which in turn was roughly centered in a triangle formed by the Zitz and Toxx and Yaty systems. Men had known for years what Hell was, and approximately where it was, before they could muster armed strength enough in this part of their sector of the galaxy to go in and find it and root it out.

"I certify that in this container there is no human life," said the cybernetic psychologist, Ercul, under his breath, at the same time stamping the words on the glassite case before him. Ercul's assistant gestured, and the able-bodied spaceman working with them pulled the power connectors loose and let the thing in the tank begin to die.

This one was not a culture-brain but had once been the nervous system of a living prisoner. It had been greatly damaged not only by removal of most of its human body but by being connected to a mass of electronic and micromechanical gear. Through some training program, probably a combination of punishment and reward, the berserker had then taught this brain to perform certain computing operations at great speed and with low probability of error. It seemed that every time the computations had been finished the mechanism in the case with the brain had immediately reset all the counters to zero and once more presented the same inputs, whereupon the brain's task had started over. The. brain now seemed incapable of anything but going on with

the job; and if that was really a kind of human life, which was not a possibility that Ercul was going to admit out loud, it was in his opinion a kind that was better terminated as soon as possible.

"Next case?" he asked the spacemen. Then he realized that he had just made a horrible pun upon his judge's role. But none of his fellow harrowers of Hell seemed to have noticed it. But just give us a few more days on the job, he thought, and we will start finding things to laugh at.

Anyway, he had to get on with his task of trying to distinguish rescued prisoners—two of these had been confirmed so far, and might someday again look human—from collections of bottled though more or less functioning organs.

When they brought the next case before him, he had a bad moment, bad even for this day, recognizing some of his own work.

The story of it had started more than a standard year before, on the not-far-off planet of Zitz, in a huge hall that had been decorated and thronged for one of the merriest of occasions.

"Happy, honey?" Ordell Callison asked his bride, having a moment to take her hand and speak to her under the tumult of the wedding feast. It was not that he had any doubt of her happiness; it was just that the banal two-word utterance was the best that he could find—unless, of course, he were to sing.

"Ohhh, happy, yes!" At the moment Eury was no more articulate than he. But the truth of her words was in her voice and in her eyes, marvelous as some song that Ordell might have made and sung.

Of course he was not going to be allowed to get away, even for his honeymoon, without singing one song at least

"Sing something, Ordell!" That was Hyman Bolf, calling from across the vast banquet table, where he stood filling his cup *at* the crystal punch fountain. The famed multifaith revivalist had come from Yaty system to perform the wedding ceremony. On landing, his private ship had suffered some old malfunction, the hydrogen power lamp flaring so that the smoke of burned insulation had caused the reverend to emerge from his cabin weeping with irritated eyes; but after that bad omen, everything had gone well for the rest of the day.

Other voices took it up at once. "Sing, Ordell!"

"Yes, you've got to. Sing!"

"But it's m'own wedding, and I don't feel quite right—" His objections were overwhelmingly shouted down. The man was music, and indeed his happiness today

was such that he felt he might burst if he could not express it. He got to his feet, and one of his most trusted manservants, who had foreseen that Ordell would sing, was ready to bring him his self-invented instrument. Crammed into a small box that Ordell could hang from his neck like an accordion were a complete speaker system and power supply, plus a good bit of electronics and audionics; on the box's plain surface were ten spots for Ordell's ten fingers to play upon. His music box, he called it, having to call it something. Ordell's imitators had had bigger and flashier and better music boxes made for them; but surprisingly few people, even among girls between twelve and twenty, cared to listen to Ordell's imitators.

So Ordell Callison sang at his own wedding, and his audience was enthralled by him as people always were, as people had been by no other performer in all the ancient records of Man. The high-browed music critics sat rapt in their places of honor at the head table; the cultured and not-so-cultured moneyed folk of Zitz and Toxx and Yaty, some of whom had come in their private racing ships, and the more ordinary guests, all were made happy by his song as no wine could have made them. And the adolescent girls, the Ordell fans who crowded and huddled inevitably outside the doors, they yielded themselves to his music to the point of fainting and beyond.

A couple of weeks later Ordell and Eury, and his new friends of the last fast years of success and staggering wealth, were out in space in their sporty one-seater ships playing the game they called Tag. This time Ordell was playing the game in a sort of reversed way, dodging about in one corner of the reserved volume of space, really trying to avoid the girl-ships that fluttered past instead of going after them.

He had been keeping one eye out for Eury's ship, and getting a little anxious about not being able to find it, when from out of nowhere there came shooting toward Ordell another boy-ship, the signals of emergency blazing from it across the spectrum. In another minute everyone had ceased to play. The screens of all the ships imaged the face of Arty, the young man whose racer had just braked to a halt outside Ordell's.

Arty was babbling: "I tried, Ordell—I mean I didn't try to—I didn't mean her any harm—they'll get her back—it wasn't my fault she—"

With what seemed great slowness, the truth of what had happened became dear. Arty had chased and overtaken Eury's ship, as was the way of the game. He had clamped his ship to hers and boarded, and then thought to claim the usual prize. But Eury of course was married now, and being married meant much to her, as it did to Ordell, who today had only played at catching girls. Somehow both of them had thought that everyone else must see how the world had changed since they were married, how the rules of the game of Tag would have to be amended for them from

now on.

Unable to convince Arty by argument of how things stood, Eury had had to struggle to make her point. She had somehow injured her foot, trying to evade him in the little cabin. He kept on stubbornly trying to claim his prize. It came out later that he had only agreed to go back to his own ship for a first aid kit (she swore that her ship's kit was missing) after her seeming promise that he could have what he wanted when he returned.

But when he had gone back to his ship, she broke her own racer free and fled. And he pursued. Drove her into a corner, against the boundary of the safety zone, which was guarded by automated warships against the possibility of berserker incursions. To get away from Arty she crossed that border in a great speeding curve, no doubt meaning to come back to safety within a few tens of thousands of kilometers.

She never made it As her little racer sped close to an out-lying wisp of dark Taynarus, the berserker machine that had been lurking there pounced out.

Of course Ordell did not hear the story in such coherent form, but what he heard was enough. On the screens of the other little ships his face at first seemed to be turned to stone by what he heard; but then his look became suddenly wild and mad. Arty cringed away, but Ordell did not stop a moment for him. Instead he drove at racer's speed out where his wife had gone. He shot through the zone of the protective patrols (which were set to keep intruders out, not to hold the mad or reckless in) and plunged between outlying dust-clouds to enter one of the vast crevices that led into the heart of Taynarus, into the maze where ships and machines must all go slow, and from which no living human had emerged since the establishment of Hell.

Some hours later the outer sentries of the berserker came around his little ship, demanding in their well-learned human speech that he halt and submit to capture. He only slowed his little ship still more and began to sing to the berserker over the radio, taking his hands from the racer's controls to put his fingers on the keys of his music box. Unsteered, his ship drifted away from the center of the navigable passage, grazing the nebular wall and suffering the pocking blasts of microcollisions with its gas and dust.

But before his ship was wrecked, the berserker's sentry devices gave up shouting radio commands and sent a boarding party of machines.

Through the memory banks of Hell they had some experience of insanity, of the *more* bizarre forms of human behavior. They searched the racer for weapons, searched Ordell—allowed him to keep his music box when it too had been examined and he kept on struggling for it—and passed him on as a prisoner to the jurisdiction

of the inner guards.

Hell, a mass of fortified metal many kilometers in diameter, received him and his racer through its main entrance. He got out of his ship and found himself able to breathe and walk and see where he was going; the physical environment in Hell was for the most part mild and pleasant, because prisoners as a rule did not survive very long, and the computer-brains of the berserker did not want to impose unnecessary stresses upon them.

The berserker devices having immediate control over the routine operations in Hell were themselves in large part organic, containing culture-brains grown for the purpose and some reeducated captured brains as well. These were all examples of the berserker's highest achievements in its attempts at reverse cybernetics.

Before Ordell had taken a dozen steps away from his ship, he was stopped and questioned by one of these monsters. Half metal and circuitry, half culture-flesh, it carried in three crystal globes its three potentially human brains, their too-smooth surfaces bathed in nutrient and woven with hair-fine wires.

"Why have you come here?" the monster asked him, speaking through a diaphragm in its midsection.

Only now did Ordell begin to make a conscious plan. At the core of his thought was the knowledge that in the human laboratories music was used to tune and tone the culture-brains, and that his own music was as superior for that purpose as it was by all other standards.

To the three-headed monster he sang very simply that he had come here only to seek his young wife: pure accident had brought her, ahead of time, to the end of her life. In one of the old formal languages in which he sang so well of deep things, he implored the power in charge of this domain of terror, this kingdom of silence and unborn creatures, to tie fast again the thread of Eury's life. If you deny me this, he sang, I cannot return to the world of the living alone, and you here will have us both.

The music, that had conveyed nothing but its mathematical elements to the cold computer-brains outside, melted the trained purpose of the inner, half-organic guardians. The three-brained monster passed him on to others, and each in turn found its set aim yielding to the hitherto unknown touch of beauty, found harmony and melody calling up the buried human things that transcended logic.

He walked steadily into Hell, and they could not resist. His music was leaked into a hundred experiments through audio inputs, vibrated faintly through the mountings of glassite cases, was sensed by tortured nerve cells through the changes in inductance and capacitance that emanated rhythmically from Ordell's music box. Brains that had known nothing but to be forced to the limit of their powers in useless

calculation—brains that had been hammered into madness with the leakage of a millimicrovolt from an inserted probe—these heard his music, felt it, sensed it, each with its own unique perception, and reacted.

A hundred experiments were interrupted, became unrealiable, were totally ruined. The overseers, half flesh themselves, failed and fumbled in their programmed purposes, coming to the decision that the asked-for prisoner must be brought forth and released.

The ultimate-controlling pure berserker computer, pure metallic cold, totally immune to this strange jamming that was wreaking havoc in its laboratory, descended at last from its concentration on high strategic planning to investigate. And then it turned its full energy at once to regaining control over what was going on within the heart of Hell. But it tried in vain, for the moment at least. It had given too much power to its half-alive creations; it had trusted too much to fickle protoplasm to be true to its conditioning.

Ordell was standing before the two linked, potentially human brains which were, under the berserker itself, the lords and superintendents of Hell. These two like all their lesser kind had been melted and deflected by Ordell's music; and now they were fighting back with all the electric speed at their command against their cold master's attempt to reaffirm its rule. They held magnetic relays like fortresses against the berserker, they maintained their grip on the outposts that were silicon chips or ferrite cores, they fought to hold a frontier that wavered through the territory of control.

"Then take her away," said the voice of these rebellious overseers to Ordell Callison. "But do not stop singing, do not pause for more than a second, until you are in your ship and away, clear of Hell's outermost gate."

Ordell sang on, sang of his new joy at the wonderful hope that they were giving him.

A door hissed open behind him, and he turned to see Eury coming through it. She was limping on her injured foot, which had never been taken care of, but he could see that she was really all right. The machines had not started to open her head.

"Do not pause!" barked the voder at him. "Go!"

Eury moaned at the sight of her husband, and stretched out her arms to him, but he dared do no more than motion with his head for her to follow him, even as his song swelled to a paean of triumphant joy. He walked out along the narrow passage through which he had come, moving now in a direction that no one else had ever traveled. The way was so narrow that he had to keep on going ahead while Eury followed. He had to keep from even turning his head to look at her, to concentrate the power of his music on each new guardian that rose before him, half-alive and

questioning. Once more each one in turn opened a door. Always behind him he could hear the sobbing of his wife and the dragging step of her wounded foot.

"Ordell? Ordell, honey, is that really you? I can't believe 'tis."

Ahead, the last danger, the three-brained sentry of the outer gate, rose to block their way, under orders to prevent escape. Ordell sang of the freedom of living in a human body, of running over unfenced grass through sunlit air. The gatekeeper bowed aside again, to let them pass.

"Honey? Turn an' look at me, tell me this is not some trick they're playin'. Honey, if y'love me, turn?"

Turning, he saw her clearly for the first time since he had entered Hell. To Ordell her beauty was such that it stopped time, stopped even the song in his throat and his fingers on the keys of music. A moment free of the strange influence that had perverted all its creatures was all the time that the berserker needed, to reestablish something close to complete control. The three-headed shape seized Eury, and bore her away from her husband, carried her back through doorway after doorway of darkness, so fast that her last scream of farewell could scarcely reach the ears of her man. "Good-bye... love..."

He cried out and ran after her, beating uselessly at a massive door that slammed in his face. He hung there on the door for a long time, screaming and pleading for one more chance to get his wife away. He sang again, but the berserker had reestablished its icy control too firmly—it had not entirely regained power, however, for though the half-living overseers no longer obeyed Ordell, neither did they molest him. They left the way open for him to depart.

He lingered for about seven days there at the gate, in his small ship and out of it, without food or sleep, singing uselessly until no voice was left him. Then he collapsed inside his ship. Then he, or more likely his autopilot, drove the racer away from the berserker and back toward freedom.

The berserker defenses did not, any more than the human, question a small ship coming out. Probably they assumed it to be one of their own scouts or raiders. There were never any escapes from Hell.

Back on the planet Zitz, his managers greeted him as one risen from the dead. In a few days' time he was to give a live concert, which had long been scheduled and sold out. In another day the managers and promoters would have had to begin returning money.

He did not really cooperate with the doctors who worked to restore his strength, but neither did he oppose them. As soon as his voice came back he began to sing again; he sang most of the time, except when they drugged him to sleep. And it did

not matter to him whether they sent him onto a stage to do his singing again.

The live performance was billed as one of his pop concerts, which in practice meant a hall overflowing with ten thousand adolescent girls, who were elevated even beyond their usual level of excitement by the miracles of Ordell's bereavement, resurrection, and ghastly appearance—which last, his managers had made sure, was not too much relieved by cosmetics.

During the first song or two the girls were awed and relatively silent, quiet enough so that Ordell's voice could be heard. Then—well, one girl in ten thousand would scream it aloud: "You're *ours* again!" There was a sense in which his marriage had been resented.

Casually and indifferently looking out over them all, he smiled out of habit, and began to sing how much he hated them and scorned them, seeing in them nothing but hopeless ugliness inside and out. How he would send them all to Hell in an instant, to gain for that instant just one more look at his wife's face.

For a few moments the currents of emotion in the great hall balanced against one another to produce the illusion of calm. Ordell's deadly voice was clear. But then the storm of reaction broke and he could no longer be heard. The powers of hate and lust, rage and demand, bore all before them. The ushers who always labored to form a barricade at a Callison concert were swept away at once by ten thousand girls turned maenad.

The riot was over in a minute, ended by the police firing a powerful tranquilizer gas into the crowd. One of the ushers had been killed and others badly hurt.

Ordell himself was nearly dead. Medical help arrived only just in time to save the life in the tissues of his brain.

Next day the leading cybernetic-psychologist on Zitz was called in by Ordell Callison's doctors. They were saving what remained of Ordell's life, but they had not yet been able to open any bridge of communication with him.

Ercul, the psychologist, sank probes directly into Ordell's brain, and connected the speech centers to a voder device loaded with recordings of Ordell's own voice, so that the tones that issued were the same as had once come from his throat. And—in response to the crippled man's first request—to the motor centers that had controlled Ordell's fingers went probes connected to a music box.

After that he at once began to sing. He sang orders to those about him, telling them what he wanted done, and they obeyed. While he sang, not one of them was assailed by any doubt.

They took him to the spaceport. With his life-support system of tubes and nourishment and electricity they put him aboard his racer. And with the autopilot

programmed as he had commanded, they sent him out, fired along the course that he had chosen.

Ercul knew Ordell and Eury when he found them, together in the same experimental case. Recognizing his own work on Ordell, he felt certain even before the electroencephalogram patterns matched with his old records.

There was little left of either of them. "Dols only two points above normal bias levels," chanted the psychologist's assistant, taking routine readings, not guessing whose pain it was he was attempting to judge. "Neither of them seems to be hurting. At the moment, anyway."

In a heavy hand, Ercul lifted his stamp and marked the case. *I certify that in this container there is no human life*.

The assistant looked up in mild surprise at this quick decision. "There is some mutual awareness here, I would say, between the two subjects." He spoke in a businesslike, almost cheerful voice. He had been enough hours on the job now to start getting used to it.

But Ercul never would.

Life is so short, there hardly seems time in it to eat and work and breathe, and do the important things with our loved ones. Things would be much different, though, if we could live for centuries or millennia.

Wouldn't they?

CALENDARS

"I have decided to die," Matthew Pandareus announced to his wife on their first evening together after their long vacation trip to Mars. Actually they had been back on Earth for a week, but Iris had begun an evening class in the history of paperweights and they had not had a real chance to talk since their return. Tonight they had just finished dinner tête-à-tête in their condominium apartment and he had strolled from the dining alcove to look out through the living room's glass wall at the fantastic complexities of city lights extending below, around, and above their middle-class, middle-level dwelling.

"Dear, you had a similar idea once before, thirty years ago." Iris' clinging gown swished faintly about her shapely legs as she followed to stand slightly behind him at the window. "Here, you forgot your brandy."

"Thank you. Closer on forty," he amended, turning to accept the glass from her

hand. She turned away busily again as soon as she had passed it on, and Pandareus had no very clear look at her face.

Iris switched on the fireplace with a wave of her hand and adjusted the mood of the background music to something a little more capricious. "Thirty," she said firmly then, coming back to face him. The communication screen chimed then and she was off to answer it. Maintaining his stance in the living room Pandareus heard the short conversation—just some friends calling to welcome them back and ask how their voyage had been. Iris invited them over for a week from Tuesday but they were busy that night They would call again tomorrow or the next day and some date for a gettogether would be worked out.

Now she was back in the living room again, wearing an expression he knew well, that of being firmly in the right though without animosity for those who weren't. "Thirty," she said firmly. "It was right after you won the golf tournament." If it was time to argue, Iris was ready. Even studying her familiar face at close range, he could neither see nor remember which parts of it were synthetic skin and which her own, rejuvenated. There were no real wrinkles on it anywhere, only the spirit of a line or two at the corners of the eyes. Even under close inspection she could be taken for a youthful twenty-eight. Her face and body were changing no more over the decades than were his golf or bowling scores. He and Iris took long vacations from each other sometimes, but stayed married. He had found no one with whom he would rather live.

"It's nearly a hundred years since we were married," he recalled aloud, and tasted his brandy. "Will you miss me very much?"

"I shall miss you, of course. Our relationship has been... very nearly perfect. But if it will make you happy, Matthew, go ahead and die. What is it? Boredom?"

"Not really." He indicated with the most minimal inclination of his head, which Iris instantly interpreted correctly, that they might go and seat themselves near the fire. Stretching out his legs there in front of his chair, Pandareus continued: "I think you know me well enough to believe that I am not trying to appear altruistic when I say that the time has come for me to move on and make room for someone else."

"Of course, dearest."

"There are—what?—maybe eleven billion people on the planet now, and I think the number has hardly changed in the last few centuries. Fortunately starvation and disease are no longer problems. But it is a mixed blessing that practically no one dies unintentionally anymore; how can new lives be lived if the old will not make way? When was the last time you saw a child? If every—"

"Speaking of children," Iris interrupted. "I don't mean to interrupt, but speaking of

children, I hope you're not planning to have yourself terminated before the nineteenth."

"Of what? This month?" Automatically he looked for a calendar but could not see one. "Why?"

"Janet called." His previous wife. "I mean she left a message while we were on vacation. Your five-great grandson is making his bar mitzvah on that date; you're to be sure to attend."

"Bar mitzvah?" He rehearsed in his mind the names and generations comprising the straight unbranching line of his descendants. "I didn't think Liang was Jewish."

"Perhaps it was his confirmation. At any rate..."

"... be sure to be there. Yes. Well, I had hoped to get away soon, once having decided that it was the right move to make. But Janet would really feel hurt, if I know her. Is there any way we could get together with her, maybe this week or next week, and discuss it face to face? Let's see, when—?"

The communications screen chimed. Another set of friends, just back from their own vacation.

The next day in his office on the upper floor of the duplex apartment he consulted his business calendar as soon as he could find the time. He discovered there was no use after all in trying to get in touch with Janet and see her, because even if the nineteenth was clear he had made commitments for important business meetings on the twenty-first and twenty-second. The firm in which he was a partner—dealers in antiques and folk art—was a small one, and no great wealth was dependent on his decisions, but still an obligation was an obligation.

He switched his calendar to the following month. Studying the new pattern of appointments and memorandums displayed electronically on the glowing glass screen, he at first found nothing in it that could not in good conscience be entrusted to his heirs and assigns. But wait, there was the antique furniture auction in Minneapolis. Of course, he and Iris had gone to a great deal of trouble so he would be sure to be back in time for that. The auction would be an ideal chance for him to train one or two of the younger people in the firm as buyers, and he supposed he owed it to his partners to carry on that far.

Now, the month after that... of course, he was supposed to be in Europe for the round of trade shows. Again, the feeling that he would be letting others down if he bowed out. His wife might have a chance to go along. She wanted to take some members of the history study group that she was leading—all adults, of course—to Europe also.

The next month, now... all clear, except for trivia that he could disregard if he put his mind to it. He did put his mind to it. Then with his electronic stylus he wrote TERMINATION across that month on the calendar screen.

That evening, however, helping Iris grade papers from her drama group before some friends came over, he paused suddenly with a half-eaten foodbar halfway to his mouth, staring after his wife, who had just vanished into the kitchen to start preparing the drinks and smokes and slices and dip. He had just been struck by the realization that the month he had tentatively chosen for his demise was the month of their hundredth anniversary. He had been deliberately keeping his calendar for that month clear of other major events, never dreaming that he could forget the big one.

Of course, they could have some worthy celebration (was it on the fifteenth or the sixteenth? never mind, he could check on that later) and then he could terminate a few days later—but no. It would be very awkward. He could hear the questions now: "And what are you and your husband doing to celebrate, my dear?" And the good wishes: "May the next hundred years be as happy as the first." No, any time that month would definitely be too close.

He would have to ask Iris how she felt about it. But there was the door, and the bridge club was starting to arrive.

The following day Pandareus had his lawyer on the screen—they were locked in a time-consuming squabble with another art dealer over the correct attribution of an Early American painting—and he took the opportunity to discuss the legal aspects of dying.

The lawyer shook his head. "Haven't time to go into the whole thing right now. But it's not advisable for you to terminate at present. You'd do much better to wait until after the first of the year. The tax structure..."

Pandareus had to cut the call short a minute later, and hurry out to meet a potential big customer for lunch, and so he managed to gain no very clear understanding of the tax structure. But he had been convinced that dying before the first of the year was financially inadvisable.

His first feeling was actually one of relief, that this enforced delay would give him a breathing space in which to plan calmly for an exit that had some dignity and perhaps a touch of ceremony about it. But in his heart he knew better. Once you let projects slide it was difficult as anything to get back to them again. Tomorrow, he promised himself, he would try to set up a termination date as soon after the first of the year as possible.

When he came downstairs from the office that night—later than he had planned, of course—there was Iris sprawled facedown on the sofa with her shoes off.

She greeted him with a faint welcoming cry. "Ahh. Come rub my feet. I have had a day, Matthew, whose story you will hardly be inclined to believe."

"That conference on endangered virus species?"

"That was yesterday. No, I went shopping this morning, and then this afternoon I had to go and look into that place where we were planning to store our boat next winter—remember, you were too busy to go?"

"Oh, yes." He sat on the sofa and began to rub a foot, squeezing the arch and instep with an expert touch. "Join me in a drink?"

"Gladly. And that was only the start. From the boat-storage establishment I had to go—"

The communicator screen chimed. It was their computer service company, reminding them that their home terminals were to be disconnected for a day's maintenance tomorrow.

After dinner, after Iris had gone wearily to bed, he dragged himself with proud determination up the stairs to his office again. Jaw outthrust, he set himself to decide firmly, to decide once and for all insofar as such decision might be possible for man aided by computer, the year, month, and day with which his life would end. He dropped into the chair before his desk, brushed aside with a sigh the printouts, accumulated during dinner, of *Antique Dealer's Bulletin* and five other periodicals he never had time to read, and punched for a combined full printout, on microtape, of his business and social calendars for the next twelve months. Next year's vacation, for example, had been arranged that far in advance. He and Iris were planning to go back to Indonesia, where they had not visited for sixty years... he took his tired mind firmly in hand. Forget about seeing Indonesia again. Otherwise this could go on forever.

While riding the tubeliner to Boston to attend a class reunion he finished other tasks in time to put the calendar microtape into a projector and begin work on his problem. Scanning backward over the printout chronologically from the scheduled vacation, setting his mind in as ruthless a frame as possible, he mentally pruned out an underbrush of minor appointments, celebrations, and entertainments planned from a sense of social duty. With his finger gliding on the projected image of the microtape he drew the surcease of eternity closer and ever closer to the hurtling moment of the present in which he dwelt...

"Would you care for a cocktail, sir?"

"No. No, thank you." He could have used one, but, nagged by the urgency of finishing before they got to Boston or probably not at all in the foreseeable future, he

stuck with his work. Four months nearer the present, moving anti-clock-ward from next year's vacation, his finger stopped, having run into the notable barrier of the annual banquet of the Old Marrieds' Club, for which he and Iris had standing reservations. Yes. That would set a time. Attend the banquet, dropping to a few old friends broad hints that he would not be back next year, and then delay a decent month, and then bow out.

He straightened up in his seat, turned the projector off, and slid it back into its travel case. Settled, and they were just pulling into Boston. Once in a while things worked out just right.

On the day he got home from the reunion he began trying to get in touch with his physician. It was a few days before the doctor, repeatedly trying to return his call, did so at a moment when Pandareus was available. Communication once established, Pandareus promptly asked for and was given the name of another doctor, who had done terminations for several other people.

"There aren't any real specialists," his own doctor assured Pandareus. "Not in the field you want. Not enough people are having it done. How about a round of golf on Wednesday?"

"Can't," Pandareus said automatically, and then consulted his calendar to make sure of why. "My father's coming into town that day. Maybe next week?"

The doctor looked off screen, evidently checking his own calendar, and frowned. "I'll call you back on it. You'll like Dr. James. One of the best men in the city."

"Thanks."

"Right."

Pandareus broke the connection and punched for Dr. James. A busy signal. Well, he would try calling in the afternoon, before the time came to leave for the matinee.

Eventually he got through. "Dr. James's office," a receptionist of timeless prettiness told him.

"How do you do. I'd like to make an appointment to talk to the doctor, or talk to him right now if that's feasible. It's regarding my contemplated termination."

"I see, sir." Even before taking his name, she asked: "And when is your preferred date of termination?"

He told her.

The receptionist was gently concerned. "I'm sorry, sir, but Dr. James will be on vacation that month."

But he persevered. Iris helped a lot. Seated with her in an aircab on his way at last to Dr. James's office to be terminated, he looked back on the months since his first firm decision to die, and found the time as viewed from his present angle to be almost disconcertingly short.

Iris, riding beside him, was tired. She held an envelope containing some of the necessary papers, which they had only just managed to have signed in time, this very morning. "Oh, God, I'm dead," she murmured without thinking, and then looked over at him with alarm. "That was thoughtless of me, wasn't it?"

"Not at all, my dear. I won't be easily upset today. I feel happy. Completed. Fulfilled. A successful race run, a well-earned rest ahead, as it were. I want you to share my joy."

"I do, Matthew." But a little movement about the lips and throat, a tiny lift of the head, counterbalanced all the happy intonations she was putting into her voice. She was trying her best to act as if nothing were wrong, but after a little more than a hundred years he could infallibly tell when something out of the ordinary was bothering her.

"Iris, what are your plans for the immediate future? I really haven't had time to discuss it with you."

"I'd like to get away for a while, Matthew. But I don't see how I can. My desensitivity training group begins to meet next week. And there will be any number of loose ends to tidy up regarding your departure."

"Something more is bothering you, I can tell. Are you going to miss me too much, after all?"

"No, dear. If your absence affects me unduly I will just think of you as being on a long trip somewhere. And I'll certainly be keeping busy."

He pressed her hand. "But there is something. I insist on hearing what it is. It is most unfair to conceal things from me at this juncture."

"Matthew, I am not going to interfere with your happy departure. You have put so much time and effort into arranging it. Into making an achievement of your whole life. To—to close it properly, like a good poem."

"Something is definitely wrong and you are going to tell me what it is. Or I will stop the cab until you do."

Iris put down the bulky envelope and looked for a tissue. "You have nothing to regret. You have certainly been a good husband to me. You have kept almost every promise you ever made."

Aha. "What promise or promises have I failed to keep?"

"I have really nothing to complain of, Matthew."

The airborne cab glided to a soft waiting halt on the roof of the building housing Dr. James's office, but neither of the passengers moved at once to disembark. Pandareus had to spar through another verbal round or two with his wife before the reason for her unhappiness came out

"It was more than ninety years ago, Matthew, and I am sure you have forgotten it. But early in our marriage you did promise me that one day we would have a child."

He closed his eyes for a moment. Recollection of the promise had been coming back, hazily, subconsciously, for some indeterminate time. Perhaps she had been dropping hints, trying to remind him. Anyway, there was no real surprise in hearing about the promise now, and he could not honestly deny it had been made. An obligation was an obligation, and he had several times already put off dying for lesser ones than this. This was rather more important than a five-great grandson's confirmation, he supposed.

"Iris, do you really think we have the right to bring a new life into the world?"

"Oh, Matthew, the world can certainly support one more, with hydrogen-fusion power, and reclamation, and all the rest. An equilibrium has been reached. It's not as if everyone were reproducing; I was reading just the other day how remarkable it is that so few exercise their legal rights to do so. The author was wondering why. And even if you did father a child once before, I've never had one. I don't think people are going to comment."

"I suppose not." He gave his wife the ghost of a smile, let his hand hang in the air for a moment, and then signaled decisively for the cab to open its door. "Just let me step into James's office and let them know there's been a change of plan."

"Oh, Matthew! How loving of you to do this for me." She gripped his fingers and looked into his eyes intently. "You must understand, having a child will mean your presence as a father is required for an indefinite period. The child will need you, psychologically. It will mean years added to your life."

"I've been through it all before, remember?" He kissed her on the cheek. "The decision is made. "I'll be right back."

But he was gone quite a long time, and she began to worry. Suppose he had—but no, there he was, looking a little happier than when he left, reaching briskly for the cab's door.

"James was pretty good about it all," Pandareus said, getting in. "But my change of mind meant there were more forms to be filled out, and we'll have to check back with

city hall, and the crematorium, and the lawyers, and..." He broke off to snap his fingers with irritation. "I meant to ask James if he could put us in touch with a good —what d'you call 'em?—obstetrician. Doctor who oversees gestation. And also one of those hospitals where they have an artificial womb. Those're supposed to be much improved these days."

Iris was relaxed now, content and comfortable. "Oh, no, Daddy Matthew. It was on television just the other day that artificial wombs are being discontinued once again. Even the new models had too many drawbacks."

Pandareus gave the cab its new orders and leaned back beside his wife as it took off and promptly became stuck in a traffic jam at the five-hundred-meter aerial level. "Then you'll just have to go through the whole nine months of inconvenience, and the big disabling trauma at the end. I went thought it all with Janet." He shook his head and smiled at her. "It's going to take some planning. Well, if it will make you happy, dear. When do you want to have the baby? Get it started, I mean?"

"Let's see." Then Iris' forehead almost creased in a pretty frown of light vexation. "Oh, dear. If we got baby started right now he'd be born just when our vacation trip is on. Let's see—"

Rembrandt's girl is really there, and so is the science fiction room, just off the topmost landing of the great four-branched central stair. Also findable in reality are, regrettably, the headlines that announce the failure of peace talks. As for the rest, you must choose what you will believe...

YOUNG GIRL AT AN OPEN HALF-DOOR

That first night there was a police vehicle, what I think they call a K-9 unit, in the little employees' lot behind the Institute. I parked my car beside it and got out. The summer moon was dull above the city's air, but floodlights glared at a small door set in the granite flank of the great building. I carried my toolbox there, pushed a button, and stood waiting.

Within half a minute, a uniformed guard appeared inside the reinforced glass of the door. Before he had finished unlocking, two uniformed policemen were standing beside him, and beside them a powerful leashed dog whose ears were aimed my way.

The door opened. "Electronic Watch," I said, holding out my identification. The dog inspected me, while the three uniformed men peered at my symbols and were satisfied.

With a few words and nods the police admitted me to fellowship. In the next moment they were saying good-bye to the guard. "It's clean here, Dan; we're gonna

shove off."

The guard agreed they might as well. He gave them a jovial farewell and locked them out, and then turned back to me, still smiling, an old and heavy man, now adopting a fatherly attitude. He squinted with the effort of remembering what he had read on my identification card. "Your name Joe?"

"Joe Ricci."

"Well, Joe, our system's acting up." He pointed. "The control room's up this way."

"I know, I helped install it." I walked beside the guard named Dan through silent passages and silent marble galleries, all carved by night lights into one-third brilliance and two-thirds shadow. We passed through new glass doors that were opened for us by photocells. Maintenance men in green uniforms were cleaning the glass; the white men among them were calling back and forth in Polish.

Dan whistled cheerfully as we went up the wide, four-branched central stair, passing under a great skylight holding out the night, From the top landing of the stair, a plain door, little noticed in the daytime, opens through classical marble into a science fiction room of fluorescent lights and electronic consoles. In that room are three large wall panels, marked Security, Fire, and Interior Climate. As we entered, another guard was alone in the room, seated before the huge security panel.

"Gallery two-fifteen showed again," the seated guard said in a faintly triumphant voice, turning to us and pointing to one of the indicator lights on the panel. The little panel lights were laid out within an outline of the building's floor plan. "You'd swear it was someone in there."

I set down my kit and stood looking at the panel, mentally reviewing the general layout of the security circuitry. Electronic Watch has not for a long time used anything as primitive as photocells, which are relegated to such prosaic jobs as opening doors. After closing hours in the Institute, when the security system is switched on, invisible electric fields permeate the space of every, room where there is anything of value. A cat cannot prowl the building without leaving a track of disturbances across the Security panel.

At the moment all its indicators were dim and quiet. I opened my kit, took out a multimeter and a set of probes, and began a preliminary check of the panel itself.

"You'd swear someone's in two-fifteen when it happens," said the guard named Dan. Standing close and watching me, he gave a little laugh. "And then a man starts over to investigate, and before he can get there it stops."

Of course there was nothing nice and obvious wrong with the panel. I had not expected there would be; neat simple troubles are too much to expect from the complexities of modern electronic gear. I tapped the indicator marked 215 but its

glow remained dim and steady. "You get the signal from just the one gallery?" I asked.

"Yeah," said the guard in the chair. "Flashing a couple times, real quick, on and off. Then it stays on steady for a while, like someone's just standing in the middle of the room over there. Then like he said, it goes off while a man's trying to get over there. We called the officers and then we called you."

I put the things back in my kit and closed it up and lifted it. "I'll walk over there and look around."

"You know where two-fifteen is?" Dan had just unwrapped a sandwich. "I can walk over with you."

"That's all right, I can find it." I delayed on my way out of the room, smiling back at the two guards. "I've been here in the daytime, looking at the pictures."

"Oh. You bring your girl here, hey?" The guards laughed, a little relieved that I had broken my air of grim intentness. I know I often struck people that way.

Walking alone through the half-lit halls, I found it pleasant to think of myself as a man who came here in two such different capacities. Electronics and art were both in my grasp. I had a good start at knowing everything of importance. Renaissance Man, I thought, of the New Renaissance of the Space Age.

Finding the gallery I wanted was no problem, for all of them are numbered plainly, more or less in sequence. Through rising numbers I traversed the thirteenth century, the fourteenth, the fifteenth. A multitude of Christs and Virgins, saints and noblemen watched my passage from their walls of glare and shadow.

From several rooms away I saw the girl, through a real doorway framing the painted one she stands in. My steps slowed as I entered gallery 215. About twenty other paintings hang there, but for me it was empty of any presence but hers.

That night I had not thought of her until I saw her, which struck me then as odd, because on my occasional daytime visits I had always stopped before her door. I had no girl of the kind to take to an art gallery, whatever guards might surmise.

The painter's light is full only on her face, and on her left hand, which rests on the closed bottom panel of a divided door. She is leaning very slightly out through the half-open doorway, her head of auburn curls turned just an inch to the left but her eyes looking the other way. She watches and listens, that much is certain. To me it has always seemed that she is expecting someone. Her full, vital body is chaste in a plain dark dress. Consider her attitude, her face, and wonder that so much is made of the smile of Mona Lisa. The card on the wall beside the painting reads:

REMBRANDT VAN RUN

DUTCH 1606-1669

YOUNG GIRL AT AN OPEN HALF-DOOR dated 1645

She might have been seventeen when Rembrandt saw her, and seventeen she has remained, while the faces passing her' doorway have grown up and grown old and disappeared, wave after wave of them.

She waits.

I broke out of my reverie, at last, with an effort. My eye was caught by the next painting, Saftleven's *Witches' Sabbath*, which once in the daylight had struck me as amusing. When I had freed ray eyes from that I looked into the adjoining galleries, trying to put down the sudden feeling of being watched. I squinted up at the skylight ceiling of gallery 215, through which a single glaring spotlight shone.

Holding firmly to thoughts of electronics, I peered in corners and under benches, where a forgotten transistor radio might lurk to interfere, conceivably, with the electric field of the alarm. There was none.

From my kit I took a small field-strength meter, and like a priest swinging a censer I moved it gently through the air around me. The needle swayed, as it should have, with the invisible presence of the field.

There was a light gasp, as of surprise. A sighing momentary movement in the air, something nearby come and gone in a moment, and in that moment the meter needle jumped over violently, pegging so that with a technician's reflex my hand flew to switch it to a less sensitive scale.

I waited there alone for ten more minutes, but nothing further happened.

"It's working now; I could follow you everywhere you moved," said the guard in the chair, turning with assurance to speak to me just as I reentered the science fiction room. Dan and his sandwich were gone.

"Something's causing interference," I said, in my voice the false authority of the expert at a loss. "So. You never have any trouble with any other gallery, hey?"

"No, least I've never seen any—well, look at that now. Make a liar out of me." The guard chuckled without humor. "Something showing in two-twenty-seven now.

That's Modern Art."

Half an hour later I was creeping on a catwalk through a clean crawl space above gallery 227, tracing a perfectly healthy microwave system. The reflected glare of night lights below filtered up into the crawl space, through a million holes in acoustical ceiling panels.

A small, bright auburn movement, almost directly below me, caught my eye. I crouched lower on the catwalk, putting my eyes close to the holes in one thin panel, bringing into my view almost the whole of the enormous room under the false ceiling.

The auburn was in a girl's hair. It came near matching the hair of the girl in the painting, but that could only have been coincidence, if such a thing exists. The girl below me was alive in the same sense I am, solid and fleshy and three-dimensional. She wore a kind of stretch suit, of a green shade that set off her hair, and she held a shiny object raised like a camera in her hands.

From my position almost directly above her I could not see her face, only the curved grace of her body as she took a step forward, holding the shiny thing high. Then she began another step, and halfway through it she was gone, vanished in an instant from the center of an open floor.

Some time passed before I eased up from the strain of my bent position. All the world was silent and ordinary, so that alarm and astonishment would have seemed out of place. I inched back through the crawl space to my borrowed ladder, climbed down, walked along a corridor, and turned a corner into the vast shadow-and-glare of gallery 227.

Standing in the brightly lit spot where I had seen the girl, I realized she had been raising her camera at a sculpture—a huge, flowing mass of bronze blobs and curved holes, on the topmost blob a face that looked like something scratched there by a child. I went up to it and thumped my knuckles on the nearest bulge of bronze, and the great thing sounded hollowly. Looking at the card on its marble base I had begun to read—*Reclining Figure*, 1957—when a sound behind me made me spin around.

Dan asked benignly: "Was that you raising a ruckus in here about five minutes ago? On the board it looked like a whole mob of people was running around."

I nodded, feeling the beginning of a strange contentment.

Next day I awoke at the usual time, to afternoon sunlight pushing at the closed yellow shades of my furnished apartment, to the endless street noises coming in. I had slept well and felt alert at once, and I began thinking about the girl.

Even if I had not seen her vanish, it would have been obvious that her comings and goings at the Institute were accomplished by no ordinary prowlers' or burglars'

methods. Nor was she there on any ordinary purpose; if she had stolen or vandalized, I would most certainly have been awakened early.

I ate an ordinary breakfast, not noticing much or being noticed, sitting at the counter in the restaurant on the ground floor of the converted hotel where I rented my apartment. The waitress wore green, although her hair was black. Once I had tried halfheartedly to talk to her, to know her, to make out, but she had kept on working and loafing, talking to me and everyone else alike.

When the sun was near going down I started for work as usual. I bought the usual newspaper to take along, but did not read it when I saw the headline *Peace Talks Failing*. That evening I felt the way I supposed a lover should feel, going to his beloved.

Dan and two other guards greeted me with smiles of the kind that people wear when things that are clearly not their fault are going wrong for their employer. They told me that the pseudo-prowler had once more visited gallery 215, had vanished as usual from the panel just as a guard approached that room, and then had several times appeared on the indicators for gallery 227. I went to 227, making a show of carrying in tools and equipment, and settled myself on a bench in a dim corner, to wait.

The contentment I had known for twenty-four hours became impatience, and with slowly passing time the tension of impatience made me uncontrollably restless. I felt sure that she could somehow watch me waiting; she must know I was waiting for her, she must be able to see that I meant her no harm. Beyond meeting her, I had no plan at all.

Not even a guard came to disturb me. Around me, in paint and bronze and stone and welded steel, crowded the tortured visions of the twentieth century. I got up at last in desperation and found that not everything was torture. There on the wall were Monet's water lilies; at first nothing but vague flat shapes of paint, then the surface of a pond and a deep curve of reflected sky. I grew dizzy staring into that water, a dizziness of relief that made me laugh. When I looked away at last the walls and ceiling were shimmering as if the glare of the night lights was reflected from Monet's pond.

I understood then that something was awry, something was being done to me, but I could not care. Giggling at the world, I stood there breathing air that seemed to sparkle in my lungs. The auburn-haired girl came to my side and took my arm and guided me to the bench where my unused equipment lay.

Her voice had the beauty I had expected, though with a strange strong accent. "Oh, I am sorry to make you weak and sick. But you insist to stay here and span much

time, the time in which I must do my work."

For the moment I could say nothing. She made me sit on the bench, and bent over me with concern, turning her head with something of the same questioning look as the girl in the Rembrandt painting. Again she said: "Oh, I am sorry."

"S'all right." My tongue was heavy, and I still wanted to laugh.

She smiled and hurried away, flowed away. Again she was dressed in a green stretch suit, setting off the color of her hair. This time she vanished from my sight in normal fashion, going around one of the gallery's low partitions. Coming from behind that partition were flashes of light.

I got unsteadily to my feet and went after her. Rounding the corner, I saw three devices set up on tripods, the tripods spaced evenly around the *Reclining Figure*. From the three devices, which I could not begin to identify, little lances of light flicked like stings or brushes at the sculpture. And whirling around it like dancers, on silent rubbery feet, moved another pair of machine-shapes, busy with some purpose that was totally beyond me.

The girl reached to support me as I swayed. Her hands were strong, her eyes were darkly blue, and she was tall in slender curves. Smiling, she said: "It is all right, I do no harm."

"I don't care about that," I said. "I want only—not to tangle things with you."

"What?" She smiled, as if at someone raving. She had drugged me, with subtle gases in the air that sparkled in my lungs. I knew that but I did not care.

"I always hold back," I said, "and tangle things with people. Not this time. I want to love you without any of that. This is a simple miracle, and I just want it to go on. Now tell me your name."

She was so silent and solemn for a moment, watching me, that I feared I had angered her. But then she shook her head and smiled again. "My name is Day-ell. Now don't fall down!" And she took her supporting arm away.

For the moment I was content without her touching me. I leaned against the partition and looked at her busy machines. "Will you steal our *Reclining Figure*?" I asked, giggling again as I wondered who would want it.

"Steal?" She was thoughtful. "The two greatest works of this house I must save. I will replace them with copies so well made that no one will ever know, before—" She broke off. After a moment she added: "Only you will ever know." And then she turned away to give closer attention to the silent and ragingly busy machines. When she made an adjustment on a tiny thing she held in her hand, there were suddenly two *Reclining Figures* visible, one of them smaller and transparent but growing larger,

moving toward us from some dark and distant space that was temporarily within the gallery.

I was thinking over what Day-ell had said. Addled and joyful, I plotted what seemed to me a clever compliment, and announced: "I know what the two greatest works in this house are."

"Oh?" The word in her voice was a soft bell. But she was still busy.

"One is Rembrandts' girl."

"You are right!" Day-ell, pleased, turned to me. "Last night I took that one to safety. Where I take them, the originals, they will be safe forever."

"But the best—is you." I pushed away from the partition. "I make you my girl. My love. Forever, if it can be. But how long doesn't matter."

Her face changed; and her eyes went wide, as if she truly understood how marvelous were such words from anyone, from grim Joe Ricci in particular. She took a step toward me.

"If you could mean that," she whispered, "then I would stay with you, in spite of everything."

My arms went around her and I could feel forever passing. "Stay, of course I mean it, stay with me."

"Come, Day-ell, come," intoned a voice, soft, but still having metal in its timbre. Looking over her shoulder I saw the machine-shapes waiting, balancing motionless now on silent feet. There was again only one *Reclining Figure*.

My thoughts were clearing and I said to her: "You're leaving copies, you said, and no one will know the difference, before. Before what? What's going to happen?"

When my girl did not answer I held her at arm's length. She was shaking her head slowly, and tears had come into her eyes. She said: "It does not matter what happens, since I have found here a man of life who will love me. In my world there is no one like that. If you will hold me, I can stay."

My hands holding her began to shake. I said: "I won't keep you here, to die in some disaster. I'll go with you instead."

"Come, Day-ell, come." It was a terrible steel whisper.

And she stepped back, compelled by the machine-voice now that I had let her go. She said to me: "You must not come. My world is safe for paint, safe for bronze, not safe for men who love. Why do you think that we must steal—?"

She was gone, the machines and lights gone with her.

The *Reclining Figure* stands massive and immobile as ever, bronze blobs and curved holes, with a face like something scratched on by a child. Thump it with a knuckle, and it sounds hollowly. Maybe three hundred years' perspective is needed to see it as one of the two greatest in this house. Maybe eyes are needed, accustomed to more dimensions than ours; eyes of those who sent Day-ell diving down through time to save choice fragments from the murky wreckage of the New Renaissance, plunged in the mud of the ignorant and boastful twentieth century.

Not that her world is better. Safe for paint, safe for bronze, not safe for men who love. I could not live there now.

The painting looks unchanged. A girl of seventeen still waits, frozen warmly in Rembrandt's light, three hundred years and more on the verge of smiling, secure that long from age and death and disappointment. But will a war incinerate her next week, or an earthquake swallow her next month? Or will our city convulse and die in mass rioting madness, a Witches' Sabbath come true? What warning can I give? When they found me alone and weeping in the empty gallery that night, they talked about a nervous breakdown. The indicators on the Security panel are always quiet now, and I have let myself be argued out of the little of my story that I told.

No world is safe for those who love.

Life and nonlife, man and machine, brain and computer—where to draw the lines, mark the cutoff points, decide that what one is, the other can never be?

WHAT DO YOU WANT ME TO DO TO PROVE IM HUMAN STOP

When the dreadnought *Hamilear Barca* came out of the inhuman world of plusspace into the blue-white glare of Meitner's sun the forty men and women of the dreadnought's crew were taut at their battle stations, not knowing whether or not the whole berserker fleet would be around them as they emerged. But then they were in normal space, seconds of time were ticking calmly by, and there were only the stars and galaxies to be seen, no implacable, inanimate killers coming to the attack. The tautness eased a little.

Captain Liao, strapped firmly into his combat chair in the center of the dreadnought's bridge, had brought his ship back into normal space as close to Meitner's sun as he dared—operating on interstellar, faster-than-light, c-plus drive in a gravitational field this strong was dangerous, to put it mildly—but the orbit of the one planet in the system worth being concerned about was still tens of millions of

kilometers closer to the central sun. It was known simply as Meitner's planet, and was the one rock in the system habitable in terms of gravity and temperature.

Before his ship had been ten standard seconds in normal space, Liao had begun to focus a remotely controlled telescope to bring the planet into close view on a screen that hung before him on the bridge. Luck had brought him to the same side of the sun that the planet happened to be on; it showed under magnification on the screen as a thin illuminated crescent, covered with fluffy-looking perpetual clouds. Somewhere beneath those clouds a colony of about ten thousand people dwelt, for the most part under the shelter of one huge ceramic dome. The colonists had begun work on the titanic project of converting the planet's ammonia atmosphere to a breathable one of nitrogen and oxygen. Meanwhile they held the planet as an outpost of some importance for the interstellar community of all Earth-descended men.

There were no flares of battle visible in space around the planet, but still Liao lost no time in transmitting a message on the standard radio and laser communications frequencies. "Meitner's planet, calling Meitner's. This is the dreadnought *Hamilcar Barca*. Are you under attack? Do you need immediate assistance?"

There came no immediate answer, nor could one be expected for several minutes, the time required for signals traveling at the speed of light to reach the planet, and for an answer to be returned.

Into Liao's earphones now came the voice of his Detection and Ranging officer. "Captain, we have three ships in view." On the bridge there now sprang to life a three-dimensional holographic presentation, showing Liao the situation as accurately as the dreadnought's far-ranging detection systems and elaborate combat computers could diagram it.

One ship, appearing as a small bright dot with attached numerical coordinates, was hanging relatively motionless in space, nearly on a line between *Hamilcar Barca* and Meitner's planet. The symbol chosen for it indicated that this was probably a sizable craft, though not nearly as massive as the dreadnought. The other two ships visible in the presentation were much smaller, according to the mass-detector readings on them. They were also both considerably closer to the planet, and moving toward it at velocities that would let them land on it, if that was their intention, in less than a standard hour.

What these three ships were up to, and whether they were controlled by human beings or berserker machines, were not immediately apparent. After sizing up the situation for a few seconds, Liao ordered full speed toward the planet—full speed, of course, in the sense of that attainable while remaining in normal space and thus traveling much slower than light—and to each of the three ships in view he ordered the same message beamed: "Identify yourself, or be destroyed."

The threat was no bluff. One took no chances where berserker machines were concerned. They were an armada of robot spaceships and supporting devices built by some unknown and long-vanished race to fight in some interstellar war that had reached its forgotten conclusion while men on Earth were wielding spears against the sabertooth tiger. Though the war for which the berserker machines had been made was long since over, still they fought on across the galaxy, replicating and repairing themselves endlessly, learning new strategies and tactics, refining their weapons to cope with their chief new enemy, Earth-descended man. The sole known basic in their fundamental programming was the destruction of all life, wherever and whenever they could find it.

Waiting for replies from the planet and the three ships, Liao studied his instruments, and hoped fervently that the berserker fleet that was known to be on its way here had not already come and gone, leaving the helpless colony destroyed. "Drive, this is the captain. Can't you get a little more speed on?"

The answer came into his earphones. "No, sir, we're on the red line now. Another kilometer-per-second and we'll blow a power lamp, or worse. This is one heavy sun, and it's got some dirty space around it." The ship was running now on the same space-warping engines that carried it faster than light between the stars, but this deep within the huge gravitational well surrounding Meitner's sun the power that could be applied to them was severely restricted. The more so because here space was dirty, as the Drive officer had said, meaning the interplanetary matter to be encountered within this system was comparatively dense. It boiled down to the fact that Liao had no hope of overtaking the two small vessels that fled ahead of him toward the planet. They, as it were, skimmed over shoals of particles that the dreadnought must plow through, flirted with reefs of drive-wrecking gravitational potential that it must approach more cautiously, and rode more lightly the waves of the solar wind that streamed outward as always from a sun.

Now the minimum time in which the largest, nearest vessel might have replied to the dreadnought's challenge had elapsed. No reply had been received. Liao ordered the challenge repeated continuously.

The Communications officer was speaking. "Answer from the planet, Captain. It's coming in code. I mean the simple standard dot-dash code, sir, like emergency signals. There's a lot of noise around; maybe that's the only way they can get a signal through." Powerfully and crudely modulated dot-and-dash signals could carry intelligence through under conditions where more advanced forms of modulation were swamped by interference.

Already Communications had the decoded words flowing across a big screen on the bridge. DREADNOUGHT ARE WE EVER GLAD TO HEAR FROM YOU

STOP ONE OF THE TWO LITTLE SHIPS CLOSING IN ON US MUST BE A BERSERKER STOP BETTER TRANSMIT TO US IN DOTDASH CODE STOP LOTS OF NOISE BECAUSE SUN IS FLARING WE COULDN'T READ YOUR SIGNAL VERY WELL

The letter abruptly stopped flowing across the screen. The voice of the Communications officer said: "Big burst of noise, Captain; signals from the planet are going to be cut off entirely for a little while. This sun is a very active flare star... just a moment, sir. Now we're getting voice and video transmissions beamed to us from both small ships. But the signals from both ships are so garbled by noise we can't make anything out of them."

"Beam back to them in dot-dash; tell them they'll have to answer us that way. Repeat our warnings that they must identify themselves. And keep trying to find out what the ground wants to tell us." The captain turned his head to look over at his second officer in the adjoining combat chair. "What'd you think of that, Miller? 'One of the two little ships must be a berserker'?"

Miller, by nature a somewhat morose man, only shook his head gloomily, and saved his speech to make a factual report. "Sir, I've been working on identifying the two active ships. The one nearest the planet is so small it seems to be nothing but a lifeboat. Extrapolating backward from its present course indicates it may well have come from the third ship, the one that's drifting, a couple of hours ago.

"The second little ship is a true interstellar vessel; could be a one-man courier ship or even somebody's private yacht. Or a berserker, of course." The enemy came in all shapes and sizes.

Still no answer had been returned from the large, drifting ship, though the dreadnought was continuing to beam threatening messages to her, now in dot-dash code. Detection reported now that she was spinning slowly around her longest axis, consistent with the theory that she was some kind of derelict. Liao checked again on the state of communications with the planet, but they were still cut off by noise.

"But here's something, Captain. Dot-and-dash is coming in from the supposed courier. Standard code as before, coming at moderate manual speed."

Immediately more letters began to flow across the number one screen on the bridge: I AM METION CHONGJIN COMMANDING THE ONE MAN COURIER ETRURIA EIGHT DAYS OUT OF ESTEEL STOP CANNOT TURN ASIDE I AM CARRYING VITAL DEFENSE COMPONENT FOR COLONY STOP LIFEBOAT APPROX 12 MILLION KM TO MY PORT AND AHEAD IS SAID BY GROUND TO BE CLAIMING TO BE THE SHIP CARRYING THE DEFENSE COMPONENT THEREFORE IT MUST REALLY BE A BERSERKER STOP IT WILL PROBABLY REACH COLONY AND BOMB AND RAM IT BEFORE I

GET THERE SO YOU MUST DESTROY IT REPEAT DESTROY THE BERSERKER QUOTE LIFEBOAT UNQUOTE MOST URGENT THAT YOU HIT IT SOON END MESSAGE.

Miller made a faint whistling noise. "Sounds fairly convincing, chief." During briefing back at base three standard days ago they had been informed of the fact that the colonists on Meitner's planet were awaiting shipment of a space inverter to complete and activate their defensive system of protective force-screens and beamprojecting weapons. Until the invertor could be brought from Esteel and installed the colony was virtually defenseless; the dreadnought had been dispatched to offer it some interim protection.

Liao was giving orders to Armament to lock the c-plus cannon of the main battery onto the lifeboat. "But fire only on my command." Turning back to Miller, he said: "Yes, fairly convincing. But the berserkers might have found out somehow that the space inverter was being rushed here. They might even have intercepted and taken over the courier carrying it. We can't see who we're talking to on that ship or hear his voice. It might have been a berserker machine that just tapped out that message to us."

The Communications officer was on again. "Bridge, we have the first coded reply from the lifeboat coming in now. Here it comes on your screen."

WE ARE HENRI SAKAI AND WINIFRED ISPAHAN CARRYING THE DEFENSE MATERIEL NAMELY SPACE INVERTOR THEY NEED ON THE PLANET STOP OUR SHIP THE WILHELMINA FROM ESTEEL WAS SHOT UP BY THE BERSERKER TWO DAYS AGO WHEN IT ALMOST CAUGHT US STOP THE BERSERKER OR ANOTHER ONE IS HERE NOW ABOUT 11 MILLION KM TO OUR STARBOARD AND A LITTLE BEHIND US YOU MUST KEEP IT FROM GETTING TO US OR TO THE PLANET WHERE MAYBE IT COULD RAM THE DOME END MESSAGE.

"Communications," the captain snapped, "how is this coming through? I mean, does this also seem like someone sending manual code?"

"No, sir, this is very rapid and regular. But if you mean, Captain, does that prove they're not human, it doesn't. In a lifeboat the radio often has a voice-to-code converter built in."

"And conversely a berserker could send slowly and somewhat irregularly, like a man, if it wanted to. Thank you." The captain pondered in silence for a little while.

"Sir," Miller suggested, "maybe we'd better order both small ships to stop, until we can overtake and board them."

The captain turned his head to look at him steadily, but remained silent.

Miller, slightly flustered, took thought and then corrected himself. "Now I see the problem more fully, sir. You can't do that. If one of them is really carrying the space inverter you don't dare delay him for a minute. A berserker fleet may materialize insystem here at any moment, and is virtually certain to arrive within the next six to eight standard hours. Our ship alone won't be able to do more than hit and run when that happens. Our fleet can't get here for another day. The colony will never survive the interval without their space inverter installed."

"Right. Even if I sent a fast launch ahead to board and inspect those ships, the delay would be too much to risk. And now tell me this, Second—is this conceivably just some misunderstanding, and both of those ships are really manned by human beings?"

"Not a chance," the second officer answered promptly. "They both claim to be carrying the space inverter, and that can't be true. Those things just aren't ordered or built in duplicate or triplicate, and they both claim to be bringing it from the planet Esteel... the next question is, can both of our little targets be berserkers? Trying to psych us into letting one of them get through? I'll keep trying to reach the ground, see if they can shed any more light on this."

"Good going."

In their earphones Communications said: "Here's more from the ship that calls itself *Etruria*, Bridge."

"Put it right on our screen."

REPEAT COLONY SAYS LIFEBOAT IS ALSO CLAIMING TO BE THE HUMAN ONE STOP THEY MUST BE A BERSERKER IMPERATIVE YOU STOP THEM WHAT DO YOU WANT ME TO DO TO PROVE IM HUMAN STOP REPEAT MY NAME IS METION CHONGJIN IM ALONE ON BOARD HERE WIFE AND KIDS AT HOME ON ESTEEL IF THAT MEANS ANYTHING TO YOU STOP REPEAT HOW CAN I PROVE TO YOU IM HUMAN END MESSAGE.

"Easy," Captain Liao muttered to himself. "Father a human child. Compose a decent symphony. In the next forty minutes or so." That was approximately the time left before at least one of the ships would be able to reach the planet. Liao's mind was racing to formulate possible tests that could be applied in the present situation, but getting nowhere. Berserkers had awesome powers, not only as physical fighting machines, but as computers. He was not certain that a battery of psychologists with plenty of time to work in would be able to set up the kind of test he needed now.

Time passed. Hurtling through silence and near-emptiness at many kilometers per second, the ships very slowly changed the positions of their symbols in the huge

holographic presentation on the bridge.

"Now more from the Wilhelmina's lifeboat, Captain."

"Run that on top of the screen, will you, and put any more that comes in from *Etruria* on the bottom."

HENRI AND WINIFRED HERE COLONY TELLS US OTHER SHIP IS CLAIMING TO BE FROM ESTEEL CARRYING DEFENSE COMPONENTS AND REQUESTING LANDING INSTRUCTIONS STOP IT MUST BE LYING IT MUST BE A BERSERKER MAYBE THE SAME ONE THAT ATTACKED OUR SHIP TWO DAYS AGO...

The message ran on, and despite some irrelevancies and redundancies it soon outlined a story. The *Wilhelmina* (if the story was to be believed) had been on an interstellar cruise, carrying a number of young people on some kind of student exchange voyage or postgraduate trip. Somewhere on the outskirts of the solar system that contained the heavily industrialized planet Esteel, a courier ship bound out for Meitner's had approached and hailed the *Wilhelmina*, had in fact commandeered her to complete the courier's mission. Berserkers were in pursuit of the courier and had already damaged her extensively.

... AND WE WERE ON OUR WAY HERE WITH THE INVERTER WHEN ONE OF THE BERSERKERS ALMOST CAUGHT UP AGAIN TWO STANDARD DAYS AGO STOP WILHELMINA WAS BADLY SHOT UP THEN CREW ALL KILLED WE ARE ONLY TWO LEFT ALIVE TWO HISTORY STUDENTS WE HAD TERRIBLE PROBLEMS ASTROGATING HERE BUT WE MADE IT STOP LIVING IN LIFEBOAT AND WORKING RIDDLED SHIP IN SPACESUTTS YOU CANT STOP US NOW AFTER ALL WEVE BEEN THROUGH STOP YOU MUST DESTROY THE BERSERKER SHIP WE WILL REACH PLANET BEFORE IT DOES I THINK BUT IT WILL BE ABLE TO HIT THE DOME BEFORE THE SPACE INVERTER CAN BE INSTALLED STOP WE ARE GOING TO KEEP SENDING UNTIL YOU ARE CONVINCED WERE HUMAN...

The message from the lifeboat went on, somewhat more repetitiously now. And at the same time on the bottom of the screen more words from the *Etruria* flowed in:

IVE TRIED TO CATCH THE BERSERKER LIFEBOAT AND SHOOT IT DOWN BUT I CANT ITS UP TO YOU TO STOP IT STOP WHAT DO YOU WANT ME TO DO TO PROVE IM HUMAN...

The second officer sighed lightly to himself, wondering if, after all, he really wanted his own command.

"Communications, beam this out," the captain was ordering. "Tell them both to keep talking and give us their life histories. Birth, family, education, the works. Tell

them both they'd better make it good if they want to live." On buttons on the arm of his chair he punched out an order for tea, and a moment later tea came to him there through a little door, hot in a capped cup with drinking tube attached. "I've got an idea, Second. You study the background this so-called Esteeler spaceman Metion Chongjin gives us. Think up someplace you might have known him. We'll introduce you to him as an old friend, see how he copes."

"Good idea, chief."

"Communications here again, Bridge. We've finally gotten another clear answer back from the ground. It's coming through now, we'll put it in the middle of your number one screen."

... IN ANSWER TO YOUR QUESTION NO THEY CANT BOTH BE BERSERKERS STOP AN HOUR AGO THERE WAS A BRIEF LETUP IN THE NOISE AND WE GOT ONE CLEAR LOOK AT A HUMAN MALE FACE ALIVE AND TALKING COGENTLY ANSWERING OUR QUESTIONS NO POSSIBILITY THAT WAS A BERSERKER BUT UNFORTUNATELY BOTH SUSPECT SHIPS WERE SENDING ON THE SAME FREQ AND WE DONT KNOW FROM WHICH ONE THAT VOICE AND PICTURE CAME BUT WE DO KNOW ONE OF THEM IS HUMAN...

"Damnation, how they've botched things up. Why didn't they ask the two men to describe themselves, and see which description fit what they saw?"

"This is Communications again, Bridge. They may have tried asking that, sir, for all we know. We've lost contact with the ground again now, even on code. I guess the solar wind is heating up. Conditions in the ionosphere down there must be pretty fierce. Anyway, here's a little more from the *Etruria*."

WHAT DO YOU WANT ME TO DO TO PROVE IM HUMAN RECITE POETRY MARY HAD A LITTLE LAMB STOP SAY PRAYERS I NEVER MEMORIZED ANY OF THEM STOP OK I GIVE UP SHOOT US BOTH DOWN THEN END MESSAGE.

The second officer thumped a fist on the arm of his massive combat chair. "A berserker would say that, knowing that its fleet was coming, and the colony would be defenseless if we stopped the space inverter from getting to it."

Liao shrugged, and helped himself to a massive slug of tea. "But a human might say that too, being willing to die to give the colony a few more hours of life. A human might hope that given a few more hours some miracle might come along, like the human fleet getting here first after all. I'm afraid that statement didn't prove a thing."

"I... guess it didn't."

After another good slug of tea, Liao put in a call to Astrogation.

"Chief Astrogator here, sir."

"Barbara, have you been listening in on this? Good. Tell me, could those two supposed history students, probably knowing little science or technology, have brought that ship in here? Specifically, could they have astrogated for two days, maybe fifty or sixty light-years, without getting lost? I suppose the ship's autopilot was knocked out. They said they were living in the lifeboat and working the damaged ship in spacesuits."

"Captain, I've been pondering that claim too, and I just don't know. I can't say definitely that it would be impossible. If we knew just how badly that ship was damaged, what they had to work with, we could make a better guess."

The captain looked back at his situation hologram*. The apparently inert hulk that he had been told was the *Wilhelmina* was considerably closer now, lying as it did almost in *Hamilcar Barca's* path toward Meitner's planet. The dreadnought was going to pass fairly near the other ship within the next few minutes. "As to that, maybe we can find out something. Keep listening in, Barbara." Turning to the second officer, Liao ordered: "You're going to be taking over the bridge shortly, Miller. I want us to match velocities with that supposed hulk ahead, and then I'm going over to her, in hopes of learning something."

"It might be booby-trapped, Captain."

"Then we'll have an answer, won't we? But I don't suppose an answer will be found that easily. Also get me a reading on exactly how much time we have left to decide which ship we're going to fire on."

"I've already had the computers going on that, sir. As of now, thirty-two and a quarter minutes. Then the lifeboat will either be down in atmosphere or around on the other side of the planet, and out of effective range in either case. The courier will take a little longer to get out of effective range, but..." He gestured helplessly.

"Yes, the courier being slower won't help us. We have to decide in thirty-two minutes."

"Chief, I just had an idea. If the lifeboat was the berserker, since it's closer to the planet, wouldn't it have tried before we got here to head off the courier from the planet... oh. No good. No offensive weapons on the lifeboat."

"Right, except perhaps it has one bloody big bomb, meant for the colony. While the courier ship doubtless has some light armament, enough to deal with the lifeboat if it got in range. Still nothing proved, either way."

In another minute the silent ship ahead was close enough for telescopes on the

dreadnought to pick out her name by starlight. It was *Wilhelmina*, all right, emblazoned near one end of her cigarlike shape. The dreadnought matched velocities with her smoothly, and held position a couple of kilometers off. Just before getting into a launch with a squad of marines to go over and inspect her, Liao checked back with the bridge to see if anything was new.

"Better hear this before you go," Miller told him. "I just introduced myself to Chongjin as an old buddy. This is his reply, quote: 'I honestly don't remember your name if I ever knew it, stop. If this was a test I guess I passed hurrah now get on with it and stop that berserker on the lifeboat...' and then the signal faded out again. Chief, our communication problems are getting steadily worse. If we're going to say anything more to either of those ships we'd better send it soon."

"How many minutes left, Second?"

"Just eighteen, sir."

"Don't waste any of 'em. The ship is yours."

"I relieve you, sir."

No signs of either life or berserker activity were apparent on the *Wilhelmina* as the launch crossed the space separating her from the dreadnought and docked, with a gentle clang of magnetic grapples. Now Liao could see that the reported damage was certainly a fact. Holes several meters in diameter had been torn in *Wilhelmina's* outer hull. Conditions inside could hardly be good.

leaving one man with the launch, Liao led the rest of his small party in through one of the blasted holes, swimming weightlessly, propelling themselves by whatever they could grip. He had briefed the men to look for something, anything, that would prove or disprove the contention that humans had driven this ship during the two days since she had been damaged.

Fifteen and a half minutes left.

The damage inside was quite as extensive as the condition of the hull had indicated. Their suit lights augmenting the sharp beams that Meitner's distant sun threw into the airless interior, the boarding party spread out, keeping in touch with their suit radios. This had undoubtedly been a passenger ship. Much of the interior was meant as living quarters, divided into single and double cabins, with accommodations for a couple of dozen people. What furnishings remained suggested luxury. So far, everything said by the lifeboat's occupant was being proved true, but Liao had as yet no clear evidence regarding that occupant's humanity. He could only hope the evidence was here, and that he would recognize it at first sight.

The interior of the ship was totally airless now, having been effectively opened to the stars by the repeated use of some kind of penetration weapon. The ruin was much cleaner than any similarly damaged structure on a planet's surface could be, loose debris having been carried out of the ship with escaping air, or separated from her when her drive took her outside of normal space and time, between the stars.

"Look here, Captain." The lieutenant in charge of the marine squad was beckoning to him.

Near the center of the slender ship the lieutenant had found a place where a wound bigger than any of the others had pierced in, creating in effect an enormous skylight over what had been one of the largest compartments on board. Probably it had been a lounge or refectory for the passengers and crew. Since the ship was damaged this ruined room had evidently provided the most convenient observation platform for whoever or whatever had been in control: a small, wide-angle telescope, and a tubular electronic spectroscope, battery-powered and made for use in vacuum, had been roughly but effectively clamped to the jagged upper edge of what had been one of the lounge's interior walls and now formed a parapet against infinity.

The lieutenant was swiveling the instruments on their mountings. "Captain, these look like emergency equipment from a lifeboat. Would a berserker machine have Deeded to use these, or would it have gear of its own?"

The captain stood beside him. "When a berserker puts a prize crew on a ship, it uses man-sized, almost android machines for the job. It's just more convenient for the machines that way, I suppose, more efficient. So they could quite easily use instruments designed for humans." He swung his legs to put his magnetic boots against the lounge's soft floor, so that they held him lightly to the steel deck beneath, and stared at the instruments, trying to force more meaning from them.

Men kept on searching the ship, probing everywhere, coming and going to report results (rather the lack of them) to Liao at his impromptu command post in what had been the lounge. Two marines had broken open a jammed door and found a small airless room containing a dead man who wore a spacesuit. Cause of death was not immediately apparent, but the uniform collar visible through the helmet's faceplate indicated that the man had been a member of *Wilhelmina's* crew. And in an area of considerable damage near the lounge another, suitless, body was discovered wedged among twisted structural members. This corpse had probably been frozen near absolute zero for several days and exposed to vacuum for an equal length of time. Also its death had been violent After all this it was hard to be sure, but Liao thought that the body had once been that of a young girl who had been wearing a fancy party dress when she met her end.

Liao could imagine a full scenario now, or rather two of them. Both began with the shipload of students, eighteen of twenty of them perhaps, enjoying their interstellar trip. Surely such a cruise had been a momentous event in their lives. Maybe they had

been partying as they either entered or were about to leave the solar system containing the planet Esteel. And then, according to Scenario One, out of the deep night of space came the desperate pleas for help from the damaged and harried courier, hotly pursued by berserkers that were not expected to be in this part of the galaxy at all. The students would have had to remain on board the *Wilhelmina*, there being no place for them to get off, when she was commandeered to carry the space inverter on to Meitner's planet. Then urgent flight, and two days from Meitner's a berserker almost catching up, tracking and finding and shooting holes in *Wilhelmina*, somewhere in the great labyrinth of space and dust and stars and time, in which the little worlds of men were strange and isolate phenomena. And then the two heroic survivors, Henri and Winifred, finding a way to push on somehow.

Scenario Two diverged from that version early on, and was simpler and at first glance more credible. Instead of the *Wilhelmina* being hailed by a courier and pressed into military service, she was simply jumped by berserkers somewhere, her crew and passengers efficiently wiped out, her battered body driven on here ahead of the main berserker fleet in a ploy to forestall the installation of the space inverter and demolish the colony before any help could reach it. Scenario One was the more heroic and romantic, Two the more prosaic and businesslike. The trouble was that the real world was not committed to behaving in either style but went on its way indifferently.

A man was just now back from inspecting *Wilhelmina's* control room. "Almost a total loss in there, sir, except for the drive controls and their directional settings. Artificial and the autopilot too. Drive itself seems all right, as far as I can tell without trying it."

"Don't bother. Thank you, mister." *

Another man came to report, drifting upside down before the captain in the lack of gravity. "Starboard forward lifeboat's been launched, Captain. Others are all still in place, no signs of having been lived in. Eight-passenger models."

"Thank you," Liao said courteously. These facts told him nothing new. Twelve minutes left now, before he must select a target and give the command to fire. In his magnetic boots he stood before the telescope and spectroscope as their user had done, and looked out at the stars.

The slow rotation of the *Wilhelmina* brought the dreadnought into view, and Liao flicked his suit radio to the inter-ship channel. "Bridge, this is Captain. Someone tell me just how big that space inverter is. Could two untrained people manhandle it and its packing into one of those little eight-passenger lifeboats?"

"This is the Armaments officer, sir," an answer came back promptly. "I used to work in ground installations, and I've handled those things. I could put my arms around the biggest space inverter ever made, and it wouldn't mass more than fifty

kilograms. It's not the size makes 'em rare and hard to come by, it's the complexity. Makes a regular drive unit or artificial gravity generator look like nothing."

"All right. Thank you. Astrogation, are you there?"

"Listening in, sir."

"Good. Barbara, the regular astrogator's gear on this ship seems to have been wiped out. What we have then is two history students or whatever, with unknown astronomical competence, working their way here from someplace two days off, in a series of c-plus jumps. We've found their instruments, apparently all they used, simply telescope and spectroscope. You've been thinking it over, now how about it? Possible?"

There was a pause. "Possible, yes. I can't say more than that on what you've given me."

"I'm not convinced it's possible. With umpteen thousand stars to look at, their patterns changing every time you jump, how could you hope to find the one you wanted to work toward?" *Ten minutes*. Inspiration struck. "Listen! Why couldn't they have shoved off in the lifeboat, two days ago, and used its autopilot?"

Barbara's voice was careful as always. "To answer your last question first, chief, the lifeboat autopilots on civilian ships are usually not adjustable to give you a choice of goals; they just bring you out in the nearest place where you are likely to be found. No good for either people or berserkers intent on coming to Meitner's system. And if *Wilhelmina's* drive is working it could take them between the stars faster than a lifeboat could.

"To answer your first question, the lifeboats carry aids for the amateur astrogator, such as spectral records of thousands of key stars, kept on microfilm. Also often provided is an electronic scanning spectroscope of the type you seem to have found there. The star records are indexed by basic spectral type, you know, types O, B, A, F, G, K, and so on. Type O stars, for example, are quite rare in this neck of the woods so if you just scanned for them you would cut down tremendously on the number of stars to be looked at closely for identification. There are large drawbacks to such a system of astrogation, but on the other hand with a little luck one might go a long way using it. If the two students are real people, though, I'll bet at least one of them knows some astronomy."

"Thank you," Liao said carefully, once again. He glanced around him. The marines were still busy, flashing their lights on everything and poking into every crevice. Eight minutes. He thought he could keep the time in his head now, not needing a chronometer.

People had lived in this lounge, or rec room, or whatever it had been, and enjoyed

themselves. The wall to which the astrogation instruments were now fastened had earlier been decorated, or burdened, with numerous graffiti of the kinds students seemed always to generate. Many of the messages, Liao saw now, were in English, an ancient and honorable language still fairly widely taught. From his own schooldays he remembered enough to be able to read it fairly well, helping himself out with an occasional guess.

CAPTAIN AHAB CHASES ALEWIVES, said one message proceeding boldly across the wall at an easy reading height. The first and third words of that were certainly English, but the meaning of the whole eluded him. Captain Liao chases shadows, he thought, and hunches. What else is left?

Here was another:

WORLD

WHOLE

THE

WISH

CLASSMATES

NOBLE

HIS

AND

OSS

And then nothingness, the remainder of the message having gone when Oss and his noble classmates went and the upper half of this wall with them.

"Here, Captain! Look!" A marine was beckoning wildly.

The writing he was pointing to was low down on the wall and inconspicuous, made with a thinner writing instrument than most of the other graffiti had been. It said simply:

Henri & Winifred

Liao looked at it, first with a jumping hope in his heart and then with a sagging sensation that had rapidly become all too familiar. He rubbed at the writing with his

suited thumb; nothing much came off. He said: "Can anyone tell me in seven minutes whether this was put here after the air went out of the ship? If so, it would seem to prove that Henri and Winifred were still around then. Otherwise it proves nothing. If the berserker had been here it could easily have seen those names and retained them in its effortless, lifeless memory, and used them when it had to construct a scenario.

"Where are Henri and Winifred now, that is the question," Liao said to the lieutenant, who came drifting near, evidently wondering, as they all must be, what to do next. "Maybe that was Winifred back there in the party dress."

The marine answered: "Sir, that might have been Henri, for all that I could tell." He went on directing his men, and waiting for the captain to tell him what else was to be done.

A little distance to one side of the names, an English message in the same script and apparently made with the same writing instrument went down the wall like this:

Oh

Be

Α

Fine

Girl

Kiss

Me

Right

Now

Sweetie

Liao was willing to bet that particular message wasn't written by anyone wearing a space helmet. But no, he wouldn't make such a bet, not really. If he tried he could easily enough picture the two young people, rubbing faceplates and laughing, momentarily able to forget the dead wedged in the twisted girders a few meters away. Something about that message nagged at his memory, though. Could it be the first line of an English poem he had forgotten?

The slow turn of the torn ship was bringing the dreadnought into view again. "Bridge, this is Captain. Tell me anything that's new."

"Sir," here's a little more that came in clear from the lifeboat. I quote: 'This is

Winifred talking now, stop. We're going on being human even if you don't believe us, stop.' Some more repetitious stuff, Captain, and then this: 'While Henri was navigating I would come out from the lifeboat with him and he started trying to teach me about the stars, stop. We wrote our names there on the wall under the telescope if you care to look you'll find them of course that doesn't prove anything does it if I had lenses for eyes I could have read those names there and remembered them...' It cuts off again there, chief, buried in noise."

"Second, confirm my reading of how much time we have left to decide."

"Three minutes forty seconds, sir. That's cutting it thin."

"Thanks." Liao fell silent, looking off across the universe. It offered him no help.

"Sir! Sir! I may have something here." It was the marine who had found the names, who was still closely examining the wall.

Looking at the wall where the man had aimed his helmet light, near the deck below the mounted instruments, Liao beheld a set of small grayish indented scratches, about half a meter apart.

"Sir, some machine coming here repeatedly to use the scopes might well have made these markings on the wall. Whereas a man or woman in a spacesuit would not have left such marks, in my opinion, sir."

"I see." Looking at the marks, that might have been made by anything, maybe furniture banged into the wall during that final party, Liao felt an irrational anger at the marine.

But of course the man was only trying his best to help. He had a duty to put forward any possibly useful idea that came into his head. "I'm not sure these were made by a berserker, spaceman, but it's something to think about, How much time have we left, Second?"

"Just under three minutes. Standing by ready to fire at target of your choice, sir. Pleading messages still coming in intermittently from both ships, nothing new in them."

"All right." The only reasonable hope of winning was *to* guess and take the fifty-fifty chance. If he let both ships go on, the bad one was certain to ram the colony and destroy it before the other could deliver the key to the defenses and it could be installed. If he destroyed both ships, the odds were ten to one or worse that the berserker fleet would be here shortly and would accomplish the same ruin upon a colony deprived of any chance of defending itself.

Liao adjusted his throat muscles so that his voice when it came out would be firm and certain, and then he slipped a coin in his mind. Well, not really. There were the

indented scratches on the bulkhead, perhaps not so meaningless after all, and there was the story of the two students' struggle to get here, perhaps a little too fantastic. "Hit the lifeboat," he said then, decisively. "Give it another two minutes, but if no new evidence turns up, let go at it with the main turret. Under no circumstances delay enough to let it reach the planet."

"Understand, sir," said Miller's voice. "Fire at the lifeboat two minutes from your order."

He would repeat the order to fire, emphatically, when the time was up, so that there could be no possible confusion as to where responsibility lay. "Lieutenant, let's get the men back to the launch. Continue to keep your eyes open on the way, for anything..."

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"Yes. sir."
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The last one to leave the ruined lounge-observatory, Liao looked at the place once more before following the marines back through the ship. Oh, be a fine girl, Winifred, when the slug from the c-plus cannon comes. But if I have guessed wrong and it is coming for you, at least you'll never see it Just no more for you. No more Henri and ho more lessons about the stars.

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The stars...
Oh, be a fine girl...
O, B, A, F, G, K...
"Sir!"
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"Cancel my previous order! Let the lifeboat land. Hit the *Etruria*! Unload on that bloody damned berserker with everything we've got, right now!"

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"Yessir!"
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Long before Liao got back to the launch the c-plus cannon volleyed. Their firing was invisible, and inaudible here in airlessness, but still he and the others felt the released energies pass twistingly through all their bones. Now the huge leaden slugs would begin skipping in and out of normal space, homing on their tiny target, far outracing light in their trajectories toward Meitner's planet. The slugs would be traveling now like de Broglie wavicles, one aspect matter with its mass magnified awesomely by Einsteinian velocity, one aspect waves of not much more than mathematics. The molecules of lead churned internally with phase velocities greater than that of light.

Liao was back on the dreadnought's bridge before laggard light brought the faint flash of destruction back.

"Direct bit, Captain." There was no need to amplify on that.

"Good shot, Arms."

And then, only a little later, a message got through the planet's ionospheric noise to tell them that the two people with the space inverter were safely down.

Within a few hours the berserker fleet appeared in the system, and found an armed and ready colony, with *Hamilcar Barca* hanging by for heavy hit-and-run support. The enemy skirmished briefly and then declined battle and departed. A few hours after that, the human fleet arrived, and put in for some refitting. And then Captain Liao had a chance to get down into the domed colony and talk to two people who wanted very much to meet him.

"So," he was explaining, soon after the first round of mutual congratulations had been completed, "when I at last recognized the mnemonic on the wall for what it was, I knew that not only had Henri and Winny been there but that he had in fact been teaching her something about astronomical spectroscopy at that very place beside the instruments—therefore after the ship was damaged."

Henri was shaking his youthful head, with the air of one still marveling at it all. "Yes, *now* I can remember putting the mnemonic thing down, showing Winny how to remember the order of spectral types. I guess we use mnemonics all the time without thinking about it much. Every good boy does fine, for the musical notes. Bad boys race our young girls—that one's in electronics."

The captain nodded. "Thirty days hath September. And 'Barbara Celarent' that the logicians still use now and then. Berserkers, with their perfect memories, probably don't even know what mnemonics are, much less need them. Anyway, if the berserker had been on the *Wilhelmina*, it would've had no reason to leave false clues. No way it could have guessed that I was coming to look things over."

Winifred took him by the hand. "Captain, you've given us our lives, you know. What can we ever do for you?"

"Well. For a start..." He slipped into some English he had recently practiced. "You might be a fine girl, sweetie, and..."