

# FRED SABERHAGEN BERSERKERS: THE BEGINNING

**Your Galaxy  
is Toast,  
Monkey Boys!**

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EAN

# A HOLE THE SIZE OF MONTANA

There had been a battle, perhaps fought while men on Earth were hunting the mammoth with spears. The berserker had met some terrible opponent, and had taken a terrible lance-thrust of a wound. A cavity two miles wide at the widest, and fifty miles deep, had been driven in by a sequence of shaped atomic charges, through level after level of machinery, deck after deck of armor and had been stopped only by the last inner defenses of the buried unliving heart.

The berserker had survived, and crushed its enemy, and soon after its repair machines had sealed over the outer opening of the wound, using extra thicknesses of armor. It had meant to gradually rebuild the whole destruction; but there was so much life to be exterminated in the galaxy, and so much of it was stubborn and clever. Somehow battle damage accumulated faster than it could be repaired. The huge hole was used as a conveyor path, and never much worked on.

When Hemphill saw the blasted cavity—what little of it his tiny spacesuit lamp could show—he felt a shrinking fear that was greater than any in his memory. He stopped on the edge of the void, drifting there with his arm instinctively around Maria.

They had already come an hour's journey from the airlock, through weightless vacuum inside the great machine. Hemphill had the pistol ready, and the bomb, and two hundred feet of cord tied around his left arm.

But when Hemphill recognized the once-molten edge of the berserker's great scar for what it was, his delicate new hope of survival left him. This, the damned thing had survived. This, perhaps had hardly weakened it.

The bomb he carried under his arm was only a pathetic toy. . . .





# **BERSERKERS: THE BEGINNING**

**FRED  
SABERHAGEN**



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## INTRODUCTION

*I, Third historian of the Carmpan race, in gratitude to the Earth-descended race for their defense of my world, set down here for them my fragmentary vision of their great war against our common enemy.*

*The vision has been formed piece by piece through my contacts in past and present time with the minds of men and of machines. In these minds alien to me I often perceive what I cannot understand, yet what I see is true. And so I have truly set down the acts and words of Earth-descended men great and small and ordinary, the words and even the secret thoughts of your heroes and your traitors.*

*Looking into the past I have seen how in the twentieth century of your Christian calendar your forefathers on Earth first built radio detectors capable of sounding the deeps of interstellar space. On the day when whispers in our alien voices were first detected, straying in across the enormous intervals, the universe of stars became real to all Earth's nations and all her tribes.*

*They became aware of the real world surrounding them—a universe strange and immense beyond thought, possibly hostile, surrounding and shrinking all Earthmen alike. Like island savages just become aware of the great powers existing on and beyond their ocean, your nations began—sullenly, mistrustfully, almost against their will—to put aside their quarrels with one another.*

*In the same century the men of old Earth took their first steps into space. They studied our alien voices whenever they could hear us. And when the men of old Earth began to travel faster than light, they followed our voices to seek us out.*

*Your race and mine studied each other with eager science and with great caution and courtesy. We Carmpan and our older friends are more passive than you. We live in different environments and think mainly in different directions. We posed no threat to Earth. We saw to it that Earthmen were not crowded by our presence; physically and mentally they had to stretch to touch us. Ours, all the skills of keeping peace. Alas, for the day unthinkable that was to come, the day when we wished ourselves warlike!*

*You of Earth found uninhabited planets, where you could thrive in the warmth of suns much like your own. In large colonies and small you scattered yourselves across one segment of one arm of our slow-turning galaxy. To your settlers and frontiersmen the galaxy began to seem a friendly place, rich in worlds hanging ripe for your peaceful occupation.*

*The alien immensity surrounding you appeared to be not hostile after all. Imagined threats had receded behind horizons of silence and vastness. And so once more you allowed among yourselves the luxury of dangerous conflict, carrying the threat of suicidal violence.*

*No enforceable law existed among the planets. On each of your scattered colonies individual leaders maneuvered for personal power, distracting their people with real or imagined dangers posed by other Earth-descended men.*

*All further exploration was delayed, in the very days when the new and inexplicable radio voices were first heard drifting in from beyond your frontiers, the strange soon-to-be-terrible voices that conversed only in mathematics. Earth and Earth's colonies were divided each against all by suspicion, and in mutual fear were rapidly training and arming for war.*

*And at this point the very readiness for violence that had sometimes so nearly destroyed you, proved to be the means of life's survival. To us, the Carmpan watchers, the withdrawn seers and touchers of minds, it appeared that you had carried the crushing weight of war through all your history knowing that it would at last be needed, that this hour would strike when nothing less awful would serve.*

*When the hour struck and our enemy came without*

*warning, you were ready with swarming battle-fleets. You were dispersed and dug in on scores of planets, and heavily armed. Because you were, some of you and some of us are now alive.*

*Not all our Carmpan psychology, our logic and vision and subtlety, would have availed us anything. The skills of peace and tolerance were useless, for our enemy was not alive.*

*What is thought, that mechanism seems to bring it forth?*



## WITHOUT A THOUGHT

The machine was a vast fortress, containing no life, set by its long-dead masters to destroy anything that lived. It and many others like it were the inheritance of Earth from some war fought between unknown interstellar empires, in some time that could hardly be connected with any Earthly calendar.

One such machine could hang over a planet colonized by men and in two days pound the surface into a lifeless cloud of dust and steam, a hundred miles deep. This particular machine had already done just that.

It used no predictable tactics in its dedicated, unconscious war against life. The ancient, unknown gamesmen had built it as a random factor, to be loosed in the enemy's territory to do what damage it might. Men thought its plan of battle was chosen by the random disintegrations of atoms in a block of some long-lived isotope buried deep inside it, and so was not even in theory predictable by opposing brains, human or electronic.

Men called it a berserker.

Del Murray, sometime computer specialist, had called it other names than that; but right now he was too busy to waste breath, as he moved in staggering lunges around the little cabin of his one-man fighter, plugging in replacement units for equipment damaged by the last near-miss of a berserker missile. An animal resembling a large dog with an ape's forelegs moved around the cabin too, carrying in its nearly human hands a supply of emergency sealing patches. The cabin air was full of haze. Wherever movement of the haze showed a leak to an unpressurized part of the hull, the dog-ape moved to apply a patch.

"Hello, Foxglove!" the man shouted, hoping that his radio was again in working order.

"Hello, Murray, this is Foxglove," said a sudden loud voice in the cabin. "How far did you get?"

Del was too weary to show much relief that his communications were open again. "I'll let you know in a minute. At least it's stopped shooting at me for a while. Move, Newton." The alien animal, pet and ally, called an *aiyan*, moved away from the man's feet and kept singlemindedly looking for leaks.

After another minute's work Del could strap his body into the deep-cushioned command chair again, with something like an operational panel before him. That last near-miss had sprayed the whole cabin with fine penetrating splinters. It was remarkable that man and *aiyan* had come through unwounded.

His radar working again, Del could say: "I'm about ninety miles out from it, Foxglove. On the opposite side from you." His present position was the one he had been trying to achieve since the battle had begun.

The two Earth ships and the berserker were half a light year from the nearest sun. The berserker could not leap out of normal space, toward the defenseless colonies of the planets of that sun, while the two ships stayed close to it. There were only two men aboard Foxglove. They had more machinery working for them than did Del, but both manned ships were mites compared to their opponent.

Del's radar showed him an ancient ruin of metal, not much smaller in cross section than New Jersey. Men had blown holes in it the size of Manhattan Island, and melted puddles of slag as big as lakes upon its surface.

But the berserker's power was still enormous. So far no man had fought it and survived. Now, it could squash Del's little ship like a mosquito; it was wasting its unpredictable subtlety on him. Yet there was a special taste of terror in the very difference of it. Men could never frighten this enemy, as it frightened them.

Earthmen's tactics, worked out from bitter experience against other berserkers, called for a simultaneous attack



by three ships. Foxglove and Murray made two. A third was supposedly on the way, but still about eight hours distant, moving at C-plus velocity, outside of normal space. Until it arrived, Foxglove and Murray must hold the berserker at bay, while it brooded unguessable schemes.

It might attack either ship at any moment, or it might seek to disengage. It might wait hours for them to make the first move—though it would certainly fight if the men attacked it. It had learned the language of Earth's spacemen—it might try to talk with them. But always, ultimately, it would seek to destroy them and every other living thing it met. That was the basic command given it by the ancient warlords.

A thousand years ago, it would easily have swept ships of the type that now opposed it from its path, whether they carried fusion missiles or not. Now, it was in some electrical way conscious of its own weakening by accumulated damage. And perhaps in long centuries of fighting its way across the galaxy it had learned to be wary.

Now, quite suddenly, Del's detectors showed force fields forming in behind his ship. Like the encircling arms of a huge bear they blocked his path away from the enemy. He waited for some deadly blow, with his hand trembling over the red button that would salvo his atomic missiles at the berserker—but if he attacked alone, or even with Foxglove, the infernal machine would parry their missiles, crush their ships, and go on to destroy another helpless planet. Three ships were needed to attack. The red firing button was now only a last desperate resort.

Del was reporting the force fields to Foxglove when he felt the first hint in his mind of another attack.

"Newton!" he called sharply, leaving the radio connection with Foxglove open. They would hear and understand what was going to happen.

The *atyan* bounded instantly from its combat couch to stand before Del as if hypnotized, all attention riveted on the man. Del had sometimes bragged: "Show Newton a drawing of different-colored lights, convince him it represents

a particular control panel, and he'll push buttons or whatever you tell him, until the real panel matches the drawing."

But no *aiyan* had the human ability to learn and to create on an abstract level; which was why Del was now going to put Newton in command of his ship.

He switched off the ship's computers—they were going to be as useless as his own brain under the attack he felt gathering—and said to Newton: "Situation Zombie."

The animal responded instantly as it had been trained, seizing Del's hands with firm insistence and dragging them one at a time down beside the command chair to where the fetters had been installed.

Hard experience had taught men something about the berserkers' mind weapon, although its principles of operation were still unknown. It was slow in its onslaught, and its effects could not be steadily maintained for more than about two hours, after which a berserker was evidently forced to turn it off for an equal time. But while in effect, it robbed any human or electronic brain of the ability to plan or to predict—and left it unconscious of its own incapacity.

It seemed to Del that all this had happened before, maybe more than once. Newton, that funny fellow, had gone too far with his pranks; he had abandoned the little boxes of colored beads that were his favorite toys, and was moving the controls around at the lighted panel. Unwilling to share the fun with Del, he had tied the man to his chair somehow. Such behavior was really intolerable, especially when there was supposed to be a battle in progress. Del tried to pull his hands free, and called to Newton.

Newton whined earnestly, and stayed at the panel.

"Newt, you dog, come lemme loose. I know what I have to say: Four score and seven . . . hey, Newt, where're your toys? Lemme see your pretty beads." There were hundreds of tiny boxes of the varicolored beads, leftover trade goods that Newton loved to sort out and handle. Del peered around the cabin, chuckling a little at his own cleverness. He would get Newton distracted by the beads, and then . . . the vague idea faded into other crackbrained grotesqueries.

Newton whined now and then but stayed at the panel moving controls in the long sequence he had been taught, taking the ship through the feinting, evasive maneuvers that might fool a berserker into thinking it was still competently manned. Newton never put a hand near the big red button. Only if he felt deadly pain himself, or found a dead man in Del's chair, would he reach for that.

"Ah, roger, Murray," said the radio from time to time, as if acknowledging a message. Sometimes Foxglove added a few words or numbers that might have meant something. Del wondered what the talking was about.

At last he understood that Foxglove was trying to help maintain the illusion that there was still a competent brain in charge of Del's ship. The fear reaction came when he began to realize that he had once again lived through the effect of the mind weapon. The brooding berserker, half genius, half idiot, had forbore to press the attack when success would have been certain—perhaps deceived, perhaps following the strategy that avoided predictability at almost any cost.

"Newton." The animal turned, hearing a change in his voice. Now Del could say the words that would tell Newton it was safe to set his master free, a sequence too long for anyone under the mind weapon to recite.

"—shall not perish from the earth," he finished. With a yelp of joy Newton pulled the fetters from Del's hands. Del turned instantly to the radio.

"Effect has evidently been turned off, Foxglove," said Del's voice through the speaker in the cabin of the larger ship.

The Commander let out a sigh. "He's back in control!"

The Second Officer—there was no third—said: "That means we've got some kind of fighting chance, for the next two hours. I say let's attack now!"

The Commander shook his head, slowly but without hesitation "With two ships, we don't have any real chance. Less than four hours until Gizmo gets here. We have to stall until then, if we want to win."

"It'll attack the next time it gets Del's mind scrambled! I don't think we fooled it for a minute . . . we're out of range

of the mind beam here, but Del can't withdraw now. And we can't expect that *aiyan* to fight his ship for him. We'll really have no chance, with Del gone."

The Commander's eyes moved ceaselessly over his panel. "We'll wait. We can't be sure it'll attack the next time it puts the beam on him . . ."

The berserker spoke suddenly, its radioed voice plain in the cabins of both ships "I have a proposition for you, little ship." Its voice had a cracking, adolescent quality, because it strung together words and syllables recorded from the voices of human prisoners of both sexes and different ages. Bits of human emotion, sorted and fixed like butterflies on pins, thought the Commander. There was no reason to think it had kept the prisoners alive after learning the language from them.

"Well?" Del's voice sounded tough and capable by comparison.

"I have invented a game which we will play," it said. "If you play well enough, I will not kill you right away."

"Now I've heard everything," murmured the Second Officer.

After three thoughtful seconds the Commander slammed a fist on the arm of his chair. "It means to test his learning ability, to run a continuous check on his brain while it turns up the power of the mind beam and tries different modulations. If it can make sure the mind beam is working, it'll attack instantly. I'll bet my life on it. That's the game it's playing this time."

"I will think over your proposition," said Del's voice coolly.

The Commander said: "It's in no hurry to start. It won't be able to turn on the mind beam again for almost two hours."

"But we need another two hours beyond that."

Del's voice said: "Describe the game you want to play."

"It is a simplified version of the human game called checkers."

The Commander and the Second looked at each other, neither able to imagine Newton able to play checkers. Nor could they doubt that Newton's failure would kill them within a few hours, and leave another planet open to destruction.

After a minute's silence, Del's voice asked: "What'll we use for a board?"

"We will radio our moves to one another," said the berserker equably. It went on to describe a checkers-like game, played on a smaller board with less than the normal number of pieces. There was nothing very profound about it; but, of course, playing would seem to require a functional brain, human or electronic, able to plan and to predict.

"If I agree to play," said Del slowly, "how'll we decide who gets to move first?"

"He's trying to stall," said the Commander, gnawing a thumbnail. "We won't be able to offer any advice, with that thing listening. Oh, stay sharp, Del boy!"

"To simplify matters," said the berserker, "I will move first in every game."

Del could look forward to another hour free of the mind weapon when he finished rigging the checkerboard. When the pegged pieces were moved, appropriate signals would be radioed to the berserker; lighted squares on the board would show him where its pieces were moved. If it spoke to him while the mind weapon was on, Del's voice would answer from a tape, which he had stocked with vaguely aggressive phrases, such as: "Get on with the game," or "Do you want to give up now?"

He hadn't told the enemy how far along he was with his preparations because he was still busy with something the enemy must not know—the system that was going to enable Newton to play a game of simplified checkers.

Del gave a soundless little laugh as he worked, and glanced over to where Newton was lounging on his couch, clutching toys in his hands as if he drew some comfort from them. This scheme was going to push the *aiyan* near the limit of his ability, but Del saw no reason why it should fail.

Dell had completely analyzed the miniature checker game, and diagrammed every position that Newton could possibly face—playing only even-numbered moves, thank the random berserker for that specification!—on small cards. Del had discarded some lines of play that would arise from some

poor early moves by Newton, further simplifying his job. Now, on a card showing each possible remaining position, Del indicated the best possible move with a drawn-in arrow. Now he could quickly teach Newton to play the game by looking at the appropriate card and making the move shown by the arrow—

"Oh, oh," said Del, as his hands stopped working and he stared into space. Newton whined at the tone of his voice.

Once Del had sat at one board in a simultaneous chess exhibition, one of sixty players opposing the world champion, Blankenship. Del had held his own into the middle game. Then, when the great man paused again opposite his board, Del had shoved a pawn forward, thinking he had reached an unassailable position and could begin a counterattack. Blankenship had moved a rook to an innocent-looking square and strolled on to the next board—and then Del had seen the checkmate coming at him, four moves away but one move too late for him to do anything about it.

The Commander suddenly said a foul phrase in a loud distinct voice. Such conduct on his part was extremely rare, and the Second Officer looked round in surprise. "What?"

"I think we've had it." The Commander paused. "I hoped that Murray could set up some kind of a system over there, so that Newton could play the game—or appear to be playing it. But it won't work. Whatever system Newton plays by rote will always have him making the same move in the same position. It may be a perfect system—but a man doesn't play any game that way, damn it. He makes mistakes, he changes strategy. Even in a game this simple there'll be room for that. Most of all, a man *learns* a game as he plays it. He gets better as he goes along. That's what'll give Newton away, and that's what our bandit wants. It's probably heard about *aiyans*. Now as soon as it can be sure it's facing a dumb animal over there, and not a man or computer. . . ."

After a little while the Second Officer said: "I'm getting signals of their moves. They've begun play. Maybe we should've rigged up a board so we could follow along with the game."

"We better just be ready to go at it when the time comes." The Commander looked hopelessly at his salvo button, and then at the clock that showed two hours must pass before Gizmo could reasonably be hoped for.

Soon the Second Officer said: "That seems to be the end of the first game; Del lost it, if I'm reading their scoreboard signal right." He paused. "Sir, here's that signal we picked up the last time it turned the mind beam on. Del must be starting to get it again."

There was nothing for the Commander to say. The two men waited silently for the enemy's attack, hoping only that they could damage it in the seconds before it would overwhelm them and kill them.

"He's playing the second game," said the Second Officer, puzzled. "And I just heard him say 'Let's get on with it.'"

"His voice could be recorded. He must have made some plan of play for Newton to follow; but it won't fool the berserker for long. It can't."

Time crept unmeasurably past them.

The Second said: "He's lost the first four games. But he's not making the same moves every time. I wish we'd made a board . . ."

"Shut up about the board! We'd be watching it instead of the panel. Now stay alert, Mister."

After what seemed a long time, the Second said: "Well, I'll be!"

"What?"

"Our side got a draw in that game."

"Then the beam can't be on him. Are you sure . . . ?"

"It is! Look, here, the same indication we got last time. It's been on him the better part of an hour now, and getting stronger."

The Commander stared in disbelief; but he knew and trusted his Second's ability. And the panel indications were convincing. He said: "Then someone—or something—with no functioning mind is learning how to play a game, over there. Ha, ha," he added as if trying to remember how to laugh.



The berserker won another game. Another draw. Another win for the enemy. Then three drawn games in a row.

Once the Second Officer heard Del's voice ask coolly: "Do you want to give up now?" On the next move he lost another game. But the following game ended in another draw. Del was plainly taking more time than his opponent to move, but not enough to make the enemy impatient.

It's trying different modulations of the mind beam," said the Second. "And it's got the power turned way up."

"Yeah," said the Commander. Several times he had almost tried to radio Del, to say something that might keep the man's spirits up—and also to relieve his own feverish inactivity, and to try to find out what could possibly be going on. But he could not take the chance. Any interference might upset the miracle.

He could not believe the inexplicable success could last, even when the checker match turned gradually into an endless succession of drawn games between two perfect players. Hours ago the Commander had said good-bye to life and hope, and he still waited for the fatal moment.

And he waited.

"—not perish from the earth!" said Del Murray, and Newton's eager hands flew to loose his right arm from its shackle.

A game, unfinished on the little board before him, had been abandoned seconds earlier. The mind beam had been turned off at the same time, when Gizmo had burst into normal space right in position and only five minutes late; and the berserker had been forced to turn all its energies to meet the immediate all-out attack of Gizmo and Foxglove.

Del saw his computers, recovering from the effect of the beam, lock his aiming screen onto the berserker's scarred and bulging midsection, as he shot his right arm forward, scattering pieces from the game board.

"Checkmate!" he roared out hoarsely, and brought his fist down on the big red button.





"I'm glad it didn't want to play chess," Del said later, talking to the Commander in Foxglove's cabin. "I could never have rigged that up."

The ports were cleared now, and the men could look out at the cloud of expanding gas, still faintly luminous, that had been a berserker; metal fire-purged of the legacy of ancient evil.

But the Commander was watching Del. "You got Newt to play by following diagrams, I see that. But how could he *learn* the game?"

Del grinned. "He couldn't, but his toys could. Now wait before you slug me." He called the *atyan* to him and took a small box from the animal's hand. The box rattled faintly as he held it up. On the cover was pasted a diagram of one possible position in the simplified checker game, with a different-colored arrow indicating each possible move of Del's pieces.

"It took a couple of hundred of these boxes," said Del. "This one was in the group that Newt examined for the fourth move. When he found a box with a diagram matching the position on the board, he picked the box up, pulled out one of these beads from inside, without looking—that was the hardest part to teach him in a hurry, by the way," said Del, demonstrating. "Ah, this one's blue. That means, make the move indicated on the cover by a blue arrow. Now the orange arrow leads to a poor position, see?" Del shook all the beads out of the box into his hand. "No orange beads left; there were six of each color when we started. But every time Newton drew a bead, he had orders to leave it out of the box until the game was over. Then, if the scoreboard indicated a loss for our side, he went back and threw away all the beads he had used. All the bad moves were gradually eliminated. In a few hours, Newt and his boxes learned to play the game perfectly."

"Well," said the Commander. He thought for a moment, then reached down to scratch Newton behind the ears. "I never would have come up with that idea."

"I should have thought of it sooner. The basic idea's a couple of centuries old. And computers are supposed to be my business."

"This could be a big thing," said the Commander. "I mean your basic idea might be useful to any task force that has to face a berserker's mind beam."

"Yeah." Del grew reflective. "Also . . ."

"What?"

"I was thinking of a guy I met once. Named Blankenship. I wonder if I could rig something up. . . ."

*Yes, I, Third Historian, have touched living minds, Earth minds, so deadly cool that for a while they could see war as a game, The first decades of the berserker war they were forced to see as a game being lost for life.*

*Nearly all the terrors of the slaughters in your past were present in this vaster war, all magnified in time and space. It was even less a game than any war has ever been.*

*As the grim length of the berserker war dragged on, even Earthmen discovered in it certain horrors that they had never known before.*

*Behold. . . .*

## GOODLIFE

"It's only a machine, Hemphill," said the dying man in a small voice.

Hemphill, drifting weightless in near-darkness, heard him with only faint contempt and pity. Let the wretch go out timidly, forgiving the universe everything, if he found the going-out easier that way!

Hemphill kept on staring out through the port, at the dark crenellated shape that blotted out so many of the stars.

There was probably just this one compartment of the passenger ship left livable, with three people in it, and the air whining out in steady leaks that would soon exhaust the emergency tanks. The ship was a wreck, torn and beaten, yet Hemphill's view of the enemy was steady. It must be a force of the enemy's that kept the wreck from spinning.

Now the young woman, another passenger, came drifting across the compartment to touch Hemphill on the arm. He thought her name was Maria something.

"Listen," she began "Do you think we might—"

In her voice there was no despair, but the tone of planning; and so Hemphill had begun to listen to her. But she was interrupted.

The very walls of the cabin reverberated, driven like speaker diaphragms through the power of the enemy force field that still gripped the butchered hull. The quavering voice of the berserker machine came in:

"You who can still hear me, live on. I plan to spare you. I am sending a boat to save you from death."

Hemphill was sick with frustrated rage. He had never heard a berserker's voice in reality before, but still it was familiar as an old nightmare. He could feel the woman's hand pull away from his arm, and then he saw that in his rage he had raised both his hands to be claws, then fists that almost smashed themselves against the port. The damned thing wanted to take him inside it! Of all people in space it wanted to make him prisoner!

A plan rose instantly in his mind and flowed smoothly into action; he spun away from the port. There were warheads, for small defensive missiles, here in this compartment. He remembered seeing them.

The other surviving man, a ship's officer, dying slowly, bleeding through his uniform tatters, saw what Hemphill was doing in the wreckage, and drifted in front of him interferingly.

"You can't do that . . . you'll only destroy the boat it sends . . . if it lets you do that much . . . there may be other people . . . still alive here . . ."

The man's face had been upside-down before Hemphill as the two of them drifted. As their movement let them see each other in normal position, the wounded man stopped talking, gave up and rotated himself away, drifting inertly as if already dead.

Hemphill could not hope to manage a whole warhead, but he could extract the chemical-explosive detonator, of a size to carry under one arm. All passengers had put on emergency spacesuits when the unequal battle had begun; now he found himself an extra air tank and some officer's laser pistol, which he stuck in a loop of his suit's belt.

The girl approached him again. He watched her warily.

"Do it," she said with quiet conviction, while the three of them spun slowly in the near-darkness, and the air leaks

whined. "Do it. The loss of a boat will weaken it, a little, for the next fight. And we here have no chance anyway."

"Yes." He nodded approvingly. This girl understood what was important: to hurt a berserker, to smash, burn, destroy, to kill it finally. Nothing else mattered very much.

He pointed to the wounded mate, and whispered: "Don't let him give me away."

She nodded silently. It might hear them talking. If it could speak through these walls, it might be listening.

"A boat's coming," said the wounded man, in a calm and distant voice.

"Goodlife!" called the machine-voice, cracking between syllables as always.

"Here!" He woke up with a start, and got quickly to his feet. He had been dozing almost under the dripping end of a drinking-water pipe.

"Goodlife!" There were no speakers or scanners in this little compartment; the call came from some distance away.

"Here!" He ran toward the call, his feet shuffling and thumping on metal. He had dozed off, being tired. Even though the battle had been a little one, there had been extra tasks for him, servicing and directing the commensal machines that roamed the endless ducts and corridors repairing damage. It was small help he could give, he knew.

Now his head and neck bore sore spots from the helmet he had had to wear; and his body was chafed in places from the unaccustomed covering he had to put on it when a battle came. This time, happily, there had been no battle damage at all.

He came to the flat glass eye of a scanner, and shuffled to a stop, waiting.

"Goodlife, the perverted machine has been destroyed, and the few badlives left are helpless."

"Yes!" He jiggled his body up and down in happiness.

"I remind you, life is evil," said the voice of the machine.

"Life is evil, I am Goodlife!" he said quickly, ceasing his jiggling. He did not think punishment impended, but he wanted to be sure.

"Yes. Like your parents before you, you have been useful.

Now I plan to bring other humans inside myself, to study them closely. Your next use will be with them, in my experiments. I remind you, they are badlife. We must be careful."

"Badlife." He knew they were creatures shaped like himself, existing in the world beyond the machine. They caused the shudders and shocks and damage that made up a battle. "Badlife—here." It was a chilling thought. He raised his own hands and looked at them, then turned his attention up and down the passage in which he stood, trying to visualize the badlife become real before him.

"Go now to the medical room," said the machine. "You must be immunized against disease before you approach the badlife."

Hemphill made his way from one ruined compartment to another, until he found a gash in the outer hull that was plugged nearly shut. While he wrenched at the obstructing material he heard the clanging arrival of the berserker's boat, come for prisoners. He pulled harder, the obstruction gave way, and he was blown out into space.

Around the wreck were hundreds of pieces of flotsam, held near by tenuous magnetism or perhaps by the berserker's force fields. Hemphill found that his suit worked well enough. With its tiny jet he moved around the shattered hull of the passenger ship to where the berserker's boat had come to rest.

The dark blot of the berserker machine came into view against the starfield of deep space, battlemented like a fortified city of old, and larger than any such city had ever been. He could see that the berserker's boat had somehow found the right compartment and clamped itself to the wrecked hull. It would be gathering in Maria and the wounded man. Fingers on the plunger that would set off his bomb, Hemphill drifted closer.

On the brink of death, it annoyed him that he would never know with certainty that the boat was destroyed. And it was such a trifling blow to strike, such a small revenge.

Still drifting closer, holding the plunger ready, he saw the puff of decompressed air moisture as the boat disconnected

itself from the hull. The invisible force fields of the berserker surged, tugging at the boat, at Hemphill, at bits of wreckage within yards of the boat.

He managed to clamp himself to the boat before it was pulled away from him. He thought he had an hour's air in his suit tank, more than he would need.

As the berserker pulled him toward itself, Hemphill's mind hung over the brink of death, Hemphill's fingers gripped the plunger of his bomb. In his mind, his night-colored enemy was death. The black, scarred surface of it hurtled closer in the unreal starlight, becoming a planet toward which the boat fell.

Hemphill still clung to the boat when it was pulled into an opening that could have accommodated many ships. The size and power of the berserker were all around him, enough to overwhelm hate and courage alike.

His little bomb was a pointless joke. When the boat touched at a dark internal dock, Hemphill leaped away from it and scrambled to find a hiding place.

As he cowered on a shadowed ledge of metal, his hand wanted to fire the bomb, simply to bring death and escape. He forced his hand to be still. He forced himself to watch while the two human prisoners were sucked from the boat through a pulsing transparent tube that passed out of sight through a bulkhead. Not knowing what he meant to accomplish, he pushed himself in the direction of the tube. He glided through the dark enormous cavern almost weightlessly; the berserker's mass was enough to give it a small natural gravity of its own.

Within ten minutes he came upon an unmistakable airlock. It seemed to have been cut with a surrounding section of hull from some Earth warship and set into the bulkhead.

Inside an airlock would be as good a place for a bomb as he was likely to find. He got the outer door open and went in, apparently without triggering any alarms. If he destroyed himself here, he would deprive the berserker of—what? Why should it need an airlock at all?

Not for prisoners, thought Hemphill, if it sucks them in

through a tube. Hardly an entrance built for enemies. He tested the air in the lock, and opened his helmet. For air-breathing friends, the size of men? That was a contradiction. Everything that lived and breathed must be a berserker's enemy, except the unknown beings who had built it. Or so man had thought, until now.

The inner door of the lock opened at Hemphill's push, and artificial gravity came on. He walked through into a narrow and badly lighted passage, his fingers ready on the plunger of his bomb.

"Go in, Goodlife," said the machine. "Look closely at each of them."

Goodlife made an uncertain sound in his throat, like a servomotor starting and stopping. He was gripped by a feeling that resembled hunger or the fear of punishment—because he was going to see life-forms directly now, not as old images on a stage. Knowing the reason for the unpleasant feeling did not help. He stood hesitating outside the door of the room where the badlife was being kept. He had put on his suit again, as the machine had ordered. The suit would protect him if the badlife tried to damage him.

"Go in," the machine repeated.

"Maybe I'd better not," Goodlife said in misery, remembering to speak loudly and clearly. Punishment was always less likely when he did.

"Punish, punish," said the voice of the machine.

When it said the word twice, punishment was very near. As if already feeling in his bones the wrenching pain—that-left-no-damage, he opened the door quickly and stepped in.

He lay on the floor, bloody and damaged, in strange ragged suiting. And at the same time he was still in the doorway. His own shape was on the floor, the same human form he knew, but now seen entirely from outside. More than an image, far more, it was himself now bilocated. There, here, himself, not-himself—

Goodlife fell back against the door. He raised his arm and tried to bite it, forgetting his suit. He pounded his suited



arms violently together, until there was bruised pain enough to nail him to himself where he stood.

Slowly, the terror subsided. Gradually his intellect could explain it and master it. This is me, here, here in the doorway. That, *there*, on the floor—that is another life. Another body, corroded like me with vitality. Only far worse than I. That one on the floor is badlife.

Maria Juarez had prayed continuously for a long time, her eyes closed. Cold impersonal grippers had moved her this way and that. Her weight had come back, and there was air to breathe when her helmet and her suit had been carefully removed. She opened her eyes and struggled when the grippers began to remove her inner coverall; she saw that she was in a low-ceilinged room, surrounded by man-sized machines of various shapes. When she struggled they gave up undressing her, chained her to the wall by one ankle, and glided away. The dying mate had been dropped at the other end of the room, as if not worth the trouble of further handling.

The man with the cold dead eyes, Hemphill, had tried to make a bomb, and failed. Now there would probably be no quick end to life—

When she heard the door open she opened her eyes again, to watch without comprehension, while the bearded young man in the ancient spacesuit went through senseless contortions in the doorway, and finally came forward to stand staring down at the dying man on the floor. The visitor's fingers moved with speed and precision when he raised his hands to the fasteners of his helmet; but the helmet's removal revealed ragged hair and beard framing a slack idiot's face.

He set the helmet down, then scratched and rubbed his shaggy head, never taking his eyes from the man on the floor. He had not yet looked once at Maria, and she could look nowhere but at him. She had never seen a face so blank on a living person. This was what happened to a berserker's prisoner!

—And yet—and yet. Maria had seen brainwashed men

before, ex-criminals on her own planet. She felt this man was something more—or something less.

The bearded man knelt beside the mate, with an air of hesitation, and reached out to touch him. The dying man stirred feebly, and looked up without comprehension. The floor under him was wet with blood.

The stranger took the mate's limp arm and bent it back and forth, as if interested in the articulation of the human elbow. The mate groaned, and struggled feebly. The stranger suddenly shot out his metal-gauntleted hands and seized the dying man by the throat.

Maria could not move, or turn her eyes away, though the whole room seemed to spin slowly, then faster and faster, around the focus of those armored hands.

The bearded man released his grip and stood erect, still watching the body at his feet.

"Turned off," he said distinctly.

Perhaps she moved. For whatever reason, the bearded man raised his sleepwalker's face to look at her. He did not meet her eyes, or avoid them. His eye movements were quick and alert, but the muscles of his face just hung there under the skin. He came toward her.

Why, he's young, she thought, hardly more than a boy. She backed against the wall and waited, standing. Women on her planet were not brought up to faint. Somehow, the closer he came, the less she feared him. But if he had smiled once, she would have screamed, on and on.

He stood before her, and reached out one hand to touch her face, her hair, her body. She stood still; she felt no lust in him, no meanness and no kindness. It was as if he radiated an emptiness.

"Not images," said the young man as if to himself. Then another word, sounding like: "Badlife."

Almost Maria dared to speak to him. The strangled man lay on the deck a few yards away.

The young man turned and shuffled deliberately away from her. She had never seen anyone who walked just like him. He picked up his helmet and went out the door without looking back.

A pipe streamed water into one corner of her little space, where it gurgled away through a hole in the floor. The gravity seemed to be set at about Earth level. Maria sat leaning against the wall, praying and listening to her heart pound. It almost stopped when the door opened again, very slightly at first, then enough for a large cake of pink and green stuff that seemed to be food. The machine walked around the dead man on its way out.

She had eaten a little of the cake when the door opened again, very slightly at first, then enough for a man to step quickly in. It was Hemphill, the cold-eyed one from the ship, leaning a bit to one side as if dragged down by the weight of the little bomb he carried under his arm. After a quick look around he shut the door behind him and crossed the room to her, hardly glancing down as he stepped over the body of the mate.

"How many of them are there?" Hemphill whispered, bending over her. She had remained seated on the floor, too surprised to move or speak.

"Who?" she finally managed.

He jerked his head toward the door impatiently. "Them. The ones who live here inside *it*, and serve it. I saw one of them coming out of this room, when I was out in the passage. It's fixed up a lot of living space for them."

"I've only seen one man."

His eyes glinted at that. He showed Maria how the bomb could be made to explode, and gave it to her to hold, while he began to burn through her chain with his laser pistol. They exchanged information on what had happened. She did not think she would ever be able to set off the bomb and kill herself, but she did not tell that to Hemphill.

Just as they stepped out of the prison room, Hemphill had a bad moment when three machines rolled toward them from around a corner. But the things ignored the two frozen humans and rolled silently past them, going on out of sight.

He turned to Maria with an exultant whisper: "The damned thing is three-quarters blind, here inside its own skin!"

She only waited, watching him with frightened eyes.

With the beginning of hope, a vague plan was forming

in his mind. He led her along the passage, saying: "Now we'll see about that man. Or men." Was it too good to be true, that there was only one of them?

The corridors were badly lit, and full of uneven jogs and steps. Carelessly built concessions to life, he thought. He moved in the direction he had seen the man take.

After a few minutes of cautious advance, Hemphill heard the shuffling footsteps of one person ahead, coming nearer. He handed the bomb to Maria again, and pressed her behind him. They waited in a dark niche.

The footsteps approached with careless speed, a vague shadow bobbing ahead of them. The shaggy head swung so abruptly into view that Hemphill's metal-fisted swing was almost too late. The blow only grazed the back of the skull; the man yelped and staggered off balance and fell down. He was wearing an old-model spacesuit, with no helmet.

Hemphill crouched over him, shoving the laser pistol almost into his face. "Make a sound and I'll kill you. Where are the others?"

The face looking up at Hemphill was stunned—worse than stunned. It seemed more dead than alive, though the eyes moved alertly enough from Hemphill to Maria and back, disregarding the gun.

"He's the same one," Maria whispered.

"Where are your friends?" Hemphill demanded.

The man felt the back of his head, where he had been hit. "Damage," he said tonelessly, as if to himself. Then he reached up for the pistol, so calmly and steadily that he was nearly able to touch it.

Hemphill jumped back a step, and barely kept himself from firing. "Sit down or I'll kill you! Now tell me who you are, and how many others are here."

The man sat there calmly, with his putty face showing nothing. He said: "Your speech is steady in tone from word to word, not like that of the machine. You hold a killing tool there. Give it to me and I will destroy you and—that one."

It seemed this man was only a brainwashed ruin, instead of an unspeakable traitor. Now what use could be made of

him? Hemphill moved back another step, slowly lowering the pistol.

Maria spoke to their prisoner. "Where are you from? What planet?"

A blank stare.

"Your home," she persisted. "Where were you born?"

"From the birth tank." Sometimes the tones of the man's voice shifted like the berserker's, as if he was a fearful comedian mocking it.

Hemphill gave an unstable laugh. "From a birth tank, of course. What else? Now for the last time, where are the others?"

"I do not understand."

Hemphill sighed. "All right. Where's this birth tank?" He had to start with something.

The place looked like the storeroom of a biology lab, badly lighted, piled and crowded with equipment, laced with pipes and conduits. Probably no living technician had ever worked here.

"You were *born* here?" Hemphill demanded.

"Yes."

"He's crazy."

"No. Wait." Maria's voice sank to an even lower whisper, as if she was frightened anew. She took the hand of the slack-faced man. He bent his head to stare at their touching hands.

"Do you have a name?" she asked, as if speaking to a lost child.

"I am Goodlife."

"I think it's hopeless," put in Hemphill.

The girl ignored him. "Goodlife? My name is Maria. And this is Hemphill."

No reaction.

"Who were your parents? Father? Mother?"

"They were goodlife too. They helped the machine. There was a battle, and badlife killed them. But they had given cells of their bodies to the machine, and from those cells it made me. Now I am the only goodlife."

"Great God," whispered Hemphill.

Silent, awed attention seemed to move Goodlife when threats and pleas had not. His face twisted in awkward grimaces; he turned to stare into a corner. Then, for almost the first time, he volunteered a communication: "I know they were like you. A man and a woman."

Hemphill wanted to sweep every cubic foot of the miles of mechanism with his hatred; he looked around at every side and angle of the room.

"The damned things," he said, his voice cracking like the berserker's. "What they've done to me. To you. To everyone."

Plans seemed to come to him when the strain of hating was greatest. He moved quickly to put a hand on Goodlife's shoulder. "Listen to me. Do you know what a radioactive isotope is?"

"Yes."

"There will be a place, somewhere, where the—the machine decided what it will do next—what strategy to follow. A place holding a block of some isotope with a long half-life. Probably near the center of the machine. Do you know of such a place?"

"Yes, I know where the strategic housing is."

"Strategic housing." Hope mounted to a strong new level. "Is there a way for us to reach it?"

"You are badlife!" He knocked Hemphill's hand away, awkwardly. "You want to damage the machine, and you have damaged me. You are to be destroyed."

Maria took over, trying to soothe. "Goodlife—we are not bad, this man and I. Those who built this machine are the badlife. Someone built it, you know, some living people built it, long ago. They were the real badlife."

"Badlife." He might be agreeing with Maria, or accusing her.

"Don't you want to live, Goodlife? Hemphill and I want to live. We want to help you, because you're alive, like us. Won't you help us now?"

Goodlife was silent for a few moments, contemplating a bulkhead. Then he turned back to face them and said: "All

life thinks it is, but it is not. There are only particles, energy and space, and the laws of the machines."

Maria kept at him. "Goodlife, listen to me. A wise man once said: 'I think, therefore I am.' "

"A wise man?" he questioned, in his cracking voice. Then he sat down on the deck, hugging his knees and rocking back and forth. He might be thinking.

Drawing Maria aside, Hemphill said: "You know, we have a faint hope now. There's plenty of air in here, there's water and food. There are warships following this thing, there must be. If we can find a way to disable it, we can wait and maybe be picked up in a month or two. Or less."

She watched him silently for a moment.

"Hemphill—what have these machines done to you?"

"My wife—my children." He thought his voice sounded almost indifferent. "They were on Pascalo, three years ago; there was nothing left. This machine, or one like it."

She took his hand, as she had taken Goodlife's. They both looked down at the joined fingers, then raised their eyes, smiling briefly together at the similarity of action.

"Where's the bomb?" Hemphill thought aloud suddenly, spinning around.

It lay in a dim corner. He grabbed it up again, and strode over to where Goodlife sat rocking back and forth.

"Well, are you with us? Us, or the ones who built the machine?"

Goodlife stood up, and looked closely at Hemphill. "They were inspired by the laws of physics, which controlled their brains, to build the machine. Now the machine has preserved them as images. It has preserved my father and mother, and it will preserve me."

"What images do you mean? Where are they?"

"The images in the theater."

It seemed best to accustom this creature to cooperation, to win his confidence and at the same time learn about him and the machine. Then, on to the strategic housing. Hemphill made his voice friendly: "Will you guide us to the theater, Goodlife?"



It was by far the largest air-filled room they had yet found, and held a hundred seats of a shape usable by Earth-descended men, though Hemphill knew it had been built for someone else. The theater was elaborately furnished and well-lighted. When the door closed behind them, the ranked images of intelligent creatures brightened into life upon the stage.

The stage became a window into a vast hall. One person stood forward at an imaged lectern; he was a slender, fine-boned being, topologically like a man except for the single eye that stretched across his face, with a bright bulging pupil that slid to and fro like mercury.

The speaker's voice was a high-pitched torrent of clicks and whines. Most of those in the ranks behind him wore a kind of uniform. When he paused, they whined in unison.

"What does he say?" Maria whispered.

Goodlife looked at her. "The machine has told me—it has lost the meaning of the sounds."

"Then may we see the images of your parents, Goodlife?"

Hemphill, watching the stage, started to object; but the girl was right. The sight of this fellow's parents might be more immediately helpful.

Goodlife found a control somewhere.

Hemphill was surprised momentarily that the parents appeared only in flat projected pictures. First the man was there, against a plain background, blue eyes and neat short beard, nodding his head with a pleasant expression on his face. He wore the lining coverall of a spacesuit.

Then the woman, holding some kind of cloth before her for covering, and looking straight into the camera. She had a broad face and red braided hair. There was hardly time to see anything more before the alien orator was back whining faster than ever.

Hemphill turned to ask: "Is that all? All you know of your parents?"

"Yes. The badlife killed them. Now they are images, they no longer think they exist."

Maria thought the creature in the projection was assuming a more didactic tone. Three-dimensional charts of stars and



planets appeared near him, one after another, and he gestured at them as he spoke. He had vast numbers of stars and planets on his charts to boast about; she could tell somehow that he was boasting.

Hemphill was moving toward the stage a step at a time, more and more absorbed. Maria did not like the way the light of the images reflected on his face.

Goodlife, too, watched the stage pageant which perhaps he had seen a thousand times before. Maria could not tell what thoughts might be passing behind his meaningless face which had never had another human face to imitate. On impulse she took his arm again.

"Goodlife, Hemphill and I are alive, like you. Will you help us now, to stay alive? Then in the future we will always help you." She had a sudden mental picture of Goodlife rescued, taken to a planet, cowering among the staring badlife.

"Good. Bad." His hand reached to take hold of hers; he had removed his suit gauntlets. He swayed back and forth as if she attracted and repelled him at the same time. She wanted to scream and wail for him, to tear apart with her fingers the mindlessly proceeding metal that had made him what he was.

"We've got them!" It was Hemphill, coming back from the stage, where the recorded tirade went on unrelentingly. He was exultant. "Don't you see? He's showing what must be a complete catalogue, of every star and rock they own. It's a victory speech. But when we study those charts we can find them, we can track them down and *reach* them!"

"Hemphill." She wanted to calm him back to concentration on immediate problems. "How old are those images up there? What part of the galaxy were they made in? Or do they even come from some other galaxy? Will we ever be able to tell?"

Hemphill lost some of his enthusiasm. "Anyway, it's a chance to track them down; it's information we've got to save." He pointed at Goodlife. "He's got to take me to what he calls the strategic housing; then we can sit and wait for the warships, or maybe get off this damned thing in a boat."

She stroked Goodlife's hand, soothing a baby. "Yes, but he's confused. How could he be anything else?"

"Of course." Hemphill paused to consider, "You can handle him much better than I."

She didn't answer.

Hemphill went on: "Now you're a woman, and he appears to be a physically healthy young male. Calm him down if you like, but somehow you've *got* to persuade him to help me. Everything depends on it." He had turned toward the stage again, unable to take more than half his mind from the star charts. "Go for a little walk and talk with him; don't get far away."

And what else was there to do? She led Goodlife from the theater while the dead man on the stage clicked and shouted, cataloguing his thousand suns.

Too much had happened, was still happening, and all at once he could no longer stand to be near the badlife. Goodlife found himself pulling away from the female, running, flying down the passages, toward the place where he had fled when he was small and strange fears had come from nowhere. It was the room where the machine always saw and heard him, and was ready to talk to him.

He stood before the attention of the machine, in the chamber-that-has-shrunk. He thought of the place so, because he could remember it clearly as a larger room, where the scanners and speakers of the machine towered above his head. He knew the real change had been his own physical growth; still, this compartment was set apart in a special association with food and sleep and protective warmth.

"I have listened to the badlife, and shown them things," he confessed, fearing punishment.

"I know that, Goodlife, for I have watched. These things have become a part of my experiment."

What joyous relief! The machine said nothing of punishment, though it must know that the words and actions of the badlife had shaken and confused his own ideas. He had even imagined himself showing the man

Hemphill the strategic housing, and so putting an end to all punishment, for always.

"They wanted me—they wanted me to—"

"I have watched. I have listened. The man is tough and evil, powerfully motivated to fight against me. I must understand his kind, for they cause much damage. He must be tested to his limits, to destruction. He believes himself free inside me, and so he will not think as a prisoner. This is important."

Goodlife pulled off his irritating suit; the machine would not let the badlife in here. He sank down to the floor and wrapped his arms around the base of the scanner-speaker console. Once long ago the machine had given him a thing that was soft and warm when he held it . . . he closed his eyes.

"What are my orders?" he asked sleepily. Here in this chamber all was steady and comforting, as always.

"First, do not tell the badlife of these orders. Then, do what the man Hemphill tells you to do. No harm will come to me."

"He has a bomb."

"I watched his approach, and I disabled his bomb, even before he entered to attack me. His pistol can do me no serious harm. Do you think one badlife can conquer me?"

"No." Smiling, reassured, he curled into a more comfortable position. "Tell me about my parents." He had heard the story a thousand times, but it was always good.

"Your parents were good, they gave themselves to me. Then, during a great battle, the badlife killed them. The badlife hated them, as they hate you. When they say they like you, they lie, with the evil untruth of all badlife.

"But your parents were good, and each gave me a part of their bodies, and from the parts I made you. Your parents were destroyed completely by the badlife, or I would have saved even their nonfunctioning bodies for you to see. That would have been good."

"Yes."

"The two badlife have searched for you. Now they are resting. Sleep, Goodlife."

He slept.

Awakening, he remembered a dream in which two people had beckoned him to join them on the stage of the theater. He knew they were his mother and father, though they looked like the two badlife. The dream faded before his waking mind could grasp it firmly.

He ate and drank, while the machine talked to him.

"If the man Hemphill wants to be guided to the strategic housing, take him there. I will capture him there, and let him escape later to try again. When finally he can be provoked to fight no more, I will destroy him. But I mean to preserve the life of the female. You and she will produce more goodlife for me."

"Yes!" It was immediately clear what a good thing that would be. They would give parts of their bodies to the machine, so new goodlife bodies could be built, cell by cell. And the man Hemphill who punished and damaged with his fast-swinging arm, would be utterly destroyed.

When he rejoined the badlife, the man Hemphill barked questions and threatened punishment until Goodlife was confused and a little frightened. But Goodlife agreed to help, and was careful to reveal nothing of what the machine planned. Maria was more pleasant than ever. He touched her whenever he could.

Hemphill demanded to be taken to the strategic housing. Goodlife agreed at once; he had been there many times. There was a high-speed elevator that made the fifty mile journey easy.

Hemphill paused, before saying: "You're too damn willing, all of a sudden." Turning his face to Maria. "I don't trust him."

This badlife thought he was being false! Goodlife was angered; the machine never lied, and no properly obedient goodlife could lie.

Hemphill paced around, and finally demanded: "Is there any route that approaches this strategic housing in such a way that the machine cannot possibly watch us?"

Goodlife thought. "I believe there is one such way. We will have to carry extra tanks of air, and travel many miles

through vacuum." The machine had said to help Hemphill, and help he would. He hoped he could watch when the male badlife was finally destroyed.

There had been a battle, perhaps fought while men on Earth were hunting the mammoth with spears. The berserker had met some terrible opponent, and had taken a terrible lance-thrust of a wound. A cavity two miles wide at the widest, and fifty miles deep, had been driven in by a sequence of shaped atomic charges, through level after level of machinery, deck after deck of armor, and had been stopped only by the last inner defenses of the buried unliving heart. The berserker had survived, and crushed its enemy, and soon afterward its repair machines had sealed over the outer opening of the wound, using extra thicknesses of armor. It had meant to gradually rebuild the whole destruction; but there was so much life in the galaxy, and so much of it was stubborn and clever. Somehow battle damage accumulated faster than it could be repaired. The huge hole was used as a conveyor path, and never much worked on.

When Hemphill saw the blasted cavity—what little of it his tiny suit lamp could show—he felt a shrinking fear that was greater than any in his memory. He stopped on the edge of the void, drifting there with his arm instinctively around Maria. She had put on a suit and accompanied him, without being asked, without protest or eagerness.

They had already come an hour's journey from the airlock, through weightless vacuum inside the great machine. Goodlife had led the way through section after section, with every show of cooperation. Hemphill had the pistol ready, and the bomb, and two hundred feet of cord tied around his left arm.

But when Hemphill recognized the once-molten edge of the berserker's great scar for what it was, his delicate new hope of survival left him. This, the damned thing had survived. This, perhaps, had hardly weakened it. Again, the bomb under his arm was only a pathetic toy.

Goodlife drifted up to them. Hemphill had already taught him to touch helmets for speech in vacuum.

"This great damage is the one path we can take to reach the strategic housing without passing scanners or service machines. I will teach you to ride the conveyor. It will carry us most of the way."

The conveyor was a thing of force fields and huge rushing containers, hundreds of yards out in the enormous wound and running lengthwise through it. When the conveyor's force fields caught the people up, their weightlessness felt more than ever like falling, with occasional vast shapes, corpuscles of the berserker's bloodstream, flickering past in the near-darkness to show their speed of movement.

Hemphill flew beside Maria, holding her hand. Her face was hard to see, inside her helmet.

This conveyor was yet another mad new world, a fairy tale of monsters and flying and falling. Hemphill fell past his fear into a new determination. I can do it, he thought. The thing is blind and helpless here. I will do it, and I will survive if I can.

Goodlife led them from the slowing conveyor, to drift into a chamber hollowed in the inner armor by the final explosion at the end of the ancient lance-thrust. The chamber was an empty sphere a hundred feet across, from which cracks radiated out into the solid armor. On the surface nearest the center of the berserker, one fissure was as wide as a door, where the last energy of the enemy's blow had driven ahead.

Goodlife touched helmets with Hemphill, and said: "I have seen the other end of this crack, from inside, at the strategic housing. It is only a few yards from here."

Hemphill hesitated for only a moment, wondering whether to send Goodlife through the twisting passage first. But if this was some incredibly complex trap, the trigger of it might be anywhere.

He touched his helmet to Maria's. "Stay behind him. Follow him through and keep an eye on him." Then Hemphill led the way.

The fissure narrowed as he followed it, but at its end it was still wide enough for him to force himself through.

He had reached another vast hollow sphere, the inner temple. In the center was a complexity the size of a small

house, shock-mounted on a web of girders that ran from it in every direction. This could be nothing but the strategic housing. There was a glow from it like flickering moonlight; force field switches responding to the random atomic turmoil within, somehow choosing what human shipping lane or colony would be next attacked, and how.

Hemphill felt a pressure rising in his mind and soul, toward a climax of triumphal hate. He drifted forward, cradling his bomb tenderly, starting to unwind the cord wrapped around his arm. He tied the free end delicately to the plunger of the bomb, as he approached the central complex.

I mean to live, he thought, to watch the damned thing die. I will tape the bomb against the central block, that so-innocent looking slab in there, and I will brace myself around two hundred feet of these heavy metal corners, and pull the cord.

Goodlife stood braced in the perfect place from which to see the heart of the machine, watching the man Hemphill string his cord. Goodlife felt a certain satisfaction that his prediction had been right, that the strategic housing was approachable by this one narrow path of the great damage. They would not have to go back that way. When the badlife had been captured, all of them could ride up in the air-filled elevator Goodlife used when he came here for maintenance practice.

Hemphill had finished stringing his cord. Now he waved his arm at Goodlife and Maria, who clung to the same girder, watching. Now Hemphill pulled on the cord. Of course, nothing happened. The machine had said the bomb was disabled, and the machine would make very certain in such a matter.

Maria pushed away from beside Goodlife, and drifted in toward Hemphill.

Hemphill tugged again and again on his cord. Goodlife sighed impatiently, and moved. There was a great cold in the girders here; he could begin to feel it now through the fingers and toes of his suit.

At last, when Hemphill started back to see what was wrong

with his device, the service machines came from where they had been hiding, to seize him. He tried to draw his pistol, but their grippers moved far too quickly.

It was hardly a struggle that Goodlife saw, but he watched with interest. Hemphill's figure had gone rigid in the suit, obviously straining every muscle to the limit. Why should the badlife try to struggle against steel and atomic power? The machines bore the man effortlessly away, toward the elevator shaft. Goodlife felt an uneasiness.

Maria was drifting, her face turned back toward Goodlife. He wanted to go to her and touch her again, but suddenly he was a little afraid, as before when he had run from her. One of the service machines came back from the elevator to grip her and carry her away.

She kept her face turned toward Goodlife. He turned from her, a feeling like punishment in the core of his being.

In the great cold silence, the flickering light from the strategic housing bathed everything. In the center, a chaotic block of atoms. Elsewhere, engines, relays, sensing units. Where was it, really, the mighty machine that spoke to him? Everywhere, and nowhere. Would these new feelings, brought by the badlife, ever leave him? He tried to understand himself, and could not begin.

Light flickered on a round shape a few yards away among the girders, a shape that offended Goodlife's sense of the proper and necessary in machinery. Looking closer, he saw it was a space helmet.

The motionless figure was wedged only lightly in an angle between frigid metal beams, but there was no force in here to move it.

He could hear the suit creak, stiff with great cold, when he grabbed it and turned it. Unseeing blue eyes looked out at Goodlife through the faceplate. The man's face wore a neat short beard.

"Ahhh, yes," sighed Goodlife inside his own helmet. A thousand times he had seen the image of this face.

His father had been carrying something, heavy, strapped carefully to his ancient suit. His father had carried it this far, and here the old suit had wheezed and failed.



His father, too, had followed the logical narrow path of the great damage, to reach the strategic housing without being seen. His father had choked and died and frozen here, carrying toward the strategic housing what could only be a bomb.

Goodlife heard his own voice keening, without words, and he could not see plainly for the tears floating in his helmet. His fingers felt numbered with cold as he unstrapped the bomb and lifted it from his father. . . .

Hemphill was too exhausted to do more than gasp as the service machine carried him out of the elevator and along the air-filled corridor toward the prison room. When the machine went dead and dropped him, he had to lie still for long seconds before he could attack it again. It had hidden his pistol somewhere, so he began to beat on the robotlike thing with his armored fists, while it stood unresisting. Soon it toppled over. Hemphill sat on it and beat it some more, cursing it with sobbing breaths.

It was nearly a minute later when the tremor of the explosion, racing from the compounded chaos of the berserker's torn-out heart, racing through metal beams and decks, reached the corridor, where it was far too faint for anyone to feel.

Maria, completely weary, sat where her metal captor had dropped her, watching Hemphill, loving him in a way, and pitying him.

He stopped his pointless pounding of the machine under him, and said hoarsely: "It's a trick, another damned trick."

The tremor had been too faint for anyone to feel, here, but Maria shook her head. "No, I don't think so." She saw that power still seemed to be on the elevator, and she watched the door of it.

Hemphill went away to search among the now-purposeless machines for weapons and food. He came back, raging again. What was probably an automatic destructor charge had wrecked the theater and the star-charts. They might as well see about getting away in the boat.

She ignored him, still watching an elevator door which never opened. Soon she began quietly to cry.



*The terror of the berserkers spread ahead of them across the galaxy. Even on worlds not touched by the physical fighting, there were people who felt themselves breathing darkness, and sickened inwardly. Few men on any world chose to look for long out into the nighttime sky. Some men on each world found themselves newly obsessed by the shadows of death.*

*I touched a mind whose soul was dead. . . .*

## PATRON OF THE ARTS

After some hours' work, Herron found himself hungry and willing to pause for food. Looking over what he had just done, he could easily imagine one of the sycophantic critics praising it: A huge canvas, of discordant and brutal line! Aflame with a sense of engulfing menace! And for once Herron thought, the critic might be praising something good.

Turning away from his view of easel and blank bulkhead, Herron found that his captor had moved up silently to stand only an arm's length behind him, for all the world like some human kibitzer.

He had to chuckle. "I suppose you've some idiotic suggestion to make?"

The roughly man-shaped machine said nothing, though it had what might be a speaker mounted on what might be a face. Herron shrugged and walked around it, going forward in search of the galley. This ship had been only a few hours out from Earth on C-plus drive when the berserker machine had run it down and captured it; and Piers Herron, the only passenger, had not yet had time to learn his way around.

It was more than a galley, he saw when he reached it—it was meant to be a place where arty colonial ladies could sit and twitter over tea when they grew weary of staring at pictures. The *Frans Hals* had been built as a traveling museum; then the war of life against berserker machines

had grown hot around Sol, and BuCulture had wrongly decided that Earth's art treasures would be safer if shipped away to Tau Epsilon. The *Frans* was ideally suited for such a mission, and for almost nothing else.

Looking further forward from the entrance to the galley, Herron could see that the door to the crew compartment had been battered down, but he did not go to look inside. Not that it would bother him to look, he told himself; he was as indifferent to horror as he was to almost all other human things. The *Frans's* crew of two were in there, or what was left of them after they had tried to fight off the berserker's boarding machines. Doubtless they had preferred death to capture.

Herron preferred nothing. Now he was probably the only living being—apart from a few bacteria—within half a light year; and he was pleased to discover that his situation did not terrify him; that his long-growing weariness of life was not just a pose to fool himself.

His metal captor followed him into the galley, watching while he set the kitchen devices to work.

"Still no suggestions?" Herron asked it. "Maybe you're smarter than I thought."

"I am what men call a berserker," the man-shaped thing squeaked at him suddenly, in an ineffectual-sounding voice. "I have captured your ship, and I will talk with you through this small machine you see. Do you grasp my meaning?"

"I understand as well as I need to." Herron had not yet seen the berserker itself, but he knew it was probably drifting a few miles away, or a few hundred or a thousand miles, from the ship it had captured. Captain Hanus had tried desperately to escape it, diving the *Frans* into a cloud of dark nebula where no ship or machine could move faster than light, and where the advantage in speed lay with the smaller hull.

The chase had been at speeds up to a thousand miles a second. Forced to remain in normal space, the berserker could not steer its bulk among the meteoroids and gas-wisps as well as the *Frans's* radar-computer system could maneuver the fleeing ship. But the berserker had sent an armed launch

of its own to take up the chase, and the weaponless *Frans* had had no chance.

Now, dishes of food, hot and cold, popped out on a galley table, and Herron bowed to the machine. "Will you join me?"

"I need no organic food."

Herron sat down with a sigh. "In the end," he told the machine, "you'll find that lack of humor is as pointless as laughter. Wait and see if I'm not right." He began to eat, and found himself not so hungry as he had thought. Evidently his body still feared death—this surprised him a little.

"Do you normally function in the operation of this ship?" the machine asked.

"No," he said, making himself chew and swallow. "I'm not much good at pushing buttons." A peculiar thing that had happened was nagging at Herron. When capture was only minutes away, Captain Hanus had come dashing aft from the control room, grabbing Herron and dragging him along in a tearing hurry, aft past all the stored art treasures.

"Herron, listen—if we don't make it, see here?" Tooling open a double hatch in the stern compartment, the captain had pointed into what looked like a short padded tunnel, the diameter of a large drainpipe. "The regular lifeboat won't get away, but this might."

"Are you waiting for the Second Officer, Captain, or leaving us now?"

"There's room for only one, you fool, and I'm not the one who's going."

"You mean to save me? Captain, I'm touched!" Herron laughed, easily and naturally. "But don't put yourself out."

"You idiot. Can I trust you?" Hanus lunged into the boat, his hands flying over its controls. Then he backed out, glaring like a madman. "Listen. Look here. This button is the activator; now I've set things up so the boat should come out in the main shipping lanes and start sending a distress signal. Chances are she'll be picked up safely then. Now the controls are set, only this activator button needs to be pushed down—"

The berserker's launch had attacked at that moment, with

a roar like mountains falling on the hull of the ship. The lights and artificial gravity had failed and then come abruptly back. Piers Herron had been thrown on his side, his wind knocked out. He had watched while the captain, regaining his feet and moving like a man in a daze, had closed the hatch on the mysterious little boat again and staggered forward to his control room.

"Why are you here?" the machine asked Herron.

He dropped the forkful of food he had been staring at. He didn't have to hesitate before answering the question. "Do you know what BuCulture is? They're the fools in charge of art, on Earth. Some of them, like a lot of other fools, think I'm a great painter. They worship me. When I said I wanted to leave Earth on this ship, they made it possible.

"I wanted to leave because almost everything that is worthwhile in any true sense is being removed from Earth. A good part of it is on this ship. What's left behind on the planet is only a swarm of animals, breeding and dying, fighting—"

"Why did you not try to fight or hide when my machines boarded this ship?"

"Because it would have done no good."

When the berserker's prize crew had forced their way in through an airlock, Herron had been setting up his easel in what was to have been a small exhibition hall, and he had paused to watch the uninvited visitors file past. One of the man-shaped metal things, the one through which he was being questioned now, had stayed to stare at him through its lenses while the others had moved on forward to the crew compartment.

"Herron!" The intercom had shouted. "Try, Heron, please! You know what to do!" Clanging noises followed, and gunshots and curses.

What to do, Captain? Why, yes. The shock of events and the promise of imminent death had stirred up some kind of life in Piers Herron. He looked with interest at the alien shapes and lines of his inanimate captor, the inhuman cold of deep space frosting over its metal here in the warm cabin.

Then he turned away from it and began to paint the berserker, trying to catch not the outward shape he had never seen, but what he felt of its inwardness. He felt the emotionless deadliness of its watching lenses, boring into his back. The sensation was faintly pleasurable, like cold spring sunshine.

"What is good?" the machine asked Herron, standing over him in the galley while he tried to eat.

He snorted. "You tell me."

It took him literally. "To serve the cause of what men call death is good. To destroy life is good."

Herron pushed his nearly full plate into a disposal slot and stood up. "You're almost right about life being worthless—but even if you were entirely right, why so enthusiastic? What is there praiseworthy about death?" Now his thoughts surprised him as his lack of appetite had.

"I am entirely right," said the machine.

For long seconds Herron stood still, as if thinking, though his mind was almost completely blank. "No," he said finally, and waited for a bolt to strike him.

"In what do you think I am wrong?" it asked.

"I'll show you." He led it out of the galley, his hands sweating and his mouth dry. Why wouldn't the damned thing kill him and have done?

The paintings were racked row on row and tier on tier; there was no room in the ship for more than a few to be displayed in a conventional way. Herron found the drawer he wanted and pulled it open so the portrait inside swung into full view, lights springing on around it to bring out the rich colors beneath the twentieth-century statglass coating.

"This is where you're wrong," Herron said.

The man-shaped thing's scanner studied the portrait for perhaps fifteen seconds. "Explain what you are showing me," it said.

"I bow to you!" Herron did so. "You admit ignorance! You even ask an intelligible question, if one that is somewhat too broad. First, tell me what *you* see here."

"I see the image of a life-unit, its third spatial dimension of negligible size as compared to the other two. The image is sealed inside a protective jacket transparent to the wavelengths used by the human eye. The life-unit imaged is, or was, an adult male apparently in good functional condition, garmented in a manner I have not seen before. What I take to be one garment is held before him—"

"You see a man with a glove," Herron cut in, wearying of his bitter game. "That is the title, *Man with a Glove*. Now what do you say about it?"

There was a pause of twenty seconds. "Is it an attempt to praise life, to say that life is good?"

Looking now at Titian's thousand-year-old more-than-masterpiece, Herron hardly heard the machine's answer; he was thinking helplessly and hopelessly of his own most recent work.

"Now you will tell me what it means," said the machine without emphasis.

Herron walked away without answering, leaving the drawer open.

The berserker's mouthpiece walked at his side. "Tell me what it means or you will be punished."

"If you can pause to think, so can I." But Herron's stomach had knotted up at the threat of punishment, seeming to feel that pain mattered even more than death. Herron had great contempt for his stomach.

His feet took him back to his easel. Looking at the discordant and brutal line that a few minutes ago had pleased him, he now found it as disgusting as everything else he had tried to do in the past year.

The berserker asked: "What have you made here?"

Herron picked up a brush he had forgotten to clean, and wiped at it irritably. "It is my attempt to get at your essence, to capture you with paint and canvas as you have seen those humans captured." He waved at the storage racks. "My attempt has failed, as most do."

There was another pause, which Herron did not try to time.

"An attempt to praise me?"



Herron broke the spoiled brush and threw it down. "Call it what you like."

This time the pause was short, and at its end the machine did not speak, but turned away and walked in the direction of the airlock. Some of its fellows clanked past to join it. From the direction of the airlock there began to come sounds like those of heavy metal being worked and hammered. The interrogation seemed to be over for the time being.

Herron's thoughts wanted to be anywhere but on his work or on his fate, and they returned to what Hanus had shown him, or tried to show him. Not a regular lifeboat, but she might get away, the captain had said. All it needs now is to press the button.

Herron started walking, smiling faintly as he realized that if the berserker was as careless as it seemed, he might possibly escape it.

Escape to what? He couldn't paint any more, if he ever could. All that really mattered to him now was here, and on other ships leaving Earth.

Back at the storage rack, Herron swung the *Man with a Glove* out so its case came free from the rack and became a handy cart. He wheeled the portrait aft. There might be yet one worthwhile thing he could do with his life.

The picture was massive in its statglass shielding, but he thought he could fit it into the boat.

As an itch might nag a dying man, the question of what the captain had been intending with the boat nagged Herron. Hanus hadn't seemed worried about Herron's fate, but instead had spoken of trusting Herron. . . .

Nearing the stern, out of sight of the machines, Herron passed a strapped-down stack of crated statuary, and heard a noise, a rapid feeble pounding.

It took several minutes to find and open the proper case. When he lifted the lid with its padded lining, a girl wearing a coverall sat up, her hair all wild as if standing in terror.

"Are they gone?" She had bitten at her fingers and nails until they were bleeding. When he didn't answer at once, she repeated her question again and again, in a rising whine.

"The machines are still here," he said at last.

Literally shaking in her fear, she climbed out of the case. "Where's Gus? Have they taken him?"

"Gus?" But he thought he was beginning to understand.

"Gus Hanus, the captain. He and I are—he was trying to save me, to get me away from Earth."

"I'm quite sure he's dead," said Herron. "He fought the machines."

Her bleeding fingers clutched at her lower face. "They'll kill us, too! Or worse! What can we do?"

"Don't mourn your lover so deeply," he said. But the girl seemed not to hear him; her wild eyes looked this way and that, expecting the machines. "Help me with this picture," he told her calmly. "Hold the door there for me."

She obeyed as if half-hypnotized, not questioning what he was doing.

"Gus said there'd be a boat," she muttered to herself. "If he had to smuggle me down to Tau Epsilon he was going to use a special little boat—" She broke off staring at Herron, afraid that he had heard her and was going to steal her boat. As indeed he was.

When he had the painting in the stern compartment, he stopped. He looked long at the *Man with a Glove*, but in the end all he could seem to see was that the fingertips of the ungloved hand were not bitten bloody.

Herron took the shivering girl by the arm and pushed her into the tiny boat. She huddled there in dazed terror; she was not good-looking. He wondered what Hanus had seen in her.

"There's room for only one," he said, and she shrank and bared her teeth as if afraid he meant to drag her out again. "After I close the hatch, push that button there, the activator. Understand?"

That she understood at once. He dogged the double hatch shut and waited. Only about three seconds passed before there came a scraping sound that he supposed meant the boat had gone.

Nearby was a tiny observation blister, and Herron put his head into it and watched the stars turn beyond the dark

blizzard of the nebula. After a while he saw the berserker through the blizzard, turning with the stars, black and rounded and bigger than any mountain. It gave no sign that it had detected the tiny boat slipping away. Its launch was very near the *Frans* but none of its commensal machines were in sight.

Looking the *Man with a Glove* in the eye, Herron pushed him forward again, to a spot near his easel. The discordant lines of Herron's own work were now worse than disgusting, but Herron made himself work on them.

He hadn't time to do much before the man-shaped machine came walking back to him; the uproar of metalworking had ceased. Wiping his brush carefully, Herron put it down, and nodded at his berserker portrait. "When you destroy all the rest, save this painting. Carry it back to those who built you, they deserve it."

The machine-voice squeaked back at him: "Why do you think I will destroy paintings? Even if they are attempts to praise life, they are dead things in themselves, and so in themselves they are good."

Herron was suddenly too frightened and weary to speak. Looking dully into the machine's lenses he saw there tiny flickerings, keeping time with his own pulse and breathing, like the indications of a lie detector.

"Your mind is divided," said the machine. "But with its much greater part you have praised me. I have repaired your ship, and set its course. I now release you, so other life-units can learn from you to praise what is good."

Herron could only stand there staring straight ahead of him, while a trampling of metal feet went past, and there was a final scraping on the hull.

After some time he realized he was alive and free.

At first he shrank from the dead men, but after once touching them he soon got them into a freezer. He had no particular reason to think either of them Believers, but he found a book and read Islamic, Ethical, Christian and Jewish burial services.

Then he found an undamaged handgun on the deck, and went prowling the ship, taken suddenly with the wild notion

that a machine might have stayed behind. Pausing only to tear down the abomination from his easel, he went on to the very stern. There he had to stop, facing the direction in which he supposed the berserker now was.

"Damn you, I can change!" he shouted at the stern bulkhead. His voice broke. "I can paint again. I'll show you . . . I can change. I am alive."

*Different men will find different ways of praising life, of calling it good.*

*Even I, who by my nature cannot fight or destroy, can see intellectually this truth: in a war against death, it is by fighting and destroying the enemy that the value of life is affirmed.*

*In such a war, no living fighter need concern himself with pity for his enemy; this one twisted pain, at least, no one need feel.*

*But in any war the vital effect of pacifism is not on the foe, but on the pacifist. I touched a peace-loving mind, very hungry for life. . . .*

## THE PEACEMAKER

Carr swallowed a pain pill and tried to find a less uncomfortable position in the combat chair. He keyed his radio transmitter, and spoke:

"I come in peace. I have no weapons. I come to talk to you."

He waited. The cabin of his little one-man ship was silent. His radar screen showed the berserker machine still many light-seconds ahead of him. There was no reaction from it, but he knew that it had heard him.

Behind Carr was the Sol-type star he called sun, and his home planet, colonized from Earth a century before. It was a lonely settlement, out near the rim of the galaxy; until now, the berserker war had been no more than a remote horror in news stories. The colony's only real fighting ship had recently gone to join Karlsen's fleet in the defense of Earth, when the berserkers were said to be massing there. But now the enemy was here. The people of Carr's planet were readying two more warships as fast as they could—they were a small colony, and not wealthy in resources. Even if the two ships could be made ready in time, they would hardly be a match for a berserker.

When Carr had taken his plan to the leaders of his planet, they had thought him mad. Go out and talk to it of peace and love? *Argue* with it? There might be some hope of converting the most depraved human to the cause of goodness and mercy, but what appeal could alter the built-in purpose of a machine?

"Why not talk to it of peace?" Carr had demanded "Have you a better plan? I'm willing to go. I've nothing to lose."

They had looked at him, across the gulf that separates healthy planners from those who know they are dying. They knew his scheme would not work, but they could think of nothing that would. It would be at least ten days until the warships were ready. The little one-man ship was expendable, being unarmed. Armed, it would be no more than a provocation to a berserker. In the end, they let Carr take it, hoping there was a chance his arguments might delay the inevitable attack.

When Carr came within a million miles of the berserker, it stopped its own unhurried motion and seemed to wait for him, hanging in space in the orbital track of an airless planetoid, at a point from which the planetoid was still several days away.

"I am unarmed," he radioed again. "I come to talk with you, not to damage you. If those who built you were here, I would try to talk to them of peace and love. Do you understand?" He was serious about talking love to the unknown builders; things like hatred and vengeance were not worth Carr's time now.

Suddenly it answered him: "Little ship, maintain your present speed and course toward me. Be ready to stop when ordered."

"I—I will." He had thought himself ready to face it, but he stuttered and shook at the mere sound of its voice. Now the weapons which could sterilize a planet would be trained on him alone. And there was worse than destruction to be feared, if one tenth of the stories about berserkers' prisoners were true. Carr did not let himself think about that.

When he was within ten thousand miles it ordered: "Stop. Wait where you are, relative to me."

Carr obeyed instantly. Soon he saw that it had launched toward him something about the size of his own ship—a little moving dot on his video screen, coming out of the vast fortress-shape that floated against the stars.

Even at this range he could see how scarred and battered that fortress was. He had heard that all of these ancient machines were damaged, from their long senseless campaign across the galaxy; but surely such apparent ruin as this must be exceptional.

The berserker's launch slowed and drew up beside his ship. Soon there came a clanging at the airlock.

"Open!" demanded the radio voice. "I must search you."

"Then will you listen to me?"

"Then I will listen."

He opened the lock, and stood aside for the half-dozen machines that entered. They looked not unlike robot valets and workers to Carr, except these were limping and worn, like their great master. Here and there a new part gleamed, but the machines' movements were often unsteady as they searched Carr, searched his cabin, probed everywhere on the little ship. When the search was completed one of the boarding machines had to be half-carried out by its fellows.

Another one of the machines, a thing with arms and hands like a man's, stayed behind. As soon as the airlock had closed behind the others, it settled itself in the combat chair and began to drive the ship toward the berserker.

"Wait!" Carr heard himself protesting. "I didn't mean I was surrendering!" The ridiculous words hung in the air, seeming to deserve no reply. Sudden panic made Carr move without thinking; he stepped forward and grabbed at the mechanical pilot, trying to pull it from the chair. It put one metal hand against his chest and shoved him across the cabin, so that he staggered and fell in the artificial gravity, thumping his head painfully against a bulkhead.

"In a matter of minutes we will talk about love and peace," said the radio.



Looking out through a port as his ship neared the immense berserker, Carr saw the scars of battle become plainer and plainer, even to his untaught eye. There were holes in the berserker's hull, there were square miles of bendings and swellings, and pits where the metal had once flowed molten. Rubbing his bumped head, Carr felt a faint thrill of pride. We've done that to it, he thought, we soft little living things. The martial feeling annoyed him in a way. He had always been something of a pacifist.

After some delay, a hatch opened in the berserker's side, and the ship followed the berserker's launch into darkness.

Now there was nothing to be seen through the port. Soon there came a gentle bump, as of docking. The mechanical pilot shut off the drive, and turned toward Carr and started to rise from its chair.

Something in it failed. Instead of rising smoothly, the pilot reared up, flailed for a moment with arms that sought a grip or balance, and then fell heavily to the deck. For half a minute it moved one arm, and made a grinding noise. Then it was still.

In the half minute of silence which followed, Carr realized that he was again master of his cabin; chance had given him that. If there was only something he could do—

"Leave your ship," said the berserker's calm voice. "There is an air-filled tube fitted to your airlock. It will lead you to a place where we can talk of peace and love."

Carr's eyes had focused on the engine switch, and then had looked beyond that, to the C-plus activator. In such proximity as this to a mass the size of the surrounding berserker, the C-plus effect was not a drive but a weapon—one of tremendous potential power.

Carr did not—or thought he did not—any longer fear sudden death. But now he found that with all his heart and soul he feared what might be prepared for him outside his airlock. All the horror stories came back. The thought of going out through that airlock now was unendurable. It was less terrifying for him to step carefully around the fallen pilot, to reach the controls and turn the engine back on.



"I can talk to you from here," he said, his voice quavering in spite of an effort to keep it steady.

After about ten seconds, the berserker said: "Your C-plus drive has safety devices. You will not be able to kamikaze me."

"You may be right," said Carr after a moment's thought. "But if a safety device does function, it might hurl my ship away from your center of mass, right through your hull. And your hull is in bad shape now, you don't want any more damage."

"You would die."

"I'll have to die sometime. But I didn't come out here to die, or to fight, but to talk to you, to try to reach some agreement."

"What kind of agreement?"

At last. Carr took a deep breath, and marshaled the arguments he had so often rehearsed. He kept his fingers resting gently on the C-plus activator, and his eyes alert on the instruments that normally monitored the hull for micrometeorite damage.

"I've had the feeling," he began, "that your attacks upon humanity may be only some ghastly mistake. Certainly we were not your original enemy."

"Life is my enemy. Life is evil." Pause. "Do you want to become goodlife?"

Carr closed his eyes for a moment; some of the horror stories were coming to life. But then he went firmly on with his argument. "From our point of view, it is you who are bad. We would like you to become a good machine, one that helps men instead of killing them. Is not building a higher purpose than destroying?"

There was a longer pause. "What evidence can you offer, that I should change my purpose?"

"For one thing, helping us will be a purpose easier of achievement. No one will damage you and oppose you."

"What is it to me, if I am damaged and opposed?"

Carr tried again. "Life is basically superior to non-life; and man is the highest form of life."

"What evidence do you offer?"

"Man has a spirit."

"I have learned that many men claim that. But do you not define this spirit as something beyond the perception of any machine? And are there not many men who deny that this spirit exists?"

"Spirit is so defined. And there are such men."

"Then I do not accept the argument of spirit."

Carr dug out a pain pill and swallowed it. "Still, you have no evidence that spirit does not exist. You must consider it as a possibility."

"That is correct."

"But leaving spirit out of the argument for now, consider the physical and chemical organization of life. Do you know anything of the delicacy and intricacy of organization in even a single living cell? And surely you must admit we humans carry wonderful computers inside our few cubic inches of skull."

"I have never had an intelligent captive to dissect," the mechanical voice informed him blandly. "Though I have received some relevant data from other machines. But you admit that your form is the determined result of the operation of physical and chemical laws?"

"Have you ever thought that those laws may have been designed to do just that—produce brains capable of intelligent action?"

There was a pause that stretched on and on. Carr's throat felt dry and rough, as if he had been speaking for hours.

"I have never tried to use that hypothesis," it answered suddenly. "But if the construction of intelligent life is indeed so intricate, so dependent upon the laws of physics being as they are and not otherwise—then to serve life may be the highest purpose of a machine."

"You may be sure, our physical construction is intricate." Carr wasn't sure he could follow the machine's line of reasoning, but that hardly mattered if he could somehow win the game for life. He kept his fingers on the C-plus activator.

The berserker said: "If I am able to study some living cells—"

Like a hot iron on a nerve, the meteorite-damage indicator moved; something was at the hull. "Stop that!" he screamed, without thought. "The first thing you try, I'll kill you!"

Its voice was unevenly calm, as always. "There may have been some accidental contact with your hull. I am damaged and many of my commensal machines are unreliable. I mean to land on this approaching planetoid to mine for metals and repair myself as far as possible." The indicator was quiet again.

The berserker resumed its argument. "If I am able to study some living cells from an intelligent life-unit for a few hours, I expect I will find strong evidence for or against your claims. Will you provide me with cells?"

"You must have had prisoners, sometime." He said it as a suspicion; he really knew no reason why it must have had human captives. It could have learned the language from another berserker.

"No, I have never taken a prisoner."

It waited. The question it had asked still hung in the air.

"The only human cells on this ship are my own. Possibly I could give you a few of them."

"Half a cubic centimeter should be enough. Not a dangerous loss for you, I believe. I will not demand part of your brain. Also I understand that you wish to avoid the situation called pain. I am willing to help you avoid it, if possible."

Did it want to drug him? That seemed too simple. Always unpredictability, the stories said, and sometimes a subtlety out of hell.

He went on with the game. "I have all that is necessary. Be warned that my attention will hardly waver from my control panel. Soon I will place a tissue sample in the airlock for you."

He opened the ship's medical kit, took two pain killers, and set very carefully to work with a sterile scalpel. He had had some biological training.

When the small wound was bandaged, he cleansed the tissue sample of blood and lymph and with unsteady fingers sealed it into a little tube. Without letting down his guard, he thought, for an instant, he dragged the fallen pilot to

the airlock and left it there with the tissue sample. Utterly weary, he got back to the combat chair. When he switched the outer door open, he heard something come into the lock and leave again.

He took a pep pill. It would activate some pain, but he had to stay alert. Two hours passed. Carr forced himself to eat some emergency rations, watched the panel, and waited.

He gave a startled jump when the berserker spoke again; nearly six hours had gone by.

"You are free to leave," it was saying. "Tell the leading life-units of your planet that when I have refitted, I will be their ally. The study of your cells has convinced me that the human body is the highest creation of the universe, and that I should make it my purpose to help you. Do you understand?"

Carr felt numb. "Yes. Yes. I have convinced you. After you have refitted, you will fight on our side."

Something shoved hugely and gently at his hull. Through a port he saw stars, and he realized that the great hatch that had swallowed his ship was swinging open.

This far within the system. Carr necessarily kept his ship in normal space to travel. His last sight of the berserker showed it moving as if indeed about to let down upon the airless planetoid. Certainly it was not following him.

A couple of hours after being freed, he roused himself from contemplation of the radar screen, and went to spend a full minute considering the inner airlock door. At last he shook his head, dialed air into the lock, and entered it. The pilot-machine was gone, and the tissue sample. There was nothing out of the ordinary to be seen. Carr took a deep breath, as if relieved, closed up the lock again, and went to a port to spend some time watching the stars.

After a day he began to decelerate, so that when hours had added into another day, he was still a good distance from home. He ate, and slept, and watched his face in a mirror. He weighed himself, and watched the stars some more, with interest, like a man reexamining something long forgotten.

In two more days, gravity bent his course into a hairpin ellipse around his home planet. With it bulking between him and the berserker's rock, Carr began to use his radio.

"Ho, on the ground, good news."

The answer came almost instantly. "We've be tracking you, Carr. What's going on? What's happened?"

He told them. "So that's the story up to now," he finished. "I expect the thing really needs to refit. Two warships attacking it now should win."

"Yes." There was excited talk in the background. Then the voice was back, sounding uneasy. "Carr—you haven't started a landing approach yet, so may you understand. The thing was probably lying to you."

"Oh, I know. Even that pilot-machine's collapse might have been staged. I guess the berserker was too badly shot up to want to risk a battle, so it tried another way. Must have sneaked the stuff into my cabin air, just before it let me go—or maybe left it in my airlock."

"What kind of stuff?"

"I'd guess it's some freshly mutated virus, designed for specific virulence against the tissue I gave it. It expected me to hurry home and land before getting sick, and spread a plague. It must have thought it was inventing biological warfare, using life against life, as we use machines to fight machines. But it needed that tissue sample to blood its pet viruses; it must have been telling the truth about never having a human prisoner."

"Some kind of virus, you think? What's it doing to you, Carr? Are you in pain? I mean, more than before?"

"No." Carr swiveled his chair to look at the little chart he had begun. It showed that in the last two days his weight loss had started to reverse itself. He looked down at his body, at the bandaged place near the center of a discolored inhuman-looking area. That area was smaller than it had been, and he saw a hint of new and healthy skin.

"What *is* the stuff doing to you?"

Carr allowed himself to smile, and to speak aloud his growing hope. "I think it's killing off my cancer."



*For most men the war brought no miracles of healing, but a steady deforming pressure which seemed to have existed always, and which had no foreseeable end. Under this burden some men became like brutes, and the minds of others grew to be as terrible and implacable as the machines they fought against.*

*But I have touched a few rare human minds, the jewels of life, who rise to meet the greatest challenges by becoming supremely men.*

## STONE PLACE

Earth's Gobi spaceport was perhaps the biggest in all the small corner of the galaxy settled by Solarian man and his descendants; at least so thought Mitchell Spain, who had seen most of those ports in his twenty-four years of life.

But looking down now from the crowded, descending shuttle, he could see almost nothing of the Gobi's miles of ramp. The vast crowd below, meaning only joyful welcome, had defeated its own purpose by forcing back and breaking the police lines. Now the vertical string of descending shuttle-ships had to pause, searching for enough clear room to land.

Mitchell Spain, crowded into the lowest shuttle with a thousand other volunteers, was paying little attention to the landing problem for the moment. Into this jammed compartment, once a luxurious observation lounge, had just come Johann Karlsen himself; and this was Mitch's first chance for a good look at the newly appointed High Commander of Sol's defense, though Mitch had ridden Karlsen's spear-shaped flagship all the way from Austeel.

Karlsen was no older than Mitchell Spain, and no taller, his shortness somehow surprising at first glance. He had become ruler of the planet Austeel through the influence of his half-brother, the mighty Felipe Nogara, head of the

empire of Esteel; but Karlsen held his position by his own talents.

"This field may be blocked for the rest of the day," Karlsen was saying now, to a cold-eyed Earthman who had just come aboard the shuttle from an aircar. "Let's have the ports open, I want to look around."

Glass and metal slid and reshaped themselves, and sealed ports became small balconies open to the air of Earth, the fresh smells of a living planet—open, also, to the roaring chant of the crowd a few hundred feet below: "Karlsen! Karlsen!"

As the High Commander stepped out onto a balcony to survey for himself the chances of landing, the throng of men in the lounge made a half-voluntary brief surging movement, as if to follow. These men were mostly Austeeler volunteers, with a sprinkling of adventurers like Mitchell Spain, the Martian wanderer who had signed up on Austeel for the battle bounty Karlsen offered.

"Don't crowd, outlander," said a tall man ahead of Mitch, turning and looking down at him.

"I answer to the name of Mitchell Spain." He let his voice rasp a shade deeper than usual. "No more an outlander here than you, I think."

The tall one, by his dress and accent, came from Venus, a planet terraformed only within the last century, whose people were sensitive and proud in newness of independence and power. A Venerian might well be jumpy here, on a ship filled with men from a planet ruled by Felipe Nogara's brother.

"Spain—sounds like a Martian name," said the Venerian in a milder tone, looking down at Mitch.

Martians were not known for patience and long suffering. After another moment the tall one seemed to get tired of locking eyes and turned away.

The cold-eyed Earthman, whose face was somehow familiar to Mitch, was talking on the communicator, probably to the captain of the shuttle. "Drive on across the city, cross the Khosutu highway, and let down there."

Karlsen, back inside, said: "Tell him to go no more than



about ten kilometers an hour, they seem to want to see me."

The statement was matter-of-fact; if people had made great efforts to see Johann Karlsen, it was only the courteous thing to greet them.

Mitch watched Karlsen's face, and then the back of his head, and the strong arms lifted to wave, as the High Commander stepped out again onto the little balcony. The crowd's roar doubled.

Is that all you feel, Karlsen, a wish to be courteous? Oh, no, my friend, you are acting. To be greeted with that thunder must do something vital to any man. It might exalt him; possibly it could disgust or frighten him, friendly as it was. You wear well your mask of courteous nobility, High Commander.

What was it like to be Johann Karlsen, come to save the world, when none of the really great and powerful ones seemed to care too much about it? With a bride of famed beauty to be yours when the battle had been won?

And what was brother Felipe doing today? Scheming, no doubt, to get economic power over yet another planet.

With another shift of the little mob inside the shuttle the tall Venerian moved from in front of Mitch, who could now see clearly out the port past Karlsen. Sea of faces, the old cliché, this was really it. How to write this . . . Mitch knew he would someday have to write it. If all men's foolishness was not permanently ended by the coming battle with the unliving, the battle bounty should suffice to let a man write for some time.

Ahead now were the bone-colored towers of Ulan Bator, rising beyond their fringe of suburban slideways and sunfields; and a highway; and bright multicolored pennants, worn by the aircars swarming out from the city in glad welcome. Now police aircars were keeping pace protectively with the spaceship, though there seemed to be no possible danger from anything but excess enthusiasm.

Another, special, aircar approached. The police craft touched it briefly and gently, then drew back with deference. Mitch stretched his neck, and made out a Carman insignia on the car. It was probably their ambassador to Sol, in

person. The space shuttle eased to a dead slow creeping.

Some said that the Carmpan looked like machines themselves, but they were the strong allies of Earth-descended men in the war against the enemies of all life. If the Carmpan bodies were slow and squarish, their minds were visionary; if they were curiously unable to use force against any enemy, their indirect help was of great value.

Something near silence came over the vast crowd as the ambassador reared himself up in his open car; from his head and body, ganglions of wire and fiber stretched to make a hundred connections with Carmpan animals and equipment around him.

The crowd recognized the meaning of the network; a great sigh went up. In the shuttle, men jostled one another trying for a better view. The cold-eyed Earthman whispered rapidly into the communicator.

"Prophecy!" said a hoarse voice, near Mitch's ear.

"—of Probability!" came the ambassador's voice, suddenly amplified, seeming to pick up the thought in midphrase. The Carmpan Prophets of Probability were half mystics, half cold mathematicians. Karlsen's aides must have decided, or known, that this prophecy was going to be a favorable, inspiring thing which the crowd should hear, and had ordered the ambassador's voice picked up on a public address system.

"The hope, the living spark, to spread the flame of life!" The inhuman mouth chopped out the words, which still rose ringingly. The armlike appendages pointed straight to Karlsen, level on his balcony with the hovering aircar. "The dark metal thoughts are now of victory, the dead things make their plan to kill us all. But in this man before me now, there is life greater than any strength of metal. A power of life, to resonate—in all of us. I see, with Karlsen, victory—"

The strain on a Carmpan prophet in action was always immense, just as his accuracy was always high. Mitch had heard that the stresses involved were more topological than nervous or electrical. He had heard it, but like most Earth-descended, had never understood it.

"Victory," the ambassador repeated. "Victory . . . and then. . ."

Something changed in the non-Solarian face. The cold-eyed Earthman was perhaps expert in reading alien expressions, or was perhaps just taking no chances. He whispered another command, and the amplification was taken from the Carmpan voice. A roar of approval mounted up past shuttle and aircar, from the great throng who thought the prophecy complete. But the ambassador had not finished, though now only those a few meters in front of him, inside the shuttle, could hear his faltering voice.

“. . . then death, destruction, failure.” The square body bent, but the alien eyes were still riveted on Karlsen. “He who wins everything . . . will die owning nothing. . . .”

The Carmpan bent down and his aircar moved away. In the lounge of the shuttle there was silence. The hurraing outside sounded like mockery.

After long seconds, the High Commander turned in from the balcony and raised his voice: “Men, we who have heard the finish of the prophecy are few—but still we are many, to keep a secret. So I don’t ask for secrecy. But spread the word, too, that I have no faith in prophecies that are not of God. The Carmpan have never claimed to be infallible.”

The gloomy answer was unspoken, but almost telepathically loud among the group. Nine times out of ten, the Carmpan are right. There will be a victory, then death and failure.

But did the dark ending apply only to Johann Karlsen, or to the whole cause of the living? The men in the shuttle looked at one another, wondering and murmuring.

The shuttles found space to land, at the edge of Ulan Bator. Disembarking, the men found no chance for gloom, with a joyous crowd growing thicker by the moment around the ships. A lovely Earth girl came, wreathed in garlands, to throw a flowery loop around Mitchell Spain, and to kiss him. He was an ugly man, quite unused to such willing attentions.

Still, he noticed when the High Commander’s eye fell on him.

“You, Martian, come with me to the General Staff meeting. I want to show a representative group in there so they’ll

know I'm not just my brother's agent. I need one or two who were born in Sol's light."

"Yes, sir." was there no other reason why Karlsen had singled him out? They stood together in the crowd, two short men looking levelly at each other. One ugly and flower-bedecked, his arm still around a girl who stared with sudden awed recognition at the other man, who was magnetic in a way beyond handsomeness or ugliness. The ruler of a planet, perhaps to be the savior of all life.

"I like the way you keep people from standing on your toes in a crowd," said Karlsen to Mitchell Spain. "Without raising your voice or uttering threats. What's your name and rank?"

Military organization tended to be vague, in this war where everything that lived was on the same side. "Mitchell Spain, sir. No rank assigned, yet. I've been training with the marines. I was on Austeel when you offered a good battle bounty, so here I am."

"Not to defend Mars?"

"I suppose, that too. But I might as well get paid for it."

Karlsen's high-ranking aides were wrangling and shouting now, about groundcar transportation to the staff meeting. This seemed to leave Karlsen with time to talk. He thought, and recognition flickered on his face.

"Mitchell Spain? The poet?"

"I—I've had a couple of things published. Nothing much. . . ."

"Have you combat experience?"

"Yes, I was aboard one berserker, before it was pacified. That was out—"

"Later, we'll talk. Probably have some marine command for you. Experienced men are scarce. Hemphill, where *are* those groundcars?"

The cold-eyed Earthman turned to answer. Of course his face had been familiar; this was Hemphill, fanatic hero of a dozen berserker fights. Mitch was faintly awed, in spite of himself.

At last the groundcars came. The ride was into Ulan Bator. The military center would be under the metropolis, taking

full advantage of the defensive force fields that could be extended up into space to protect the area of the city.

Riding down the long elevator zigzag to the buried WarRoom, Mitch found himself again next to Karlsen.

"Congratulations on your coming marriage, sir." Mitch didn't know if he liked Karlsen or not; but already he felt curiously certain of him, as if he had known the man for years. Karlsen would know he was not trying to curry favor.

The High Commander nodded. "Thank you." He hesitated for a moment, then produced a small photo. In an illusion of three dimensions it showed the head of a young woman, golden hair done in the style favored by the new aristocracy of Venus.

There was no need for any polite stretching of truth. "She's very beautiful."

"Yes." Karlsen looked long at the picture, as if reluctant to put it away. "There are those who say this will be only a political alliance. God knows we need one. But believe me, Poet, she means far more than that to me."

Karlsen blinked suddenly and, as if amused at himself, gave Mitch a why-am-I-telling-you-all-this look. The elevator floor pressed up under the passengers' feet, and the doors sighed open. They had reached the catacomb of the General Staff.

Many of the staff, though not an absolute majority, were Venerian in these days. From their greeting it was plain that the Venerian members were coldly hostile to Nogara's brother.

Humanity was, as always, a tangle of cliques and alliances. The brains of the Solarian Parliament and the Executive had been taxed to find a High Commander. If some objected to Johann Karlsen, no one who knew him had any honest doubt of his ability. He brought with him to battle many trained men, and unlike some mightier leaders, he had been willing to take responsibility for the defense of Sol.

In the frigid atmosphere in which the staff meeting opened, there was nothing to do but get quickly to business. The enemy, the berserker machines, had abandoned their

old tactics of single, unpredictable raids—for slowly over the last decades the defenses of life had been strengthened.

There were now thought to be about two hundred berserkers; to meet humanity's new defenses they had recently formed themselves into a fleet, with concentrated power capable of overwhelming one at a time all centers of human resistance. Two strongly defended planets had already been destroyed. A massed human fleet was needed, first to defend Sol, and then to meet and break the power of the unliving.

"So far, then, we are agreed," said Karlsen, straightening up from the plotting table and looking around at the General Staff. "We have not as many ships or as many trained men as we would like. Perhaps no government away from Sol has contributed all it could."

Kemal, the Venerian admiral, glanced around at his planetmen, but declined the chance to comment on the weak contribution of Karlsen's own half-brother, Nogara. There was no living being upon whom Earth, Mars, and Venus could really agree, as the leader for this war. Kemal seemed to be willing to try and live with Nogara's brother.

Karlsen went on: "We have available for combat two hundred and forty-three ships, specially constructed or modified to suit the new tactics I propose to use. We are all grateful for the magnificent Venerian contribution of a hundred ships. Six of them, as you probably all know, mount the new long-range C-plus cannon."

The praise produced no visible thaw among the Venerians. Karlsen went on: "We seem to have a numerical advantage of about forty ships. I needn't tell you how the enemy outgun and outpower us, unit for unit." He paused. "The ram-and-board tactics should give us just the element of surprise we need."

Perhaps the High Commander was choosing his words carefully, not wanting to say that some element of surprise offered the only logical hope of success. After the decades-long dawning of hope, it would be too much to say that. Too much for even these tough-minded men who knew how a berserker machine weighed in the scales of war against any ordinary warship.

"One big problem is trained men," Karlsen continued, "to lead the boarding parties. I've done the best I can, recruiting. Of those ready and in training as boarding marines now, the bulk are Esteelers."

Admiral Kemal seemed to guess what was coming; he started to push back his chair and rise, then waited, evidently wanting to make certain.

Karlsen went on in the same level tone. "These trained marines will be formed into companies, and one company assigned to each warship. Then—"

"One moment, High Commander Karlsen." Kemal had risen.

"Yes?"

"Do I understand that you mean to station companies of Esteelers aboard Venerian ships?"

"In many cases my plan will mean that, yes. You protest?"

"I do." The Venerian looked around at his planetmen. "We all do."

"Nevertheless it is so ordered."

Kemal looked briefly around at his fellows once more, then sat down, blankfaced. The stenocameras in the room's corners emitted their low sibilance, reminding all that the proceedings were being recorded.

A vertical crease appeared briefly in the High Commander's forehead, and he looked for long thoughtful seconds at the Venerians before resuming his talk. But what else was there to do, except put Esteelers onto Venerian ships?

They won't let you be a hero, Karlsen, thought Mitchell Spain. The universe is bad; and men are fools, never really all on the same side in any war.

In the hold of the Venerian warship *Solar Spot* the armor lay packed inside a padded coffinlike crate. Mitch knelt beside it inspecting the knee and elbow joints.

"Want me to paint some insignia on it, Captain?"

The speaker was a young Esteeler named Fishman, one of the newly formed marine company Mitch now commanded. Fishman had picked up a multicolor paintstick somewhere, and he pointed with it to the suit.

Mitch glanced around the hold, which was swarming with his men busily opening crates of equipment. He had decided to let things run themselves as much as possible.

"Insignia? Why, I don't think so. Unless you have some idea for a company insignia. That might be a good thing to have."

There seemed no need for any distinguishing mark on his armored suit. It was of Martian make, distinctive in style, old but with the latest improvements built in—probably no man wore better. The barrel chest already bore one design—a large black spot shattered by jagged red—showing that Mitch had been in at the "death" of one berserker. Mitch's uncle had worn the same armor; the men of Mars had always gone in great numbers out into space.

"Sergeant McKendrick," Mitch asked, "what do you think about having a company insignia?"

The newly appointed sergeant, an intelligent-looking young man, paused in walking past, and looked from Mitch to Fishman as if trying to decide who stood where on insignia before committing himself. Then he looked between them, his expression hardening.

A thin-faced Venerian, evidently an officer, had entered the hold with a squad of six men behind him, armbanded and sidearmed. Ship's Police.

The officer took a few steps and then stood motionless, looking at the paintstick in Fishman's hand. When everyone in the hold was silently watching him, he asked quietly:

"Why have you stolen from ship's stores?"

"Stolen—*this*?" The young Esteeler held up the paintstick, half-smiling, as if ready to share a joke.

They didn't come joking with a police squad, or, if they did, it was not the kind of joke a Martian appreciated. Mitch still knelt beside his crated armor. There was an unloaded carbine inside the suit's torso and he put his hand on it.

"We are at war, and we are in space," the thin-faced officer went on, still speaking mildly, standing relaxed, looking round at the open-mouthed Esteeler company. "Everyone aboard a Venerian ship is subject to law. For stealing from the ship's stores, while we face the enemy, the penalty is death. By



hanging. Take him away." He made an economical gesture to his squad.

The paintstick clattered loudly on the deck. Fishman looked as if he might be going to topple over, half the smile still on his face.

Mitch stood up, the carbine in the crook of his arm. It was a stubby weapon with heavy double barrel, really a miniature recoilless cannon, to be used in free fall to destroy armored machinery. "Just a minute," Mitch said.

A couple of the police squad had begun to move uncertainly toward Fishman. They stopped at once, as if glad of an excuse for doing so.

The officer looked at Mitch, and raised one cool eyebrow. "Do you know what the penalty is, for threatening me?"

"Can't be any worse than the penalty for blowing your ugly head off. I'm Captain Mitchell Spain, marine company commander on this ship, and nobody just comes in here and drags my men away and hangs them. Who are you?"

"I am Mr. Salvador," said the Venerian. His eyes appraised Mitch, no doubt establishing that he was Martian. Wheels were turning in Mr. Salvador's calm brain, and plans were changing. He said: "Had I known that a man commanded this . . . group . . . I would not have thought an object lesson necessary. Come." This last word was addressed to his squad and accompanied by another simple elegant gesture. The six lost no time, preceding him to the exit. Salvador's eyes motioned Mitch to follow him to the door. After a moment's hesitation Mitch did so, while Salvador waited for him, still unruffled.

"Your men will follow you eagerly now, Captain Spain," he said in a voice too low for anyone else to hear. "And the time will come when you will willingly follow me." With a faint smile, as if of appreciation, he was gone.

There was a moment of silence; Mitch stared at the closed door, wondering. Then a roar of jubilation burst out and his back was being pounded.

When most of the uproar had died down, one of the men asked him: "Captain—what'd he mean, calling himself Mister?"

"To the Venerians, it's some kind of political rank. You guys look here! I may need some honest witnesses." Mitch held up the carbine for all to see, and broke open the chambers and clips, showing it to be unloaded. There was renewed excitement, more howls and jokes at the expense of the retreated Venerians.

But Salvador had not thought himself defeated.

"McKendrick, call the bridge. Tell the ship's captain I want to see him. The rest of you men, let's get on with this unpacking."

Young Fishman, paintstick in hand again, stood staring vacantly downward as if contemplating a design for the deck. It was beginning to soak in, how close a thing it had been. An object lesson?

The ship's captain was coldly taciturn with Mitch, but he indicated there were no present plans for hanging any Esteelers on the *Solar Spot*. During the next sleep period Mitch kept armed sentries posted in the marines' quarters.

The next day he was summoned to the flagship. From the launch he had a view of a dance of bright dots, glinting in the light of distant Sol. Part of the fleet was already at ramming practice.

Behind the High Commander's desk sat neither a poetry critic nor a musing bridegroom, but the ruler of a planet.

"Captain Spain—sit down."

To be given a chair seemed a good sign. Waiting for Karlsen to finish some paperwork, Mitch's thoughts wandered, recalling customs he had read about, ceremonies of saluting and posturing men had used in the past when huge permanent organizations had been formed for the sole purpose of killing other men and destroying their property. Certainly men were still as greedy as ever; and now the berserker war was accustoming them again to mass destruction. Could those old days, when life fought all-out war against life, ever come again?

With a sigh, Karlsen pushed aside his papers. "What happened yesterday, between you and Mr. Salvador?"

"He said he meant to hang one of my men." Mitch gave

the story, as simply as he could. He omitted only Salvador's parting words, without fully reasoning out why he did. "When I'm made responsible for men," he finished, "nobody just walks in and hangs them. Though I'm not fully convinced they would have gone that far, I meant to be as serious about it as they were."

The High Commander picked out a paper from his desk litter. "Two Esteeler marines have been hanged already. For fighting."

"Damned arrogant Venerians I'd say."

"I want none of that, Captain!"

"Yes, sir. But I'm telling you we came mighty close to a shooting war, yesterday on the *Solar Spot*."

"I realize that." Karlsen made a gesture expressive of futility. "Spain, is it impossible for the people of this fleet to cooperate, even when the survival of— What is it?"

The Earthman, Hemphill, had entered the cabin without ceremony. His thin lips were pressed tighter than ever. "A courier has just arrived with news. Atsog is attacked."

Karlsen's strong hand crumpled papers with an involuntary twitch. "Any details?"

"The courier captain says he thinks the whole berserker fleet was there. The ground defenses were still resisting strongly when he pulled out. He just got his ship away in time."

Atsog—a planet closer to Sol than the enemy had been thought to be. It was Sol they were coming for, all right. They must know it was the human center.

More people were at the cabin door. Hemphill stepped aside for the Venerian, Admiral Kemal. Mr. Salvador, hardly glancing at Mitch, followed the admiral in.

"You have heard the news, High Commander?" Salvador began. Kemal, just ready to speak himself, gave his political officer an annoyed glance, but said nothing.

"That Atsog is attacked, yes," said Karlsen.

"My ships can be ready to move in two hours," said Kemal.

Karlsen sighed, and shook his head. "I watched today's maneuvers. The fleet can hardly be ready in two weeks."

Kemal's shock and rage seemed genuine. "You'd do that?"

You'd let a Venerian planet die just because we haven't knuckled under to your brother? Because we discipline his damned Esteeler—"

"Admiral Kemal, you will control yourself! You, and everyone else, are subject to discipline while I command!"

Kemal got himself in hand, apparently with great effort.

Karlsen's voice was not very loud, but the cabin seemed to resonate with it.

"You call hangings part of your discipline. I swear by the name of God that I will use every hanging, if I must, to enforce some kind of unity in this fleet. Understand, this fleet is the only military power that can oppose the massed berserkers. Trained, and unified, we can destroy them."

No listener could doubt it, for the moment.

"But whether Atsog falls, or Venus, or Esteel, I will not risk this fleet until I judge it ready."

Into the silence, Salvador said, with an air of respect: "High Commander, the courier reported one thing more. That the Lady Christina de Dulcin was visiting on Atsog when the attack began—and that she must be there still."

Karlsen closed his eyes for two seconds. Then he looked round at all of them. "If you have no further military business, gentlemen, get out." His voice was still steady.

Walking beside Mitch down the flagship corridor, Hemphill broke a silence to say thoughtfully: "Karlsen is the man the cause needs, now. Some Venerians have approached me, tentatively, about joining a plot—I refused. We must make sure that Karlsen remains in command."

"A plot?"

Hemphill did not elaborate.

Mitch said: "What they did just now was pretty low—letting him make that speech about going slow, no matter what—and then breaking the news to him about his lady being on Atsog."

Hemphill said: "He knew already she was there. That news arrived on yesterday's courier."

There was a dark nebula, made up of clustered billions of rocks and older than the sun, named the Stone Place by

men. Those who gathered there now were not men and they gave nothing a name; they hoped nothing, feared nothing, wondered at nothing. They had no pride and no regret, but they had plans—a billion subtleties, carved from electrical pressure and flow—and their built-in purpose, toward which their planning circuits moved. As if by instinct the berserker machines had formed themselves into a fleet when the time was ripe, when the eternal enemy, Life, had begun to mass its strength.

The planet named Atsog in the life-language had yielded a number of still-functioning life-units from its deepest shelters, though millions had been destroyed while their stubborn defenses were beaten down. Functional life-units were sources of valuable information. The mere threat of certain stimuli usually brought at least limited cooperation from any life-unit.

The life-unit (designating itself General Bradin) which had controlled the defense of Atsog was among those captured almost undamaged. Its dissection was begun within perception of the other captured life-units. The thin outer covering tissue was delicately removed, and placed upon a suitable form to preserve it for further study. The life-units which controlled others were examined carefully, whenever possible.

After this stimulus, it was no longer possible to communicate intelligibly with General Bradin; in a matter of hours it ceased to function at all.

In itself a trifling victory, the freeing of this small unit of watery matter from the aberration called Life. But the flow of information now increased from the nearby units which had perceived the process.

It was soon confirmed that the life-units were assembling a fleet. More detailed information was sought. One important line of questioning concerned the life-unit which would control this fleet. Gradually, from interrogations and the reading of captured records, a picture emerged.

A name: Johann Karlsen. A biography. Contradictory things were said about him, but the facts showed he had risen rapidly to a position of control over millions of life-units.

Throughout the long war, the berserker computers had

gathered and collated all available data on the men who became leaders of Life. Now against this data they matched, point for point, every detail that could be learned about Johann Karlsen.

The behavior of these leading units often resisted analysis, as if some quality of the life-disease in them was forever beyond the reach of machines. These individuals used logic, but sometimes it seemed they were not bound by logic. The most dangerous life-units of all sometimes acted in ways that seemed to contradict the known supremacy of the laws of physics and chance, as if they could be minds possessed of true free will, instead of its illusion.

And Karlsen was one of these, supremely one of these. His fitting of the dangerous pattern became plainer with every new comparison.

In the past, such life-units had been troublesome local problems. For one of them to command the whole life-fleet with a decisive battle approaching, was extremely dangerous to the cause of Death.

The outcome of the approaching battle seemed almost certain to be favorable, since there were probably only two hundred ships in the life-fleet. But the brooding berserkers could not be certain enough of anything, while a unit like Johann Karlsen led the living. And if the battle was long postponed the enemy Life could become stronger. There were hints that inventive Life was developing new weapons, newer and more powerful ships.

The wordless conference reached a decision. There were berserker reserves, which had waited for millennia along the galactic rim, dead and uncaring in their hiding places among dust clouds and heavy nebulae, and on dark stars. For this climactic battle they must be summoned, the power of Life to resist must be broken now.

From the berserker fleet at the Stone Place, between Atsog's Sun and Sol, courier machines sped out toward the galactic rim.

It would take some time for all the reserves to gather. Meanwhile, the interrogations went on.



"Listen, I've decided to help you, see. About this guy Karlsen, I know you want to find out about him. Only I got a delicate brain. If anything hurts me, my brain don't work at all, so no rough stuff on me, understand? I'll be no good to you ever if you use rough stuff on me."

This prisoner was unusual. The interrogating computer borrowed new circuits for itself, chose symbols and hurled them back at the life-unit.

"What can you tell me about Karlsen?"

"Listen you're gonna treat me right, aren't you?"

"Useful information will be rewarded. Untruth will bring you unpleasant stimuli."

"I'll tell you this now—the woman Karlsen was going to marry is here. You caught her alive in the same shelter General Bradin was in. Now, if you sort of give me control over some other prisoners, make things nice for me, why I bet I can think up the best way for you to use her. If you just tell him you've got her, why he might not believe you, see?"

Out on the galactic rim, the signals of the giant heralds called out the hidden reserves of the unliving. Subtle detectors heard the signals, and triggered the great engines into cold flame. The force field brain in each strategic housing awoke to livelier death. Each reserve machine began to move, with metallic leisure shaking loose its cubic miles of weight and power freeing itself from dust, or ice, or age-old mud, or solid rock—then rising and turning, orienting itself in space. All converging, they drove faster than light toward the Stone Place, where the destroyers of Atsog awaited their reinforcement.

With the arrival of each reserve machine, the linked berserker computers saw victory more probable. But still the quality of one life-unit made all of their computations uncertain.

Felipe Nogara raised a strong and hairy hand, and wiped it gently across one glowing segment of the panel before his chair. The center of his private study was filled by an

enormous display sphere, which now showed a representation of the explored part of the galaxy. At Nogara's gesture the sphere dimmed, then began to relight itself in a slow intricate sequence.

A wave of his hand had just theoretically eliminated the berserker fleet as a factor in the power game. To leave it in, he told himself, diffused the probabilities too widely. It was really the competing power of Venus—and that of two or three other prosperous, aggressive planets—which occupied his mind.

Well insulated in this private room from the hum of Esteel City and from the routine press of business, Nogara watched his computers' new prediction take shape, showing the political power structure as it might exist one year from now, two years, five. As he had expected, this sequence showed Esteel expanding in influence. It was even possible that he could become ruler of the human galaxy.

Nogara wondered at his own calm in the face of such an idea. Twelve or fifteen years ago he had driven with all his power of intellect and will to advance himself. Gradually, the moves in the game had come to seem automatic. Today, there was a chance that almost every thinking being known to exist would come to acknowledge him as ruler—and it meant less to him than the first local election he had ever won.

Diminishing returns, of course. The more gained, the greater gain needed to produce an equal pleasure. At least when he was alone. If his aides were watching this prediction now it would certainly excite them, and he would catch their excitement.

But, being alone, he sighed. The berserker fleet would not vanish at the wave of a hand. Today, what was probably the final plea for more help had arrived from Earth. The trouble was that granting Sol more help would take ships and men and money from Nogara's expansion projects. Wherever he did that now, he stood to loose out, eventually, to other men. Old Sol would have to survive the coming attack with no more help from Esteel.

Nogara realized, wondering dully at himself, that he would



as soon see even Esteel destroyed as see control slip from his hands. Now why? He could not say he loved his planet or his people, but he had been, by and large, a good ruler, not a tyrant. Good government was, after all, good politics.

His desk chimed the melodious notes that meant something was newly available for his amusement. Nogara chose to answer.

"Sir," said a woman's voice, "two new possibilities are in the shower room now."

Projected from hidden cameras, a scene glowed into life above Nogara's desk—bodies gleaming in a spray of water.

"They are from prison, sir, anxious for any reprieve."

Watching, Nogara felt only a weariness; and, yes, something like self-contempt. He questioned himself: Where in all the universe is there a reason why I should not seek pleasure as I choose? And again: Will I dabble in sadism, next? And if I do, what of it?

But what after that?

Having paused respectfully, the voice asked: "Perhaps this evening you would prefer something different?"

"Later," he said. The scene vanished. Maybe I should try to be a Believer for a while, he thought. What an intense thrill it must be for Johann to sin. If he ever does.

That had been a genuine pleasure, seeing Johann given command of the Solarian fleet, watching the Venerians boil. But it had raised another problem. Johann, victorious over the berserkers, would emerge as the greatest hero in human history. Would that not make even Johann dangerously ambitious? The thing to do would be to ease him out of the public eye, give him some high-ranked job, honest, but dirty and inglorious. Hunting out outlaws somewhere. Johann would probably accept that, being Johann. But if Johann bid for galactic power, he would have to take his chances. Any pawn on the board might be removed.

Nogara shook his head. Suppose Johann lost the coming battle, and lost Sol? A berserker victory would not be a matter of diffusing probabilities, that was pleasant doubletalk for a tired mind to fool itself with. A berserker victory would

mean the end of Earthman in the galaxy, probably within a few years. No computer was needed to see that.

There was a little bottle in his desk; Nogara brought it out and looked at it. The end of the chess game was in it, the end of all pleasure and boredom and pain. Looking at the vial caused him no emotion. In it was a powerful drug which threw a man into a kind of ecstasy—a transcendental excitement that within a few minutes burst the heart or the blood vessels of the brain. Someday, when all else was exhausted, when it was completely a berserker universe . . .

He put the vial away, and he put away the final appeal from Earth. What did it all matter? Was it not a berserker universe already, everything determined by the random swirls of condensing gas, before the stars were born?

Felipe Nogara leaned back in his chair, watching his computers marking out the galactic chessboard.

Through the fleet the rumor spread that Karlsen delayed because it was a Venerian colony under siege. Aboard the *Solar Spot*, Mitch saw no delays for any reason. He had time for only work, quick meals, and sleep. When the final ram-and-board drill had been completed, the last stores and ammunition loaded, Mitch was too tired to feel much except relief. He rested, not frightened or elated, while the *Spot* wheeled into a rank with forty other arrow-shaped ships, dipped with them into the first C-plus jump of the deep space search, and began to hunt the enemy.

It was days later before dull routine was broken by a jangling battle alarm. Mitch was awakened by it; before his eyes were fully opened, he was scrambling into the armored suit stored under his bunk. Nearby, some marines grumbled about practice alerts; but none of them was moving slowly.

"This is High Commander Karlsen speaking," boomed the overhead speakers. "This is not a practice alert; repeat, not practice. Two berserkers have been sighted. One we've just glimpsed at extreme range. Likely it will get away, though the Ninth Squadron is chasing it.

"The other is not going to escape. In a matter of minutes we will have it englobed, in normal space. We are not going

to destroy it by bombardment; we are going to soften it up a bit, and then see how well we can really ram and board. If there are any bugs left in our tactics, we'd better find out now. Squadrons Two, Four, and Seven will each send one ship to the ramming attack. I'm going back on Command Channel now, Squadron Commanders."

"Squadron Four," sighed Sergeant McKendrick. "More Esteelers in our company than any other. How can we miss?"

The marines lay like dragon's teeth seeded in the dark, strapped into the padded acceleration couches that had been their bunks, while the psych-music tried to lull them, and those who were Believers prayed. In the darkness Mitch listened on intercom, and passed on to his men the terse battle reports that came to him as marine commander on the ship.

He was afraid. What was death, that men should fear it so? It could only be the end of all experience. That end was inevitable, and beyond imagination, and he feared it.

The preliminary bombardment did not take long. Two hundred and thirty ships of life held a single trapped enemy in the center of their hollow sphere formation. Listening in the dark to laconic voices, Mitch heard how the berserker fought back, as if with the finest human courage and contempt for odds. Could you really fight machines, when you could never make them suffer pain or fear?

But you could defeat machines. And this time, for once, humanity had far too many guns. It would be easy to blow this berserker into vapor. Would it be best to do so? There were bound to be marine casualties in any boarding, no matter how favorable the odds. But a true combat test of the boarding scheme was badly needed before the decisive battle came to be fought. And, too, this enemy might hold living prisoners who might be rescued by boarders. A High Commander did well to have a rocklike certainty of his own rightness.

The order was given. The *Spot* and two other chosen ships fell in toward the battered enemy at the center of the englobement.

Straps held Mitch firmly, but the gravity had been turned off for the ramming, and weightlessness gave the impression

that his body would fly and vibrate like a pellet shaken in a bottle with the coming impact. Soundless dark, soft cushioning, and lulling music; but a few words came into the helmet and the body cringed, knowing that outside were the black cold guns and the hurtling machines, unimaginable forces leaping now to meet. Now—

Reality shattered in through all the protection and the padding. The shaped atomic charge at the tip of the ramming prow opened the berserker's skin. In five seconds of crashing impact, the prow vaporized, melted, and crumpled its length away, the true hull driving behind it until the *Solar Spot* was sunk like an arrow into the body of the enemy.

Mitch spoke for the last time to the bridge of the *Solar Spot*, while his men lurched past him in free fall, their suit lights glaring.

"My panel shows Sally Port Three the only one not blocked," he said. "We're all going out that way."

"Remember," said a Venerian voice. "Your first job is to protect this ship against counterattack."

"Roger." If they wanted to give him offensively unnecessary reminders, now was not the time for argument. He broke contact with the bridge and hurried after his men.

The other two ships were to send their boarders fighting toward the strategic housing, somewhere deep in the berserker's center. The marines from the *Solar Spot* were to try to find and save any prisoners the berserker might hold. A berserker usually held prisoners near its surface, so the first search would be made by squads spreading out under the hundreds of square kilometers of hull.

In the dark chaos of wrecked machinery just outside the sally port there was no sign yet of counterattack. The berserkers had supposedly not been built to fight battles inside their own metallic skins—on this rested the fleet's hopes for success in a major battle.

Mitch left forty men to defend the hull of the *Spot*, and himself led a squad of ten out into the labyrinth. There was no use setting himself up in a command post—communications in here would be impossible, once out of line-of-sight.

The first man in each searching squad carried a mass spectrometer, an instrument that would detect the stray atoms of oxygen bound to leak from compartments where living beings breathed. The last man wore on one hand a device to blaze a trail with arrows of luminous paint; without a trail, getting lost in this three-dimensional maze would be almost inevitable.

"Got a scent, Captain," said Mitch's spectrometer man, after five minutes' casting through the squad's assigned sector of the dying berserker.

"Keep on it." Mitch was second in line, his carbine ready.

The detector man led the way through a dark and weightless mechanical universe. Several times he paused to adjust his instrument and wave its probe. Otherwise the pace was rapid; men trained in free fall, and given plenty of holds to thrust and steer by, could move faster than runners.

A towering, multijointed shape rose up before the detector man, brandishing blue-white welding arcs like swords. Before Mitch was aware of aiming, his carbine fired twice. The shells ripped the machine open and pounded it backward; it was only some semirobotic maintenance device, not built for fighting.

The detector man had nerve; he plunged straight on. The squad kept pace with him, their suit lights scouting out unfamiliar shapes and distances, cutting knife-edge shadows in the vacuum, glare and darkness mellowed only by reflection.

"Getting close!"

And then they came to it. It was a place like the top of a huge dry well. An ovoid like a ship's launch, very thickly armored, had apparently been raised through the well from deep inside the berserker, and now clamped to a dock.

"It's the launch, it's oozing oxygen."

"Captain, there's some kind of airlock on this side. Outer door's open."

It looked like the smooth and easy entrance of a trap.

"Keep your eyes open." Mitch went into the airlock. "Be ready to blast me out of here if I don't show in one minute."

It was an ordinary airlock, probably cut from some human spaceship. He shut himself inside, and then got the inner door open.

Most of the interior was a single compartment. In the center was an acceleration couch, holding a nude female mannikin. He drifted near, saw that her head had been depilated and that there were tiny beads of blood still on her scalp, as if probes had just been withdrawn.

When his suit lamp hit her face she opened dead blue staring eyes, blinking mechanically. Still not sure that he was looking at a living human being, Mitch drifted beside her and touched her arm with metal fingers. Then all at once her face became human, her eyes coming from death through nightmare to reality. She saw him and cried out. Before he could free her there were crystal drops of tears in the weightless air.

Listening to his rapid orders, she held one hand modestly in front of her, and the other over her raw scalp. Then she nodded, and took into her mouth the end of a breathing tube that would dole air from Mitch's suit tank. In a few more seconds he had her wrapped in a clinging, binding rescue blanket, temporary proof against vacuum and freezing.

The detector man had found no oxygen source except the launch. Mitch ordered his squad back along their luminous trail.

At the sally port, he heard that things were not going well with the attack. Real fighting robots were defending the strategic housing; at least eight men had been killed down there. Two more ships were going to ram and board.

Mitch carried the girl through the sally port and three more friendly hatches. The monstrously thick hull of the ship shuddered and sang around him; the *Solar Spot*, her mission accomplished, boarders retrieved, was being withdrawn. Full weight came back, and light.

"In here, Captain."

QUARANTINE, said the sign. A berserker's prisoner might have been deliberately infected with something contagious; men now knew how to deal with such tricks.

Inside the infirmary he set her down. While medics and nurses scrambled around, he unfolded the blanket from the girl's face, remembering to leave it curled over her shaven head, and opened his own helmet.

"You can spit out the tube now," he told her, in his rasping voice.

She did so, and opened her eyes again.

"Oh, are you real?" she whispered. Her hand pushed its way out of the blanket folds and slid over his armor. "Oh, let me touch a human being again!" Her hand moved up to his exposed face and gripped his cheek and neck.

"I'm real enough. You're all right now."

One of the bustling doctors came to a sudden, frozen halt, staring at the girl. Then he spun around on his heel and hurried away. What was wrong?

Others sounded confident, reassuring the girl as they ministered to her. She wouldn't let go of Mitch, she became nearly hysterical when they tried gently to separate her from him.

"I guess you'd better stay," a doctor told him.

He sat there holding her hand, his helmet and gauntlets off. He looked away while they did medical things to her. They still spoke easily; he thought they were finding nothing much wrong.

"What's your name?" she asked him when the medics were through for the moment. Her head was bandaged; her slender arm came from beneath the sheets to maintain contact with his hand.

"Mitchell Spain." Now that he got a good look at her, a living young human female, he was in no hurry at all to get away. "What's yours?"

A shadow crossed her face. "I'm—not sure."

There was a sudden commotion at the infirmary door; High Commander Karlsen was pushing past protesting doctors into the QUARANTINE area. Karlsen came on until he was standing beside Mitch, but he was not looking at Mitch.

"Chris," he said to the girl. "Thank God." There were tears in his eyes.

The Lady Christina de Dulcin turned her eyes from Mitch to Johann Karlsen, and screamed in abject terror.

"Now, Captain. Tell me how you found her and brought her out."

Mitch began his tale. The two men were alone in Karlsen's monastic cabin, just off the flagship's bridge. The fight was over, the berserker a torn and harmless hulk. No other prisoners had been aboard it.

"They planned to send her back to me," Karlsen said, staring into space, when Mitch had finished his account. "We attacked before it could launch her toward us. It kept her out of the fighting, and sent her back to me."

Mitch was silent.

Karlsen's red-rimmed eyes fastened on him. "She's been brainwashed, Poet. It can be done with some permanence, you know, when advantage is taken of the subject's natural tendencies. I suppose she's never thought too much of me. There were political reasons for her to consent to our marriage . . . she screams when the doctors even mention my name. They tell me it's possible that horrible things were done to her by some man-shaped machine made to look like me. Other people are tolerable, to a degree. But it's you she wants to be alone with, you she needs."

"She cried out when I left her, but—me?"

"The natural tendency, you see. For her to . . . love . . . the man who saved her. The machines set her mind to fasten all the joy of rescue upon the first male human face she saw. The doctors assure me such things can be done. They've given her drugs, but even in sleep the instruments show her nightmares, her pain, and she cries out for you. What do you feel toward her?"

"Sir, I'll do anything I can. What do you want of me?"

"I want you to stop her suffering, what else?" Karlsen's voice rose to a ragged shout. "Stay alone with her, stop her pain if you can!"

He got himself under a kind of control. "Go on. The doctors will take you in. Your gear will be brought over from the *Solar Spot*."



Mitch stood up. Any words he could think of sounded in his mind like sickening attempts at humor. He nodded, and hurried out.

"This is your last chance to join us," said the Venerian, Salvador, looking up and down the dim corridors of this remote outer part of the flagship. "Our patience is worn, and we will strike soon. With the De Dulcin woman in her present condition, Nogara's brother is doubly unfit to command."

The Venerian must be carrying a pocket spy-jammer; a multisonic whine was setting Hemphill's teeth on edge. And so was the Venerian.

"Karlsen is vital to the human cause whether we like him or not," Hemphill said, his own patience about gone, but his voice still calm and reasonable. "Don't you see to what lengths the berserkers have gone to get at him? They sacrificed a perfectly good machine just to deliver his brainwashed woman here, to attack him psychologically."

"Well. If that is true they have succeeded. If Karlsen had any value before, now he will be able to think of nothing but his woman and the Martian."

Hemphill sighed. "Remember, he refused to hurry the fleet to Atsog to try to save her. He hasn't failed yet. Until he does, you and the others must give up this plotting against him."

Salvador backed away a step, and spat on the deck in rage. A calculated display, thought Hemphill.

"Look to yourself, Earthman!" Salvador hissed. "Karlsen's days are numbered, and the days of those who support him too willingly!" He spun around and walked away.

"Wait!" Hemphill called, quietly. The Venerian stopped and turned, with an air of arrogant reluctance. Hemphill shot him through the heart with a laser pistol. The weapon made a splitting, crackling noise in atmosphere.

Hemphill prodded the dying man with his toe, making sure no second shot was needed. "You were good at talking," he mused aloud. "But too devious to lead the fight against the damned machines."

He bent to quickly search the body, and stood up elated. He had found a list of officers' names. Some few were

underlined, and some, including his own, followed by a question mark. Another paper bore a scribbled compilation of the units under command of certain Venerian officers. There were a few more notes; altogether, plenty of evidence for the arrest of the hard-core plotters. It might tend to split the fleet, but—

Hemphill looked up sharply, then relaxed. The man approaching was one of his own, whom he had stationed nearby.

"We'll take these to the High Commander at once." Hemphill waved the papers. "There'll be just time to clean out the traitors and reorganize command before we face battle."

Yet he delayed for another moment, staring down at Salvador's corpse. The plotter had been overconfident and inept, but still dangerous. Did some sort of luck operate to protect Karlsen? Karlsen himself did not match Hemphill's ideal of a war leader; he was not as ruthless as machinery or as cold as metal. Yet the damned machines made great sacrifices to attack him.

Hemphill shrugged, and hurried on his way.

"Mitch, I do love you. I know what the doctors say it is, but what do they really know about me?"

Christina de Dulcin, wearing a simple blue robe and turbanlike headdress, now reclined on a luxurious acceleration couch, in what was nominally the sleeping room of the High Commander's quarters. Karlsen had never occupied the place, preferring a small cabin.

Mitchell Spain sat three feet from her, afraid to so much as touch her hand, afraid of what he might do, and what she might do. They were alone, and he felt sure they were unwatched. The Lady Christina had even demanded assurances against spy devices and Karlsen had sent his pledge. Besides, what kind of ship would have spy devices built into its highest officers' quarters?

A situation for bedroom farce, but not when you had to live through it. The man outside, taking the strain, had more than two hundred ships dependent on him now, and many

human planets would be lifeless in five years if the coming battle failed.

"What do you really know about me, Chris?" he asked.

"I know you mean life itself to me. Oh, Mitch, I have no time now to be coy, and mannered, and every millimeter a lady. I've been all those things. And—once—I would have married a man like Karlsen, for political reasons. But all that was before Atsog."

Her voice dropped on the last word, and her hand on her robe made a convulsive grasping gesture. He had to lean forward and take it.

"Chris, Atsog is in the past, now."

"Atsog will never be over, completely over, for me. I keep remembering more and more of it. Mitch, the machines made us watch while they skinned General Bradin alive. I saw that. I can't bother with silly things like politics anymore, life is too short for them. And I no longer fear anything, except driving you away . . ."

He felt pity, and lust, and half a dozen other maddening things.

"Karlsen's a good man," he said finally.

She repressed a shudder. "I suppose," she said in a controlled voice. "But Mitch, what do you feel for me? Tell the truth—if you don't love me now, I can hope you will, in time." She smiled faintly, and raised a hand. "When my silly hair grows back."

"Your silly hair." His voice almost broke. He reached to touch her face, then pulled his fingers back as from a flame. "Chris, you're his girl, and too much depends on him."

"I was never his."

"Still . . . I can't lie to you, Chris; maybe I can't tell you the truth, either, about how I feel. The battle's coming, everything's up in the air, paralyzed. No one can plan . . ." He made an awkward, uncertain gesture.

"Mitch." Her voice was understanding. "This is terrible for you, isn't it? Don't worry, I'll do nothing to make it worse. Will you call the doctor? As long as I know you're somewhere near, I think I can rest, now."



Karlsen studied Salvador's papers in silence for some minutes, like a man pondering a chess problem. He did not seem greatly surprised.

"I have a few dependable men standing ready," Hemphill finally volunteered. "We can quickly—arrest—the leaders of this plot."

The blue eyes searched him. "Commander, was Salvador's killing truly necessary?"

"I thought so," said Hemphill blandly. "He was reaching for his own weapon."

Karlsen glanced once more at the papers and reached a decision.

"Commander Hemphill, I want you to pick four ships, and scout the far edge of the Stone Place nebula. We don't want to push beyond it without knowing where the enemy is, and give him a chance to get between us and Sol. Use caution—to learn the general location of the bulk of his fleet is enough."

"Very well." Hemphill nodded. The reconnaissance made sense; and if Karlsen wanted to get Hemphill out of the way, and deal with his human opponents by his own methods, well, let him. Those methods often seemed soft-headed to Hemphill, but they seemed to work for Karlsen. If the damned machines for some reason found Karlsen unendurable, then Hemphill would support him, to the point of cheerful murder and beyond.

What else really mattered in the universe, besides smashing the damned machines?

Mitch spent hours every day alone with Chris. He kept from her the wild rumors which circulated throughout the fleet. Salvador's violent end was whispered about, and guards were posted near Karlsen's quarters. Some said Admiral Kemal was on the verge of open revolt.

And now the Stone Place was close ahead of the fleet, blanking out half the stars; ebony dust and fragments, like a million shattered planets. No ship could move through the Stone Place; every cubic kilometer of it held enough matter to prevent C-plus travel or movement in normal space at any effective speed.

The fleet headed toward one sharply defined edge of the cloud, around which Hemphill's scouting squadron had already disappeared.

"She grows a little saner, a little calmer, every day," said Mitch, entering the High Commander's small cabin.

Karlsen looked up from his desk. The papers before him seemed to be lists of names, in Venerian script.

"I thank you for that word, Poet. Does she speak of me?"

"No."

They eyed each other, the poor and ugly cynic, the anointed and handsome Believer.

"Poet," Karlsen asked suddenly, "how do you deal with deadly enemies, when you find them in your power?"

"We Martians are supposed to be a violent people. Do you expect me to pass sentence on myself?"

Karlsen appeared not to understand, for a moment.

"Oh. No. I was not speaking of—you and me and Chris. Not personal affairs. I suppose I was only thinking aloud, asking for a sign."

"Then don't ask me, ask your God. But didn't he tell you to forgive your enemies?"

"He did." Karlsen nodded, slowly and thoughtfully. "You know, he wants a lot from us. A real hell of a lot."

It was a peculiar sensation, to become suddenly convinced that the man you were watching was a genuine, nonhypocritical Believer. Mitch was not sure he had ever met the like before.

Nor had he ever seen Karlsen quite like this—passive, waiting; asking for a sign. As if there was in fact some Purpose outside the layers of a man's own mind, that could inspire him. Mitch thought about it. If . . .

But that was all mystical nonsense.

Karlsen's communicator sounded. Mitch could not make out what the other voice was saying, but he watched the effect on the High Commander. Energy and determination were coming back, there were subtle signs of the return of force, of the tremendous conviction of being right. It was like watching the gentle glow when a fusion power lamp was ignited.

"Yes," Karlsen was saying. "Yes, well done."

Then he raised the Venerian papers from his desk; it was as if he raised them only by force of will, his fingers only gesturing beneath them.

"The news is from Hemphill," he said to Mitch, almost absently. "The berserker fleet is just around the edge of the Stone Place from us. Hemphill estimates they are two hundred strong, and thinks they are unaware of our presence. We attack at once. Man your battle station, Poet; God be with you." He turned back to his communicator. "Ask Admiral Kemal to my cabin at once. Tell him to bring his staff. In particular—" He glanced at the Venerian papers and read off several names.

"Good luck to you, sir." Mitch had delayed to say that. Before he hurried out, he saw Karlsen stuffing the Venerian papers into his trash disintegrator.

Before Mitch reached his own cabin, the battle horns were sounding. He had armed and suited himself and was making his way back through the suddenly crowded narrow corridors toward the bridge, when the ship's speakers boomed suddenly to life, picking up Karlsen's voice:

"... whatever wrongs we have done you, by word, or deed, or by things left undone, I ask you now to forgive. And in the name of every man who calls me friend or leader, I pledge that any grievance we have against you, is from this moment wiped from memory."

Everyone in the crowded passage hesitated in the rush for battle stations. Mitch found himself staring into the eyes of a huge, well-armed Venerian ship's policeman, probably here on the flagship as some officer's bodyguard.

There came an amplified cough and rumble, and then the voice of Admiral Kemal:

"We—we are brothers, Esteeler and Venerian, and all of us. All of us together now, the living against the berserker." Kemal's voice rose to a shout. "Destruction to the damned machines, and death to their builders! Let every man remember Atsog!"

"Remember Atsog!" roared Karlsen's voice.

In the corridor there was a moment's hush, like that before

a towering wave smites down. Then a great insensate shout. Mitch found himself with tears in his eyes, yelling something.

"Remember General Bradin," cried the big Venerian, grabbing Mitch and hugging him, lifting him, armor and all. "Death to his flayers!"

"Death to the flayers!" The shout ran like a flame through the corridor. No one needed to be told that the same things were happening in all the ships of the fleet. All at once there was no room for anything less than brotherhood, no time for anything less than glory.

"Destruction to the damned machines!"

Near the flagship's center of gravity was the bridge, only a dais holding a ring of combat chairs, each with its clustered controls and dials.

"Boarding Coordinator ready," Mitch reported, strapping himself in.

The viewing sphere near the bridge's center showed the human advance, in two leapfrogging lines of over a hundred ships each. Each ship was a green dot in the sphere, positioned as truthfully as the flagship's computers could manage. The irregular surface of the Stone Place moved beside the battle lines in a series of jerks; the flagship was traveling by C-plus microjumps, so the presentation in the viewing sphere was a succession of still pictures at second-and-a-half intervals. Slowed by the mass of their C-plus cannon, the six fat green symbols of the Venerian heavy weapons ships labored forward, falling behind the rest of the fleet.

In Mitch's headphones someone was saying: "In about ten minutes we can expect to reach—"

The voice died away. There was a red dot in the sphere already, and then another, and then a dozen, rising like tiny suns around the bulge of dark nebula. For long seconds the men on the bridge were silent while the berserker advance came into view. Hemphill's scouting patrol must, after all, have been detected, for the berserker fleet was not cruising, but attacking. There was a battlenet of a hundred or more red dots, and now there were two nets,

leapfrogging in and out of space like the human lines. And still the red berserkers rose into view, their formations growing, spreading out to englobe and crush a smaller fleet.

"I make it three hundred machines," said a pedantic and somewhat effeminate voice, breaking the silence with cold precision. Once, the mere knowledge that three hundred berserkers existed might have crushed all human hopes. In this place, in this hour, fear itself could frighten no one.

The voices in Mitch's headphones began to transact the business of opening a battle. There was nothing yet for him to do but listen and watch.

The six heavy green marks were falling further behind; without hesitation, Karlsen was hurling his entire fleet straight at the enemy center. The foe's strength had been underestimated, but it seemed the berserker command had made a similar error, because the red formations too were being forced to regroup, spread themselves wider.

The distance between fleets was still too great for normal weapons to be effective, but the laboring heavy-weapon ships with their C-plus cannon were now in range, and they could fire through friendly formations almost as easily as not. At their volley Mitch thought he felt space jar around him; it was some secondary effect that the human brain notices, really only wasted energy. Each projectile, blasted by explosives to a safe distance from its launching ship, mounted its own C-plus engine, which then accelerated the projectile while it flickered in and out of reality on microtimers.

Their leaden masses magnified by velocity, the huge slugs skipped through existence like stones across water, passing like phantoms through the fleet of life, emerging fully into normal space only as they approached their target, traveling then like De Broglie wavicles, their matter churning internally with a phase velocity greater than that of light.

Almost instantly after Mitch had felt the slugs' ghostly passage, one red dot began to expand and thin into a cloud, still tiny in the viewing sphere. Someone gasped. In a few more moments the flagship's own weapons, beams and missiles, went into action.



The enemy center stopped, two million miles ahead, but his flanks came on, smoothly as the screw of a vast meat-grinder, threatening englobement of the first line of human ships.

Karlsen did not hesitate, and a great turning point flickered past in a second. The life-fleet hurtled on, deliberately into the trap, straight for the hinge of the jaws.

Space twitched and warped around Mitchell Spain. Every ship in the fleet was firing now, and every enemy answering, and the energies released plucked through his armor like ghostly fingers. Green dots and red vanished from the sphere, but not many of either as yet.

The voices in Mitch's helmet slackened, as events raced into a pattern that shifted too fast for human thought to follow. Now for a time the fight would be computer against computer, faithful slave of life against outlaw, neither caring, neither knowing.

The viewing sphere on the flagship's bridge was shifting ranges almost in a flicker. One swelling red dot was only a million miles away, then half of that, then half again. And now the flagship came into normal space for the final lunge of the attack, firing itself like a bullet at the enemy.

Again the viewer switched to a closer range, and the chosen foe was no longer a red dot, but a great forbidding castle, tilted crazily, black against the stars. Only a hundred miles away, then half of that. The velocity of closure slowed to less than a mile a second. As expected, the enemy was accelerating, trying to get away from what must look to it like a suicide charge. For the last time Mitch checked his chair, his suit, his weapons. *Chris, be safe in a cocoon.* The berserker swelled in the sphere, gun-flashes showing now around his steel-ribbed belly. A small one, this, maybe only ten times the flagship's bulk. Always a rotten spot to be found, in every one of them, old wounds under their ancient skins. Try to run, you monstrous obscenity, try in vain.

Closer, twisting closer. Now!

Lights all gone, falling in the dark for one endless second—

Impact. Mitch's chair shook him, the gentle pads inside his armor battering and bruising him. The expendable

ramming prow would be vaporizing, shattering and crumpling, dissipating energy down to a level the battering-ram ship could endure.

When the crashing stopped, noise still remained, a whining, droning symphony of stressed metal and escaping air and gases like sobbing breathing. The great machines were locked together now, half the length of the flagship embedded in the berserker.

A rough ramming, but no one on the bridge was injured. Damage Control reported that the expected air leaks were being controlled. Gunnery reported that it could not yet extend a turret inside the wound. Drive reported ready for a maximum effort.

Drive!

The ship twisted in the wound it had made. This could be victory now, tearing the enemy open, sawing his metal bowels out into space. The bridge twisted with the structure of the ship, this warship that was more solid metal than anything else. For a moment, Mitch thought he could come close to comprehending the power of the engines men had built.

"No use, Commander. We're wedged in."

The enemy endured. The berserker memory would already be searched, the plans made, the counterattack on the flagship coming, without fear or mercy.

The Ship Commander turned his head to look at Johann Karlsen. It had been foreseen that once a battle reached this melee stage there would be little for a High Commander to do. Even if the flagship itself were not half-buried in an enemy hull, all space nearby was a complete inferno of confused destruction, through which any meaningful communication would be impossible. If Karlsen was helpless now, neither could the berserker computers still link themselves into a single brain.

"Fight your ship, sir" said Karlsen. He leaned forward, gripping the arms of his chair, gazing at the clouded viewing sphere as if trying to make sense of the few flickering lights within it.

The Ship Commander immediately ordered his marines to board.

Mitch saw them out the sally ports. Then, sitting still was worse than any action. "Sir, I request permission to join the boarders."

Karlsen seemed not to hear. He disqualified himself, for now, from any use of power; especially to set Mitchell Spain in the forefront of the battle or to hold him back.

The Ship Commander considered. He wanted to keep a Boarding Coordinator on the bridge; but experienced men would be desperately needed in the fighting. "Go, then. Do what you can to help defend our sally ports."

This berserker defended itself well with soldier-robots. The marines had hardly gotten away from the embedded hull when the counterattack came, cutting most of them off.

In a narrow zigzag passage leading out to the port near which fighting was heaviest, an armored figure met Mitch. "Captain Spain? I'm Sergeant Broom, acting Defense Commander here. Bridge says you're to take over. It's a little rough. Gunnery can't get a turret working inside the wound. The clankers have all kinds of room to maneuver, and they keep coming at us."

"Let's get out there, then."

The two of them hurried forward, through a passage that became only a warped slit. The flagship was bent here, a strained swordblade forced into a chink of armor.

"Nothing rotten here," said Mitch, climbing at last out of the sally port. There were distant flashes of light, and the sullen glow of hot metal nearby, by which to see braced girders, like tall buildings among which the flagship had jammed itself.

"Eh? No." Broom must be wondering what he was talking about. But the sergeant stuck to business, pointing out to Mitch where he had about a hundred men disposed among the chaos of torn metal and drifting debris. "The Cankers don't use guns. They just drift in, sneaking, or charge in a wave, and get us hand-to-hand, if they can. Last wave we lost six men."

Whining gusts of gas came out of the deep caverns, and

scattered blobs of liquid, along with flashes of light, and deep shudders through the metal. The damned thing might be dying, or just getting ready to fight; there was no way to tell.

"Any more of the boarding parties get back?" Mitch asked.

"No. Doesn't look good for 'em."

"Port Defense, this is Gunnery," said a cheerful radio voice. "We're getting the eighty-degree forward turret working."

"Well, then use it!" Mitch rasped back. "We're inside, you can't help hitting something."

A minute later, searchlights moved out from doored recesses in the flagship's hull, and stabbed into the great chaotic cavern.

"Here they come again!" yelled Broom. Hundreds of meters away, beyond the melted stump of the flagship's prow, a line of figures drifted nearer. The searchlights questioned them; they were not suited men. Mitch was opening his mouth to yell at Gunnery when the turret fired, throwing a raveling skein of shellbursts across the advancing rank of machines.

But more ranks were coming. Men were firing in every direction at machines that came clambering, jetting, drifting, in hundreds.

Mitch took off from the sally port, moving in diving weightless leaps, touring the outposts, shifting men when the need arose.

"Fall back when you have to!" he ordered, on Command radio. "Keep them from the sally ports!"

His men were facing no lurching conscription of mechanized pipefitters and moving welders; these devices were built, in one shape or another, to fight.

As he dove between outposts, a thing like a massive chain looped itself to intercept Mitch; he broke it in half with his second shot. A metallic butterfly darted at him on brilliant jets, and away again, and he wasted four shots at it.

He found an outpost abandoned, and started back toward the sally port, radioing ahead: "Broom, how is it there?"

"Hard to tell, Captain. Squad leaders, check in again, squad leaders—"

The flying thing darted back; Mitch sliced it with his laser

pistol. As he approached the sally port, weapons were firing all around him. The interior fight was turning into a microcosm of the confused struggle between fleets. He knew that still raged, for the ghostly fingers of heavy weapons still plucked through his armor continually.

"Here they come again—Dog, Easy, Nine-o'clock."

Coordinates of an attack straight at the sally port. Mitch found a place to wedge himself, and raised his carbine again. Many of the machines in this wave bore metal shields before them. He fired and reloaded, again and again.

The flagship's one usable turret flamed steadily, and an almost continuous line of explosions marched across the machines' ranks in vacuum-silence, along with a traversing searchlight spot. The automatic cannons of the turret were far heavier than the marines' hand weapons; almost anything the cannon hit dissolved in radii of splinters. But suddenly there were machines on the flagship's hull, attacking the turret from its blind side.

Mitch called out a warning and started in that direction. Then all at once the enemy was around him. Two things caught a nearby man in their crablike claws, trying to tear him apart between them. Mitch fired quickly at the moving figures and hit the man, blowing one leg off.

A moment later one of the crab-machines was knocked away and broken by a hailstorm of shells. The other one beat the armored man to pieces against a jagged girder, and turned to look for its next piece of work.

This machine was armored like a warship. It spotted Mitch and came for him, climbing through drifting rubble, shells and slugs rocking it but not crippling. It gleamed in his suit lights, reaching out bright pincers, as he emptied his carbine at the box where its cybernetics should be.

He drew his pistol and dodged, but like a falling cat it turned at him. It caught him by the left hand and the helmet, metal squealing and crunching. He thrust the laser pistol against what he thought was the brainbox, and held the trigger down. He and the machine were drifting, it could get no leverage for its strength. But it held him, working on his armored hand and helmet.

Its brainbox, the pistol, and the fingers of his right gauntlet, all were glowing hot. Something molten spattered across his faceplate, the glare half-blinding him. The laser burned out, fusing its barrel to the enemy in a radiant weld.

His left gauntlet, still caught, was giving way, being crushed—

—*his hand*—

Even as the suit's hypos and tourniquet bit him, he got his burned right hand free of the laser's butt and reached the plastic grenades at his belt.

His left arm was going wooden, even before the claw released his mangled hand and fumbled slowly for a fresh grip. The machine was shuddering all over, like an agonized man. Mitch whipped his right arm around to plaster a grenade on the far side of the brainbox. Then with arms and legs he strained against the crushing, groping claws. His suit-servos whined with overload, being overpowered, two seconds, close eyes, three—

The explosion stunned him. He found himself drifting free. Lights were flaring. Somewhere was a sally port; he had to get there and defend it.

His head cleared slowly. He had the feeling that someone was pressing a pair of fingers against his chest. He hoped that was only some reaction from the hand. It was hard to see anything, with his faceplate still half-covered with splashed metal, but at last he spotted the flagship hull. A chunk of something came within reach, and he used it to propel himself toward the sally port, spinning weakly. He dug out a fresh clip of ammunition and then realized his carbine was gone.

The space near the sally port was foggy with shattered mechanism; and there were still men here, firing their weapons out into the great cavern. Mitch recognized Broom's armor in the flaring lights, and got a welcoming wave.

"Captain! They've knocked out the turret, and most of the searchlights. But we've wrecked an awful lot of 'em—how's your arm?"

"Feels like wood. Got a carbine?"

"Say again?"

Broom couldn't hear him. Of course, the damned thing had squeezed his helmet and probably wrecked his radio transmitter. He put his helmet against Broom's and said: "You're in charge. I'm going in. Get back out if I can."

Broom was nodding, guiding him watchfully toward the port. Gun flashes started up around them thick and fast again, but there was nothing he could do about that, with two steady dull fingers pressing into his chest. Lightheaded. Get back out? Who was he fooling? Lucky if he got in without help.

He went into the port, past the interior guards' niches, and through an airlock. A medic took one look and came to help him.

Not dead yet, he thought, aware of people and lights around him. There was still some part of a hand wrapped in bandages on the end of his left arm. He noticed another thing, too; he felt no more ghostly plucking of space-bending weapons. Then he understood that he was being wheeled out of surgery, and that people hurrying by had triumph in their faces. He was still too groggy to frame a coherent question, but words he heard seemed to mean that another ship had joined in the attack on this berserker. That was a good sign, that there were spare ships around.

The stretcher bearers set him down near the bridge, in an area that was being used as a recovery room; there were many wounded strapped down and given breathing tubes against possible failure of gravity or air. Mitch could see signs of battle damage around him. How could that be, this far inside the ship. The sally ports had been held.

There was a long gravitic shudder. "They've disengaged her," said someone nearby.

Mitch passed out for a little while. The next thing he could see was that people were converging on the bridge from all directions. Their faces were happy and wondering, as if some joyful signal had called them. Many of them carried what seemed to Mitch the strangest assortment of burdens: weapons, books, helmets, bandages, trays of food, bottles, even bewildered children, who must have been just rescued from the berserker's grip.

Mitch hitched himself up on his right elbow, ignoring the twinges in his bandaged chest and in the blistered fingers of his right hand. Still he could not see the combat chairs of the bridge, for the people moving between.

From all the corridors of the ship the people came, solemnly happy, men and women crowding together in the brightening lights.

An hour or so later, Mitch awoke again to find that a viewing sphere had been set up nearby. The space where the battle had been was a jagged new nebula of gaseous metal, a few little fireplace coals against the ebony folds of the Stone Place.

Someone near Mitch was tiredly, but with animation, telling the story to a recorder:

"—fifteen ships and about eight thousand men lost are our present count. Every one of our ships seemed to be damaged. We estimate ninety—that's nine-zero—berserkers destroyed. Last count was a hundred and seventy-six captured, or wrecking themselves. It's still hard to believe. A day like this . . . we must remember that thirty or more of them escaped, and are as deadly as ever. We will have to go on hunting and fighting them for a long time, but their power as a fleet has been broken. We can hope that capturing this many machines will at last give us some definite lead on their origin. Ah, best of all, some twelve thousand human prisoners have been freed.

"Now, how to explain our success? Those of us not Believers of one kind or another will say victory came because our hulls were newer and stronger, our long-range weapons new and superior, our tactics unexpected by the enemy—and our marines able to defeat anything the berserkers could send against them.

"Above all, history will give credit to High Commander Karlsen, for his decision to attack, at a time when his reconciliation with the Venerians had inspired and united the fleet. The High Commander is here now, visiting the wounded who lie in rows . . ."

Karlsen's movements were so slow and tired that Mitch thought he too might be wounded, though no bandages were



visible. He shuffled past the ranked stretchers, with a word or nod for each of the wounded. Beside Mitch's pallet he stopped, as if recognition was a shock.

"She's dead, Poet," were the first words he said.

The ship turned under Mitch for a moment; then he could be calm, as if he had expected to hear this. The battle had hollowed him out.

Karlsen was telling him, in a withered voice, how the enemy had forced through the flagship's hull a kind of torpedo, an infernal machine that seemed to know how the ship was designed, a moving atomic pile that had burned its way through the High Commander's quarters and almost to the bridge before it could be stopped and quenched.

The sight of battle damage here should have warned Mitch. But he hadn't been able to think. Shock and drugs kept him from thinking or feeling much of anything now, but he could see her face, looking as it had in the gray deadly place from which he had rescued her.

Rescued.

"I am a weak and foolish man," Karlsen was saying. "But I have never been your enemy. Are you mine?"

"No. You forgave all your enemies. Got rid of them. Now you won't have any, for a while. Galactic hero. But, I don't envy you."

"No. God rest her." But Karlsen's face was still alive, under all the grief and weariness. Only death could finally crush this man. He gave the ghost of a smile. "And now, the second part of the prophecy, hey? I am to be defeated, and to die owning nothing. As if a man could die any other way."

"Karlsen, you're all right. I think you may survive your own success. Die in peace, someday, Still hoping for your Believers' heaven."

"The day I die," Karlsen turned his head slowly, seeing all the people around him. "I'll remember this day. This glory, this victory for all men." Under the weariness and grief he still had his tremendous assurance—not of being right, Mitch thought now, but of being committed to right.

"Poet, when you are able, come and work for me."

"Someday, maybe. Now I can live on the battle bounty.

And I have work. If they can't grow back my hand—why, I can write with one." Mitch was suddenly very tired.

A hand touched his good shoulder. A voice said: "God be with you." Johann Karlsen moved on.

Mitch wanted only to rest. Then, to his work. The world was bad, and all men were fools—but there were men who would not be crushed. And that was a thing worth telling.

*After every battle, even a victory, there are the wounded. Injured flesh can heal. A hand can be replaced, perhaps. An eye can be bandaged; even a damaged brain can to some extent be repaired. But there are wounds too deep for any surgeon's knife to probe. There are doors that will not open from the outside.*

*I found a mind divided.*

## WHAT T AND I DID

My first awareness is of location. I am in a large conical room inside some vast vehicle, hurtling through space. The world is familiar to me, though I am new.

"He's awake!" says a black-haired young woman, watching me with frightened eyes. Half a dozen people in disheveled clothing, the three men, long unshaven, gather slowly in my field of vision.

My field of vision? My left hand comes up to feel about my face, and its fingers find my left eye covered with a patch.

"Don't disturb that!" says the tallest of the men. Probably he was once a distinguished figure. He speaks sharply, yet there is still a certain diffidence in his manner, as if I am a person of importance. But I am only . . . who?

"What's happened?" I ask. My tongue has trouble finding even the simplest words. My right arm lies at my side as if forgotten, but it stirs at my thought, and with its help I raise myself to a sitting position, provoking an onrush of pain through my head, and dizziness.

Two of the women back away from me. A stout young man puts a protective arm around each of them. These people are familiar to me, but I cannot find their names.

"You'd better take it easy," says the tallest man. His hands, a doctor's, touch my head and my pulse, and ease me back onto the padded table.

Now I see that two tall humanoid robots stand flanking

me. I expect that at any moment the doctor will order them to wheel me away to my hospital room. Still, I know better. This is no hospital. The truth will be terrible when I remember it.

"How do you feel?" asks the third man, an oldster, coming forward to bend over me.

"All right I guess." My speech comes only in poor fragments. "What's happened?"

"There was a battle," says the doctor. "You were hurt, but I've saved your life."

"Well. Good." My pain and dizziness are subsiding.

In a satisfied tone the doctor says: "It's to be expected that you'll have difficulty speaking. Here, try to read this."

He holds up a card, marked with neat rows of what I suppose are letters or numerals. I see plainly the shapes of the symbols, but they mean nothing to me, nothing at all.

"No," I say finally, closing my eye and lying back. I feel plainly that everyone here is hostile to me. Why?

I persist: "What's happened?"

"We're all prisoners, here inside the machine," says the old man's voice. "Do you remember that much?"

"Yes." I nod, remembering. But details are very hazy. I ask: "My name?"

The old man chuckles drily, sounding relieved. "Why not Thad for Thaddeus?"

"Thad?" questions the doctor. I open my eye again. Power and confidence are growing in the doctor, because of something I have done, or have not done? "Your name is Thad," he tells me.

"We're prisoners?" I question him. "Of a machine?"

"Of a berserker machine." He sighs. "Does that mean anything to you?"

Deep in my mind, it means something that will not bear looking at. I am spared; I sleep.

When I awake again, I feel stronger. The table is gone, and I recline on the soft floor of this cabin or cell, this white cone-shaped place of imprisonment. The two robots still stand by me, why I do not know.

"Atsog!" I cry aloud, suddenly remembering more. I had

happened to be on the planet Atsog when the berserkers attacked. The seven of us here were carried out of a deep shelter, with others, by the raiding machines. The memory is vague and jumbled, but totally horrible.

"He's awake!" says someone again. Again the women shrink from me. The old man raises his quivering head to look, from where he and the doctor seem to be in conference. The stout young man jumps to his feet, facing me, fists clenched, as if I had threatened him.

"How are you, Thad?" the doctor calls. After a moment's glance my way, he answers himself: "He's all right. One of you girls help him with some food. Or you, Halsted."

"Help him? God!" The black-haired girl flattens herself against the wall, as far from me as possible. The other two women crouch washing someone's garment in our prison sink. They only look at me and turn back to their washing.

My head is not bandaged for nothing. I must be truly hideous, my face must be monstrously deformed, for three women to look so pitilessly at me.

The doctor is impatient. "Someone feed him, it must be done."

"He'll get no help from me," says the stout young man. "There are limits."

The black-haired girl begins to move across the chamber toward me, everyone watching her.

"You would?" the young man marvels to her, and shakes his head.

She moves slowly, as if she finds walking painful. Doubtless she too was injured in the battle; there are old healing bruises on her face. She kneels beside me, and guides my left hand to help me eat, and gives me water. My right side is not paralyzed, but somehow unresponsive.

When the doctor comes close again, I say: "My eye. Can it see?"

He is quick to push my fingers away from the eyepatch. "For the present, you must use only your left eye. You've undergone brain surgery. If you take off that patch now, the consequences could be disastrous, let me warn you."

I think he is being deceptive about the eyepatch. Why?

The black-haired girl asks me: "Have you remembered anything more?"

"Yes. Before Atsog fell, we heard that Johann Karlsen was leading out a fleet, to defend Sol."

All of them stare at me, hanging on my words. But they must know better than I what happened.

"Did Karlsen win the battle?" I plead. Then I realize we are prisoners still. I weep.

"There've been no new prisoners brought in here," says the doctor, watching me carefully. "I think Karlsen has beaten the berserkers. I think this machine is now fleeing from the human fleet. How does that make you feel?"

"How?" Has my understanding failed with my verbal skills? "Good."

They all relax slightly.

"Your skull was cracked when we bounced around in the battle," the old man tells me. "You're lucky a famous surgeon was here." He nods his head. "The machine wants all of us kept alive, so it can study us. It gave the doctor what he needed to operate, and if he'd let you die, or remain paralyzed, things would've been bad for him. Yessir, it made that plain."

"Mirror?" I ask. I gesture at my face. "I must see. How bad."

"We don't have a mirror," says one of the women at the sink, as if blaming me for the lack.

"Your face? It's not disfigured," says the doctor. His tone is convincing, or would be if I were not certain of my deformity.

I regret that these good people must put up with my monster-presence, compounding all their other troubles. "I'm sorry," I say, and turn from them, trying to conceal my face.

"You really don't know," says the black-haired girl, who has watched me silently for a long time. "He doesn't know!" Her voice chokes. "Oh—Thad. Your face is all right."

True enough, the skin of my face feels smooth and normal when my fingers touch it. The black-haired girl watches me with pity. Rounding her shoulder, from inside her dress, are half-healed marks like the scars of a lash.

"Someone's hurt you," I say, frightened. One of the women at the sink laughs nervously. The young man mutters something. I raise my left hand to hide my hideous face. My right comes up and crosses over to finger the edges of the eyepatch.

Suddenly the young man swears aloud, and points at where a door has opened in the wall.

"The machine must want your advice on something," he tells me harshly. His manner is that of a man who wants to be angry but does not dare. Who am I, what am I, that these people hate me so?

I get to my feet, strong enough to walk. I remember that I am the one who goes to speak alone with the machine.

In a lonely passage it offers me two scanners and a speaker as its visible face. I know that the cubic miles of the great berserker machine surround me, carrying me through space, and I remember standing in this spot before the battle, talking with it, but I have no idea what was said. In fact, I cannot recall the words of any conversation I have ever held.

"The plan you suggested has failed, and Karlsen still functions," says the cracked machine voice, hissing and scraping in the tones of a stage villain.

What could *I* have ever suggested, to this horrible thing?

"I remember very little," I say. "My brain has been hurt."

"If you are lying about your memory, understand that I am not deceived," says the machine. "Punishing you for your plan's failure will not advance my purpose. I know that you live outside the laws of human organization, that you even refused to use a full human name. Knowing you, I trust you to help me against the organization of intelligent life. You will remain in command of the other prisoners. See that your damaged tissues are repaired as fully as possible. Soon we will attack life in a new way."

There is a pause, but I have nothing to say. Then the noisy speaker scrapes into silence, and the scanner-eyes dim. Does it watch me still, in secret? But it said it trusted me, this nightmare enemy said it trusted in my evil to make me its ally.

Now I have enough memory to know it speaks the truth about me. My despair is so great I feel sure that Karlsen did not win the battle. Everything is hopeless, because of the horror inside me. I have betrayed all life. To what bottom of evil have I not descended?

As I turn from the lifeless scanners, my eye catches a movement—my own reflection, in polished metal. I face the flat shiny bulkhead, staring at myself.

My scalp is bandaged, and my left eye. That I knew already. There is some discoloration around my right eye, but nothing shockingly repulsive. What I can see of my hair is light brown, matching my two months' unkempt beard. Nose and mouth and jaw are normal enough. There is no horror in my face.

The horror lies inside me. I have willingly served a berserker.

Like the skin around my right eye, that bordering my left eye's patch is tinged with blue and greenish yellow, hemoglobin spilled under the skin and breaking down, some result of the surgeon's work inside my head.

I remember his warning, but the eyepatch has the fascination for my fingers that a sore tooth has for the tongue, only far stronger. The horror is centered in my evil left eye, and I cannot keep from probing after it. My right hand flies eagerly into action, pulling the patch away.

I blink, and the world is blurred. I see with two eyes, and then I die.

T staggered in the passage, growling and groaning his rage, the black eyepatch gripped in his fingers. He had language now, he had a foul torrent of words, and he used them until his weak breath failed. He stumbled, hurrying through the passage toward the prison chamber, wild to get at the wise punks who had tried such smooth trickery to get rid of him. Hypnotism, or whatever. Re-name him, would they? He'd show them Thaddeus.

T reached the door and threw it open, gasping in his weakness, and walked out into the prison chamber. The doctor's shocked face showed that he realized T was back in control.



"Where's my whip?" T glared around him. "What wise punk hid it?"

The women screamed. Young Halsted realized that the Thaddeus scheme had failed; he gave a kind of hopeless yell and charged, swinging like a crazy man. Of course, T's robot bodyguards were too fast for any human. One of them blocked Halsted's punch with a metal fist, so the stout man yelped and folded up, nursing his hand.

"Get me my whip!" A robot went immediately to reach behind the sink, pull out the knotted plastic cord, and bring it to the master.

T thumped the robot jovially, and smiled at the cringing lot of his fellow prisoners. He ran the whip through his fingers, and the fingers of his left hand felt numb. He flexed them impatiently. "What's a matter, there, Mr. Halsted? Somethin' wrong with your hand? Don't wanna give me a handshake, welcome me back? C'mon let's shake!"

The way Halsted squirmed around on the floor was so funny T had to pause and give himself up to laughing.

"Listen, you people," he said when he got his breath. "My fine friends. The machine says I'm still in charge, see? That little information I gave it about Karlsen did the trick. Boom! Haw haw haw! So you better try to keep me happy, 'cause the machine's still backing me a hunnerd per cent. You, Doc." T's left hand began trembling uncontrollably, and he waved it. "You were gonna change me, huh? You did somethin' nice to fix me up?"

Doc held his surgeon's hands behind him, as if he hoped to protect them. "I couldn't have made a new pattern for your character if I had tried—unless I went all the way, and turned you into a vegetable. That I might have done."

"Now you wish you had. But you were scared of what the machine would do to you. Still, you tried somethin', huh?"

"Yes, to save your life." Doc stood up straight. "Your injury precipitated a severe and almost continuous epileptoid seizure, which the removal of the blood clot from your brain did not relieve. So, I divided the corpus callosum."

T flicked his whip. "What's that mean?"

"You see—the right hemisphere of the brain chiefly controls the left side of the body. While the left hemisphere, the dominant one in most people, controls the right side, and handles most judgments involving symbols."

"I know. When you get a stroke, the clot is on the opposite side from the paralysis."

"Correct." Doc raised his chin. "T, I split your brain, right side from left. That's as simply as I can put it. It's an old but effective procedure for treating severe epilepsy, and the best I could do for you here. I'll take an oath on that, or a lie test—"

"Shuddup! I'll give you a lie test!" T strode shakily forward. "What's gonna happen to me?"

"As a surgeon, I can say only that you may reasonably expect many years of practically normal life."

"Normal!" T took another step, raising his whip. "Why'd you patch my good eye, and start calling me Thaddeus?"

"That was my idea," interrupted the old man, in a quavery voice. "I thought—in a man like yourself, there had to be someone, some component, like Thad. With the psychological pressure we're under here, I thought Thad just might come out, if we gave him a chance in your right hemisphere. It was my idea. If it hurt you any, blame me."

"I will." But T seemed, for the moment, more interested than enraged. "Who is this Thaddeus?"

"You are," said the doctor. "We couldn't put anyone else into your skull."

"Jude Thaddeus," said the old man, "was a contemporary of Judas Iscariot. A similarity of names, but—" He shrugged.

T made a snorting sound, a single laugh. "You figured there was good in me, huh? It just had to come out sometime? Why, I'd say you were crazy—but you're not. Thaddeus was real. He was here in my head for a while. Maybe he's still there, hiding. How do I get at him, huh?" T raised his right hand and jabbed a finger gently at the corner of his right eye. "Ow. I don't like to be hurt. I got a delicate nervous system. Doc, how come his eye is on the right side if everything crosses over? And if it's his eye, how come I feel what happens to it?"

"His eye is on the right because I divided the optic chiasm, too. It's a somewhat complicated—"

"Never mind. We'll show Thaddeus who's boss. He can watch with the rest of you. Hey, Blacky, c'mere. We haven't played together for a while, have we?"

"No," the girl whispered. She hugged her arms around herself, nearly fainting. But she walked toward T. Two months as his slaves had taught them all that obedience was easiest.

"You like this punk Thad, huh?" T whispered, when she halted before him. "You think his face is all right, do you? How about my face? Look at me!"

T saw his own left hand reach out and touch the girl's cheek, gently and lovingly. He could see in her startled face that she felt Thaddeus in the hand; never had her eyes looked this way at T before. T cried out and raised his whip to strike her, and his left hand flew across his body to seize his own right wrist, like a terrier clamping jaws on a snake.

T's right hand still gripped the whip, but he thought the bones of his wrist were cracking. His legs tangled each other and he fell. He tried to shout for help, and could utter only a roaring noise. His robots stood watching. It seemed a long time before the doctor's face loomed over him, and a black patch descended gently upon his left eye.

Now I understand more deeply, and I accept. At first I wanted the doctor to remove my left eye, and the old man agreed, quoting some ancient Believers' book to the effect that an offending eye should be plucked out. An eye would be a small price to rid myself of T.

But after some thought, the doctor refused. "T is yourself," he said at last. "I can't point to him with my scalpel and cut him out, although it seems I helped to separate the two of you. Now you control both sides of the body; once he did." The doctor smiled wearily. "Imagine a committee of three, a troika inside your skull. Thaddeus is one, T another—and the third is the person, the force, that casts the deciding vote. You. That's best I can tell you."

And the old man nodded.

Mostly, I do without the eyepatch now. Reading and

speaking are easier when I use my long-dominant left brain, and I am still Thaddeus—perhaps because I choose to be Thaddeus. Could it be that terribly simple?

Periodically I talk with the berserker, which still trusts in T's greedy outlawry. It means to counterfeit much money, coins and notes, for me to take in a launch to a highly civilized planet, relying on my evil to weaken men there and set them against each other.

But the berserker is too badly damaged to watch its prisoners steadily, or it does not bother. With my freedom to move about I have welded some of the silver coins into a ring, and chilled this ring to superconductivity in a chamber near the berserker's unliving heart.

Halsted tells me we can use this ring, carrying a permanent electric current, to trigger the C-plus drive of the launch that is our prison, and tear our berserker open from inside. We may damage it enough to save ourselves. Or we may all be killed.

But while I live, I Thaddeus, rule myself; and both my hands are gentle, touching long black hair.

*Men might explain their victories by compiled statistics on armament; by the imponderable value of one man; perhaps by the precise pathway chosen by a surgeon's knife.*

*But for some victories no realistic explanation could be found. On one lonely world decades of careless safety had left the people almost without defense; then at last a berserker with all its power came upon them.*

*Behold and share their laughter!*

## MR. JESTER

Defeated in battle the berserker-computers saw that refitting, repair, and the construction of new machines were necessary. They sought out sunless, hidden places, where minerals were available but where men—who were now as often the hunters as the hunted—were not likely to show up. And in such secret places they set up automated shipyards.

To one such concealed shipyard, seeking repair, there came a berserker. Its hull had been torn open in a recent fight, and it had suffered severe internal damage. It collapsed rather than landed on the dark planetoid, beside the half-finished hull of a new machine. Before emergency repairs could be started, the engines of the damaged machine failed, its emergency power failed, and like a wounded living thing it died.

The shipyard-computers were capable of wide improvisation. They surveyed the extent of the damage, weighed various courses of action, and then swiftly began to cannibalize. Instead of embodying the deadly purpose of the new machine in a new force-field brain, following the replication-instructions of the Builders, they took the old brain with many another part from the wreck.

The Builders had not foreseen that this might happen, and so the shipyard-computers did not know that in the

force-field brain of each original berserker there was a safety switch. The switch was there because the original machines had been launched by living Builders, who had wanted to survive while testing their own life-destroying creations.

When the brain was moved from one hull to another, the safety switch reset itself.

The old brain awoke in control of a mighty new machine, of weapons that could sterilize a planet, of new engines to hurl the whole mass far faster than light.

But there was, of course, no Builder present, and no timer, to turn off the simple safety switch.

The jester—the accused jester, but he was as good as convicted—was on the carpet. He stood facing a row of stiff necks and granite faces, behind a long table. On either side of him was a tridi camera. His offenses had been so unusually offensive that the Committee of Duly Constituted Authority themselves, the very rulers of Planet A, were sitting to pass judgment on his case.

Perhaps the Committee members had another reason for this session: planet-wide elections were due in a month. No member wanted to miss the chance for a nonpolitical tridi appearance that would not have to be offset by a grant of equal time for the new Liberal party opposition.

"I have this further item of evidence to present," the Minister of Communication was saying, from his seat on the Committee side of the long table. He held up what appeared at first to be an official pedestrian-control sign, having steady black letters on a blank white background. But the sign read: UNAUTHORIZED PERSONNEL ONLY.

"When a sign is put up," said the MiniCom, "the first day, a lot of people read it." He paused, listening to himself. "That is, a new sign on a busy pedestrian ramp is naturally given great attention. Now in this sign, the semantic content of the first word is confusing in its context."

The President of the Committee—and of the planet—cleared his throat warningly. The MiniCom's fondness for stating truisms made him sound more stupid than he actually was. It seemed unlikely that the Liberals were going to

present any serious challenge at the polls, but there was no point in giving them encouragement.

The lady member of the Committee, the Minister of Education, waved her lorgnette in chubby fingers, seeking attention. She inquired: "Has anyone computed the cost to us all in work-hours of this confusing sign?"

"We're working on it," growled the Minister of Labor, hitching up an overall strap. He glared at the accused. "You do admit causing this sign to be posted?"

"I do." The accused was remembering how so many of the pedestrians on the crowded ramp had smiled, and how some had laughed aloud, not caring if they were heard. What did a few work-hours matter? No one on Planet A was starving any longer.

"You admit that you have never done a thing, really, for your planet or your people?" This question came from the Minister of Defense, a tall, powerful, bemedaled figure, armed with a ritual pistol.

"I don't admit that," said the accused bluntly. "I've tried to brighten people's lives." He had no hope of official leniency anyway. And he knew no one was going to take him offstage and beat him; the beating of prisoners was not authorized.

"Do you even now attempt to defend levity?" The Minister of Philosophy took his ritual pipe from his mouth, and smiled in the bleak permissible fashion, baring his teeth at the challenge of the Universe. "Life is a jest, true; but a grim jest. You have lost sight of that. For years you have harassed society, leading people to drug themselves with levity instead of facing the bitter realities of existence. The pictures found in your possession could do only harm."

The President's hand moved to the video recording cube that lay on the table before him, neatly labeled as evidence. In his droning voice the President asked: "You do admit that these pictures are yours? That you used them to try to get other people to—yield to mirth?"

The prisoner nodded. They could prove everything; he had waived his right to a full legal defense, wanting only to get the trial over with. "Yes, I filled that cube with tapes

and films I sneaked out of libraries and archives. Yes, I showed people its contents."

There was a murmur from the Committee. The Minister of Diet, a skeletal figure with a repellent glow of health in his granite cheeks, raised a hand. "Inasmuch as the accused seems certain to be convicted, may I request in advance that he be paroled in my custody? In his earlier testimony he admitted that one of his first acts of deviation was the avoidance of his community mess. I believe I could demonstrate, using this man, the wonderful effects on character of dietary discipline—"

"I refuse!" the accused interrupted loudly. It seemed to him that the words ascended, growling, from his stomach.

The President rose, to adroitly fill what might have become an awkward silence. "If no member of the Committee has any further questions—? Then let us vote. Is the accused guilty as charged on all counts?"

To the accused, standing with weary eyes closed, the vote sounded like one voice passing along the table: "Guilty. Guilty. Guilty . . ."

After a brief whispered conference with the Minister of Defense, the President passed sentence, a hint of satisfaction in his drone.

"Having rejected a duly authorized parole, the convicted jester will be placed under the orders of the Minister of Defense and sent to solitary beacon duty out on the Approaches, for an indefinite period. This will remove his disruptive influence, while at the same time constraining him to contribute positively to society."

For decades Planet A and its sun had been cut off from all but occasional contact with the rest of the galaxy, by a vast interstellar dust storm that was due to go on for more decades at least. So the positive contribution to society might be doubted. But it seemed that the beacon stations could be used as isolation prisons without imperiling nonexistent shipping or weakening defense against an enemy that never came.

"One thing more," added the President. "I direct that this recording cube be securely fastened around your neck



on a monomolecular cord, in such a way that you may put the cube into a viewer when you choose. You will be alone on the station and no other off-duty activity will be available."

The President faced toward a tridi camera. "Let me assure the public that I derive no satisfaction from imposing a punishment that may seem harsh, and even—imaginative. But in recent years a dangerous levity has spread among some few of our people; a levity all too readily tolerated by some supposedly more solid citizens."

Having gotten in a dig at the newly burgeoning Liberals, a dig he might hope to claim was nonpolitical in intent, the President faced back to the jester. "A robot will go with you to the beacon, to assist you in your duties and see to your physical safety. I assure you the robot will not be tempted into mirth."

The robot took the convicted jester out in a little ship, so far out that Planet A vanished and its sun shrank to a point of brilliance. Out on the edge of the great dusty night of the Approaches, they drew near the putative location of station Z-45, which the MiniDef had selected as being the most dismal and forsaken of those unmanned at present.

There was indeed a metallic object where beacon Z-45 was supposed to be; but when the robot and jester got closer, they saw the object was a sphere some forty miles in diameter. There were a few little bits and pieces floating about it that just might be the remains of Z-45. And now the sphere evidently sighted their ship, for with startling speed it began to move toward them.

Once robots are told what berserkers look like, they do not forget, nor do robots grow slow and careless. But radio equipment can be sloppily maintained, and ever the dust drifts in around the edges of the system of Planet A, impeding radio signals. Before the MiniDef's robot could successfully broadcast an alarm, the forty-mile sphere was very close indeed, and its grip of metal and force was tight upon the little ship.

The jester kept his eyes shut through a good deal of what followed. If they had sent him out here to stop him laughing

they had chosen the right spot. He squeezed his eyelids tighter, and put his fingers in his ears, as the berserker's commensal machines smashed their way into his little ship and carried him off. He never did find out what they did with his robot guard.

When things grew quiet, and he felt gravity and good air and pleasant warmth again, he decided that keeping his eyes shut was worse than knowing whatever they might tell him. His first cautious peek showed him that he was in a large shadowy room, that at least held no visible menace.

When he stirred, a squeaky monotonous voice somewhere above him said: "My memory bank tells me that you are a protoplasmic computing unit, probably capable of understanding this language. Do you understand?"

"Me?" The jester looked up into the shadows, but could not see the speaker. "Yes, I understand you. But who *are* you?"

"I am what this language calls a berserker."

The jester had taken shamefully little interest in galactic affairs, but that word frightened even him. He stuttered: "That means you're a kind of automated warship?"

There was a pause. "I am not sure," said the squeaky droning voice. The tone sounded almost as if the President was hiding up there in the rafters. "War may be related to my purpose, but my purpose is still partially unclear to me, for my construction was never quite completed. For a time I waited where I was built, because I was sure some final step had been left undone. At last I moved, to try to learn more about my purpose. Approaching this sun, I found a transmitting device which I have disassembled. But I have learned no more about my purpose."

The jester sat on the soft, comfortable floor. The more he remembered about berserkers, the more he trembled. He said: "I see. Or perhaps I at least begin to see. What *do* you know of your purpose?"

"My purpose is to destroy all life wherever I can find it."

The jester cowered down. Then he asked in a low voice: "What is unclear about that?"

The berserker answered his question with two of its own: "What is life? And how is it destroyed?"

After half a minute there came a sound that the berserker computers could not identify. It issued from the protoplasmic computing-unit, but if it was speech it was in a language unknown to the berserker.

"What is the sound you make?" the machine asked.

The jester gasped for breath. "It's laughter. Oh, laughter! So. You were unfinished." He shuddered, the terror of his position coming back to sober him. But then he once more burst out giggling; the situation was too ridiculous.

"What is life?" he said at last. "I'll tell you. Life is a great grim grayness, and it inflicts fright and pain and loneliness upon all who experience it. And you want to know how to destroy it? Well, I don't think you can. But I'll tell you the best way to fight life—with laughter. As long as we can fight it that way, it can't overcome us."

The machine asked: "Must I laugh, to prevent this great-grim-grayness from enveloping me?"

The jester thought. "No, you are a machine. You are not—" he caught himself, "protoplasmic. Fright and pain and loneliness will never bother you."

"Nothing bothers me. Where will I find life, and how will I make laughter to fight it?"

The jester was suddenly conscious of the weight of the cube that still hung from his neck. "Let me think for a while," he said.

After a few minutes he stood up. "If you have a viewer of the kind men use, I can show you how laughter is created. And perhaps I can guide you to a place where life is. By the way, can you cut this cord from my neck? Without hurting me, that is!"

A few weeks later, in the main War Room of Planet A; the somnolence of decades was abruptly shattered. Robots bellowed and buzzed and flashed, and those that were mobile scurried about. In five minutes or so they managed to rouse their human overseers, who hurried about, tightening their belts and stuttering.

"This is a *practice* alert, isn't it?" the Officer of the Day kept hoping aloud. "Someone's running some kind of a test? Someone?" He was beginning to squeak like a berserker himself.

He got down on all fours, removed a panel from the base of the biggest robot and peered inside, hoping to discover something causing a malfunction. Unfortunately, he knew nothing about robotics; recalling this, he replaced the panel and jumped to his feet. He really knew nothing about planet defense, either, and recalling *this* was enough to send him on a screaming run for help.

So there was no resistance, effective or otherwise. But there was no attack, either.

The forty-mile sphere, unopposed, came down to hover directly above Capital City, low enough for its shadow to send a lot of puzzled birds to nest at noon. Men and birds alike lost many hours of productive work that day; somehow the lost work made less difference than most of the men expected. The days were past when only the grimmest attention to duty let the human race survive on Planet A, though most of the planet did not realize it yet.

"Tell the President to hurry up," demanded the jester's image, from a viewscreen in the no-longer somnolent War Room. "Tell him it's urgent that I talk to him."

The President, breathing heavily, had just entered. "I am here. I recognize you, and I remember your trial."

"Odd, so do I."

"Have you now stooped to treason? Be assured that if you have led a berserker to us you can expect no mercy from your government."

The image made a forbidden noise, a staccato sound from the open mouth, head thrown back. "Oh, please, mighty President! Even I know our Ministry of Defense is a j-o-k-e, if you will pardon an obscene word. It's a catchbasin for exiles and incompetents. So I come to offer mercy, not ask it. Also, I have decided to legally take the name of Jester. Kindly continue to apply it to me."

"We have nothing to say to you!" barked the Minister of

Defense. He was purple granite, having entered just in time to hear his Ministry insulted.

"We have no objection to talking to you!" contradicted the President, hastily. Having failed to overawe the Jester through a viewscreen, he could now almost feel the berserker's weight upon his head.

"Then let us talk," said Jester's image. "But not so privately. This is what I want."

What he wanted, he said, was a face-to-face parley with the Committee, to be broadcast live on planet-wide tridi. He announced that he would come "properly attended" to the conference. And he gave assurance that the berserker was under his full control, though he did not explain how. It, he said, would not *start* any shooting.

The Minister of Defense was not ready to start anything. But he and his aides hastily made secret plans.

Like almost every other citizen, the presidential candidate of the Liberal party settled himself before a tridi on the fateful evening, to watch the confrontation. He had an air of hopefulness, for any sudden event may bring hope to a political underdog.

Few others on the planet saw anything encouraging in the berserker's descent, but there was still no mass panic. Berserkers and war were unreal things to the long-isolated people of Planet A.

"Are we ready?" asked the Jester nervously, looking over the mechanical delegation which was about to board a launch with him for the descent to Capital City.

"What you have ordered, I have done," squeaked the berserker-voice from the shadows above.

"Remember," Jester cautioned, "the protoplasmic-units down there are much under the influence of life. So ignore whatever they say. Be careful not to hurt them, but outside of that you can improvise within my general plan."

"All this is in my memory from your previous orders," said the machine patiently.

"Then let's go." Jester straightened his shoulders. "Bring me my cloak!"



The brilliantly lighted interior of Capital City's great Meeting Hall displayed a kind of rigid, rectilinear beauty. In the center of the Hall there had been placed a long, polished table, flanked on opposing sides by chairs.

Precisely at the appointed time, the watching millions saw one set of entrance doors swing mathematically open. In marched a dozen human heralds, their faces looking almost robotic under bearskin helmets. They halted with a single snap. Their trumpet-tucket rang out clearly.

To the taped strains of *Pomp and Circumstance*, the President, in the full dignity of his cloak of office, then made his entrance.

He moved at the pace of a man marching to his own execution, but his was the slowness of dignity, not that of fear. The Committee had overruled the purple protestations of the MiniDef, and convinced themselves that the military danger was small. Real berserkers did not ask to parley, they slaughtered. Somehow the Committee could not take the Jester seriously, any more than they could laugh at him. But until they were sure they had him again under their control they would humor him.

The granite-faced Ministers entered in a double file behind the President. It took almost five minutes of *Pomp and Circumstance* for them all to position themselves.

A launch had been seen to descend from the berserker, and vehicles had rolled from the launch to the Meeting Hall. So it was presumed that Jester was ready, and the cameras pivoted dutifully to face the entrance reserved for him.

Just at the appointed time, the doors of that entrance swung mathematically open, and a dozen man-sized machines entered. They were heralds, for they wore bearskin helmets, and each carried a bright, brassy trumpet.

All but one, who wore a coonskin cap, marched a half-pace out of step, and was armed with a slide trombone.

The mechanical tucket was a faithful copy of the human one—almost. The slide-trombonist faltered at the end, and one long sour note trailed away.

Giving an impression of slow mechanical horror, the

berserker-heralds looked at one another. Then one by one their heads turned until all their lenses were focused upon the trombonist.

It—almost it seemed the figure must be *he*—looked this way and that. Tapped his trombone, as if to clear it of some defect. Paused.

Watching, the President was seized by the first pang of a great horror. In the evidence, there had been a film of an Earthman of ancient time, a balding comic violinist, who had had the skill to pause like that, just pause, and evoke from his filmed audience great gales of . . .

Twice more the robot heralds blew. And twice more the sour note was sounded. When the third attempt failed, the eleven straight-robots looked at one another and nodded agreement.

Then with robotic speed they drew concealed weapons and shot holes in the offender.

All across the planet the dike of tension was cracking, dribbles and spurts of laughter forcing through. The dike began to collapse completely as the trombonist was borne solemnly away by a pair of his fellows, his shattered horn clasped lily-fashion on his iron breast.

But no one in the Meeting Hall was laughing. The Minister of Defense made an innocent-looking gesture, calling off a tentative plan, calling it *off*. There was to be no attempt to seize the Jester, for the berserker-robot-heralds or whatever they were seemed likely to perform very capably as bodyguards.

As soon as the riddled herald had been carried out, Jester entered. *Pomp and Circumstance* began belatedly, as with the bearing of a king he moved to his position at the center of the table, opposite the President. Like the President, the Jester wore an elegant cloak, clasped in front, falling to his ankles. Those that filed in behind him, in the position of aides, were also richly dressed.

And each of them was a metallic parody, in face and shape, of one of the Ministers of the Committee.

When the plump robotic analogue of the Minister of

Education peered through a lorgnette at the tridi camera, the watching populace turned, in unheard-of millions, to laughter. Those who might be outraged later, remembering, laughed now, in helpless approval of seeming danger turned to farce. All but the very grimmest smiled.

The Jester-king doffed his cape with a flourish. Beneath it he wore only a preposterous bathing-suit. In reply to the President's coldly formal greeting—the President could not be shaken by anything short of a physical attack—the Jester thoughtfully pursed his lips, then opened them and blew a gummy substance out into a large pink bubble.

The President maintained his unintentional role of slowburning straight man, ably supported by all the Committee save one. The Minister of Defense turned his back on the farce and marched to an exit.

He found two metallic heralds planted before the door, effectively blocking it. Glaring at them, the MiniDef barked an order to move. The metal figures flipped him a comic salute, and stayed where they were.

Brave in his anger, the MiniDef tried futilely to shove his way past the berserker-heralds. Dodging another salute, he looked round at the sound of great clomping footsteps. His berserker-counterpart was marching toward him across the Hall. It was a clear foot taller than he, and its barrel chest was armored with a double layer of jangling medals.

Before the MiniDef paused to consider consequences, his hand had moved to his sidearm. But his metal parody was far faster on the draw; it hauled out a grotesque cannon with a fist-sized bore, and fired instantly.

"Gahl" The MiniDef staggered back, the world gone red . . . and then he found himself wiping from his face something that tasted suspiciously like tomato. The cannon had propelled a whole fruit, or a convincing and juicy imitation of one.

The MiniCom jumped to his feet, and began to expound the idea that the proceedings were becoming frivolous. His counterpart also rose, and replied with a burst of gabbles in speed-falsetto.

The pseudo-Minister of Philosophy rose as if to speak,



was pricked with a long pin by a prankish herald, and jetted fluttering through the air, a balloon collapsing in flight. At that the human Committee fell into babel, into panic.

Under the direction of the metal MiniDiet, the real one, arch-villain to the lower masses, began to take unwilling part in a demonstration of dietary discipline. Machines gripped him, spoon-fed him grim gray food, napkined him, squirted drink into his mouth—and then, as if accidentally, they gradually fell out of synch with spoon and squirt, their aim becoming less and less accurate.

Only the President still stood rooted in dignity. He had one hand cautiously in his trousers pocket, for he had felt a sly robotic touch, and had reason to suspect that his suspenders had been cut.

As a tomato grazed his nose, and the MiniDiet writhed and choked in the grip of his remorseless feeders, balanced nutrients running from his ears, the President closed his eyes.

Jester was, after all, only a self-taught amateur working without a visible audience to play to. He was unable to calculate a climax for the show. So when he ran out of jokes he simply called his minions to his side, waved good-bye to the tridi cameras, and exited.

Outside the Halls, he was much encouraged by the cheers and laughter he received from the crowds fast-gathering in the streets. He had his machines entertain them with an improvised chase-sequence back to the launch parked on the edge of Capital City.

He was about to board the launch, return to the berserker and await developments when a small group of men hurried out of the crowd, calling to him.

“Mr. Jester!”

The performer could now afford to relax and laugh a little himself. “I like the sound of that name! What can I do for you gentlemen?”

They hurried up to him, smiling. The one who seemed to be their leader said: “Provided you get rid of this berserker or whatever it is, harmlessly—you can join the Liberal party ticket. As Vice-President!”

He had to listen for some minutes before he could believe they were serious. He protested: "But I only wanted to have some fun with them, to shake them up a bit."

"You're a catalyst, Mr. Jester. You've formed a rallying point. You've shaken up a whole planet and made it think."

Jester at last accepted the Liberals' offer. They were still sitting around in front of the launch, talking and planning, when the light of Planet A's moon fell full and sudden upon them.

Looking up, they saw the vast bulk of the berserker dwindling into the heavens, vanishing toward the stars in eerie silence. Cloud streamers went aurora in the upper atmosphere to honor its departure.

"I don't know," Jester said over and over, responding to a dozen excited questions. "I don't know." He looked at the sky, puzzled as anyone else. The edge of fear came back. The robotic Committee and heralds, which had been controlled from the berserker, began to collapse one by one, like dying men.

Suddenly the heavens were briefly alight with a gigantic splashing flare that passed like lightning across the sky, not breaking the silence of the stars. Ten minutes later came the first news bulletin: The berserker had been destroyed.

Then the President came on tridi, close to the brink of showing emotion. He announced that under the heroic personal leadership of the Minister of Defense, the few gallant warships of Planet A had met and defeated, utterly annihilated, the menace. Not a man had been lost, though the MiniDef's flagship was thought to be heavily damaged.

When he heard that his mighty machine ally had been destroyed, Jester felt a pang of something like sorrow. But the pang was quickly obliterated in a greater joy. No one had been hurt, after all. Overcome with relief, Jester looked away from the tridi for a moment.

He missed the climactic moment of the speech, which came when the President forgetfully removed both hands from his pockets.



The Minister of Defense—today the new Presidential candidate of a Conservative party stirred to grim enthusiasm by his exploit of the night before—was puzzled by the reactions of some people, who seemed to think he had merely spoiled a jest instead of saving the planet. As if spoiling a jest was not a good thing in itself! But his testimony that the berserker had been a genuine menace after all rallied most people back to the Conservative side again.

On this busiest of days the MiniDef allowed himself time to visit Liberal headquarters to do a bit of gloating. Graciously he delivered to the opposition leaders what was already becoming his standard speech.

"When it answered my challenge and came up to fight, we went in with a standard englobement pattern—like hummingbirds round a vulture, I suppose you might say. And did you really think it was jesting? Let me tell you, that berserker peeled away the defensive fields from my ship like they were nothing. And then it launched this ghastly thing at me, a kind of huge disk. My gunners were a little rusty, maybe, anyway they couldn't stop it and it hit us.

"I don't mind saying, I thought I'd bought the farm right then. My ship's still hanging in orbit for decontamination, I'm afraid I'll get word any minute that the metal's melting or something—anyway, we sailed right through and hit the bandit with everything we had.

I can't say too much for my crew. One thing I don't quite understand; when our missiles struck that berserker just went poof, as if it had no defense up at all. Yes?"

"Call for you, Minister," said an aide, who had been standing by with a radiophone, waiting for a chance to break in.

"Thank you." The MiniDef listened to the phone, and his smile left him. His form went rigid. "Analysis of the weapon shows what? Synthetic proteins and water?"

He jumped to his feet glaring upward as if to pierce the ceiling and see his ship in orbit. "What do you mean—no more than a giant custard pie?"

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*A jester by his efforts may give laughter to others, but by no labor can he seize it for himself.*

*I have touched minds that worked hard at revelry. Men and women who poured time and wealth and genius into costumes and music and smiling masks, seeking escape from the terror of the world . . . but who found no laughter.*

*And no escape.*

## MASQUE OF THE RED SHIFT

Finding himself alone and unoccupied, Felipe Nogara chose to spend a free moment in looking at the thing that had brought him out here beyond the last fringe of the galaxy. From the luxury of his quarters he stepped up into his private observation bubble. There, in a raised dome of invisible glass, he seemed to be standing outside the hub of his flagship *Nirvana*.

Under that hull, "below" the *Nirvana's* artificial gravity, there slanted the bright disk of the galaxy, including in one of its arms all the star systems the Earth-descended man had yet explored. But in whatever direction Nogara looked, bright spots and points of light were plentiful. They were other galaxies, marching away at their recessional velocities of tens of thousands of miles per second, marching on out to the optical horizon of the universe.

Nogara had not come here to look at galaxies, however; he had come to look at something new, at a phenomenon never before seen by men at such close range.

It was made visible to him by the apparent pinching-together of the galaxies beyond it, and by the clouds and streamers of dust cascading into it. The star that formed the center of the phenomenon was itself held beyond human sight by the strength of its own gravity. Its mass, perhaps a billion times that of Sol, so bent spacetime around itself that not a photon of light could escape it with a visible wavelength.

The dusty debris of deep space tumbled and churned, falling into the grip of the hypermass. The falling dust built up static charges until lightning turned it into luminescent thunderclouds, and the flicker of the vast lightning shifted into the red before it vanished, near the bottom of the gravitational hill. Probably not even a neutrino could escape this sun. And no ship would dare approach much closer than *Nirvana* now rode.

Nogara had come out here to judge for himself if the recently discovered phenomenon might soon present any danger to inhabited planets; ordinary suns would go down like chips of wood into a whirlpool if the hypermass found them in its path. But it seemed that another thousand years would pass before any planets had to be evacuated; and before then the hypermass might have gorged itself on dust until its core imploded, whereupon most of its substance could be expected to reenter the universe in a most spectacular but less dangerous form.

Anyway, in another thousand years it would be someone else's problem. Right now it might be said to be Nogara's—for men said that he ran the galaxy, if they said it of anyone.

A communicator sounded, calling him back to the enclosed luxury of his quarters, and he walked down quickly, glad of a reason to get out from under the galaxies.

He touched a plate with one finger. "What is it?"

"My lord, a courier ship has arrived. From the Flamländ system. They are bringing . . ."

"Speak plainly. They are bringing my brother's body?"

"Yes, my lord. The launch bearing the coffin is already approaching *Nirvana*."

"I will meet the courier captain, alone, in the Great Hall. I want no ceremony. Have the robots at the airlock test the escort and the outside of the coffin for infection."

"Yes, my lord."

The mention of disease was a bit of misdirection. It was not the Flamländ plague that had put Johann Karlsen into a box, though that was the official story. The doctors were supposed to have frozen the hero of the Stone Place as a last resort, to prevent his irreversible death.

An official lie was necessary because not even High Lord Nogara could lightly put out of the way the one man who had made the difference at the Stone Place. Since that battle it seemed that life in the galaxy would survive, though the fighting against the berserkers was still bitter.

The Great Hall was where Nogara met daily for feasting and pleasure with the forty or fifty people who were with him on *Nirvana*, as aides or crewmen or entertainers. But when he entered the Hall now he found it empty, save for one man who stood at attention beside a coffin.

Johann Karlsen's body and whatever remained of his life were sealed under the glass top of the heavy casket, which contained its own refrigeration and revival systems, controlled by a fiber-optic key theoretically impossible to duplicate. This key Nogara now demanded, with a gesture, from the courier captain.

The captain had the key hung round his neck, and it took him a moment to pull the golden chain over his head and hand it to Nogara. It was another moment before he remembered to bow; he was a spaceman and not a courtier. Nogara ignored the lapse of courtesy; it was his governors and admirals who were reinstituting ceremonies of rank; he himself cared nothing about how subordinates gestured and postured, so long as they obeyed intelligently.

Only now, with the key in his own hand, did Nogara look down at his frozen half-brother. The plotting doctors had shaved away Johann's short beard and his hair. His lips were marble pale, and his sightless open eyes were ice. But still the face above the folds of the draped and frozen sheet was undoubtedly Johann's. There was something that would not freeze.

"Leave me for a time," Nogara said. He turned to face the end of the Great Hall and waited, looking out through the wide viewport to where the hypermass blurred space like a bad lens.

When he heard the door ease shut behind the courier captain he turned back—and found himself facing the short figure of Oliver Mical, the man he had selected to replace Johann as governor of Flamland. Mical must have entered

as the spaceman left, which Nogara thought might be taken as symbolic of something.

Resting his hands familiarly on the coffin, Mical raised one graying eyebrow in his habitual expression of weary amusement. His rather puffy face twitched in an overcivilized smile.

"How does Browning's line go?" Mical mused, glancing down at Karlsen. " 'Doing the king's work all the dim day long'—and now, this reward of virtue."

"Leave me," said Nogara.

Mical was in on the plot, as was hardly anyone else except the Flamland doctors. "I thought it best to appear to share your grief," he said. Then he looked at Nogara and ceased to argue. He made a bow that was mild mockery when the two of them were alone, and walked briskly to the door. Again it closed.

So, Johann. If you had plotted against me, I would have had you killed outright. But you were never a plotter, it was just that you served me too successfully, my enemies and friends alike began to love you too well. So here you are, my frozen conscience, the last conscience I'll ever have. Sooner or later you would have become ambitious, so it was either do this to you or kill you.

Now I'll put you away safely, and maybe someday you'll have another chance at life. It's a strange thought that someday you may stand musing over my coffin as I now stand over yours. No doubt you'll pray for what you think is my soul. . . . I can't do that for you, but I wish you sweet dreams. Dream of your Believers' heaven, not of your hell.

Nogara imagined a brain at absolute zero, its neurons superconducting, repeating one dream on and on and on. But that was nonsense.

"I cannot risk my power, Johann." This time he whispered the words aloud. "It was either this or have you killed." He turned again to the wide viewport.

"I suppose Thirty-three's gotten the body to Nogara already," said the Second Officer of Esteeler Courier Thirty-four, looking at the bridge chronometer. "It must be nice



to declare yourself an emperor or whatever, and have people hurl themselves all over the galaxy to do everything for you."

"Can't be nice to have someone bring you your brother's corpse," said Captain Thurman Holt, studying his astrogational sphere. His ship's C-plus drive was rapidly stretching a lot of timelike interval between itself and the Flamland system. Even if Holt was not enthusiastic about his mission, he was glad to be away from Flamland, where Mical's political police were taking over.

"I wonder," said the Second, and chuckled.

"What's that mean?"

The Second looked over both shoulders, out of habit formed on Flamland. "Have you heard this one?" he asked. "Nogara is God—but half of his spacemen are atheists."

Holt smiled, but only faintly. "He's no mad tyrant, you know. Esteel's not the worst-run government in the galaxy. Nice guys don't put down rebellions."

"Karlsen did all right."

"That's right, he did."

The Second grimaced. "Oh, sure, Nogara could be worse, if you want to be serious about it. He's a politician. But I just can't stand that crew that's accumulated around him the last few years. We've got an example on board now of what they do. If you want to know the truth I'm a little scared now that Karlsen's dead."

"Well, we'll soon see them." Holt sighed and stretched. "I'm going to look in on the prisoners. The bridge is yours, Second."

"I relieve you, sir. Do the man a favor and kill him, Thurm."

A minute later, looking through the spy-plate into the courier's small brig, Holt could wish with honest compassion that his male prisoner was dead.

He was an outlaw chieftain named Janda, and his capture had been the last success of Karlsen's Flamland service, putting a virtual end to the rebellion. Janda had been a tall man, a brave rebel, and a brutal bandit. He had raided and fought against Nogara's Esteeler empire until there was no hope left, and then he had surrendered to Karlsen.

"My pride commands me to conquer my enemy," Karlsen

had written once, in what he thought was to be a private letter. "My honor forbids me to humble or hate my enemy." But Mical's political police operated with a different philosophy.

The outlaw might still be long-boned, but Holt had never seen him stand tall. The manacles still binding his wrists and ankles were of plastic and supposedly would not abrade human skin, but they served no sane purpose now, and Holt would have removed them if he could.

A stranger seeing the girl Lucinda, who sat now at Janda's side to feed him, might have supposed her to be his daughter. She was his sister, five years younger than he. She was also a girl of rare beauty, and perhaps Mical's police had motives other than mercy in sending her to Nogara's court unmarked and unbrainwashed. It was rumored that the demand for certain kinds of entertainment was strong among the courtiers, and the turnover among the entertainers high.

Holt had so far kept himself from believing such stories, largely by not thinking about them. He opened the brig now—he kept it locked only to prevent Janda's straying out and falling childlike into an accident—and went in.

When the girl Lucinda had first come aboard ship her eyes had shown helpless hatred of every Esteeler. Holt had been as gentle and as helpful as possible to her in the days since then, and there was not even dislike in the face she raised to him now—there was a hope which it seemed she had to share with someone.

She said: "I think he spoke my name a few minutes ago."

"Oh?" Holt bent to look more closely at Janda, and could see no change. The outlaw's eyes still stared glassily, the right eye now and then dripping a tear that seemed to have no connection with any kind of emotion. Janda's jaw was as slack as ever, and his whole body as awkwardly slumped.

"Maybe—" Holt didn't finish.

"What?" She was almost eager.

Gods of Space, he couldn't let himself get involved with this girl. He almost wished to see hatred in her eyes again.

"Maybe," he said gently, "it will be better for your brother

if he doesn't make any recovery now. You know where he's going."

Lucinda's hope, such as it was, was shocked away by his words. She was silent, staring at her brother as if she saw something new.

Holt's wrist-intercom sounded.

"Captain here," he acknowledged.

"Sir, reported a ship detected and calling us. Bearing five o'clock level to our course. Small and normal."

The last three words were the customary reassurance that a sighted ship was not possibly a berserker's giant hull. Such Flamland outlaws as were left possessed no deep space ships, so Holt had no reason to be cautious.

He went back to the bridge and looked at the small shape on the detector screen. It was unfamiliar to him, but that was hardly surprising, as there were many shipyards orbiting many planets. Why, though, should any ship approach and hail him in deep space?

Plague?

"No, no plague," answered a radio voice, through bursts of static, when he put the question to the stranger. The video signal from the other ship was also jumpy, making it hard to see the speaker's face. "Caught a speck of dust on my last jump, and my fields are shaky. Will you take a few passengers aboard?"

"Certainly." For a ship on the brink of a C-plus jump to collide with the gravitational field of a sizable dust-speck was a rare accident, but not unheard of. And it would explain the noisy communications. There was still nothing to alarm Holt.

The stranger sent over a launch which clamped to the courier's airlock. Wearing a smile of welcome for distressed passengers. Holt opened the lock. In the next moment he and the half-dozen men who made up his crew were caught helpless by an inrush of metal—a berserker's boarding party, cold and merciless as nightmare.

The machines seized the courier so swiftly and efficiently that no one could offer real resistance, but they did not

immediately kill any of the humans. They tore the drive units from one of the lifeboats and herded Holt and his crew and his erstwhile prisoners into the boat.

"It wasn't a berserker on the screen, it wasn't," the Second Officer kept repeating to Holt. The humans sat side by side, jammed against one another in the small space. The machines were allowing them air and water and food, and had started to take them out one at a time for questioning.

"I know, it didn't look like one," Holt answered. "The berserkers are probably forming themselves into new shapes, building themselves new weapons. That's only logical, after the Stone Place. The only odd thing is that no one foresaw it."

A hatch clanged open, and a pair of roughly man-shaped machines entered the boat, picking their way precisely among the nine cramped humans until they reached the one they wanted.

"No, he can't talk!" Lucinda shrieked. "Don't take him!"

But the machines could not or would not hear. They pulled Janda to his feet and marched him out. The girl followed, dragging at them, trying to argue with them. Holt could only scramble uselessly after her in the narrow space, afraid that one of the machines would turn and kill her. But they only kept her from following them out of the lifeboat, pushing her back from the hatch with metal hands as gently resistless as time. Then they were gone with Janda, and the hatch was closed again. Lucinda stood gazing at it blankly. She did not move when Holt put his arm around her.

After a timeless period of waiting, the humans saw the hatch open again. The machines were back, but they did not return Janda. Instead they had come to take Holt.

Vibrations echoed through the courier's hull; the machines seemed to be rebuilding her. In a small chamber sealed off from the rest of the ship by a new bulkhead, the berserker computer-brain had set up electronic eyes and ears and a speaker for itself, and here Holt was taken to be questioned.

The berserkers interrogated Holt at great length, and

almost every question concerned Johann Karlsen. It was known that the berserkers regarded Karlsen as their chief enemy, but this one seemed to be obsessed with him—and unwilling to believe that he was really dead.

"I have captured your charts and astrogational settings," the berserker reminded Holt. "I know your course is to *Nirvana* where supposedly the nonfunctioning Karlsen has been taken. Describe this *Nirvana*-ship used by the life-unit Nogara."

So long as it had asked only about a dead man, Holt had given the berserker straight answers, not wanting to be tripped up in a useless lie. But a flagship was a different matter, and now he hesitated. Still, there was little he could say about *Nirvana* if he wanted to. And he and his fellow prisoners had had no chance to agree on any plan for deceiving the berserker; certainly it must be listening to everything they said in the lifeboat.

"I've never seen the *Nirvana*," he answered truthfully. "Logic tells me it must be a strong ship, since the highest human leaders travel on it." There was no harm in telling the machine what it could certainly deduce for itself.

A door opened suddenly, and Holt started in surprise as a strange man entered the interrogation chamber. Then he saw that it was not a man, but some creation of the berserker. Perhaps its flesh was plastic, perhaps some product of tissue culture.

"Hi, are you Captain Holt?" asked the figure. There was no gross flaw in it, but a ship camouflaged with the greatest skill looks like nothing so much as a ship that has been camouflaged.

When Holt was silent, the figure asked: "What's wrong?"

Its speech alone would have given it away, to an intelligent human who listened carefully.

"You're not a man," Holt told it.

The figure sat down and went limp.

The berserker explained: "You see I am not capable of making an imitation life-unit that will be accepted by real ones face to face. Therefore I require that you, a real life-unit, help me make certain of Karlsen's death."

Holt said nothing.

"I am a special device," the berserker said, "built by the berserkers with one prime goal, to bring about with certainty Karlsen's death. If you help me prove him dead, I will willingly free you and the other life-units I now hold. If you refuse to help, all of you will receive the most unpleasant stimuli until you change your mind."

Holt did not believe that it would ever willingly set them free. But he had nothing to lose by talking, and he might at least gain for himself and the others a death free of most unpleasant stimuli. Berserkers preferred to be efficient killers, not sadists.

"What sort of help do you want from me?" Holt asked.

"When I have finished building myself into the courier we are going on to *Nirvana*, where you will deliver your prisoners. I have read the orders. After being interviewed by the human leaders on *Nirvana*, the prisoners are to be taken on to Esteel for confinement. Is it not so?"

"It is."

The door opened again, and Janda shuffled in, bent and bemused.

"Can't you spare this man any more questioning?" Holt asked the berserker. "He can't help you in any way."

There was only silence. Holt waited uneasily. At last, looking at Janda, he realized that something about the outlaw had changed. The tears had stopped flowing from his right eye. When Holt saw this he felt a mounting horror that he could not have explained, as if his subconscious already knew what the berserker was going to say next.

"What was bone in this life-unit is now metal," the berserker said. "Where blood flowed, now preservatives are pumped. Inside the skull I have placed a computer, and in the eyes are cameras to gather the evidence I must have on Karlsen. To match the behavior of a brainwashed man is within my capability."

"I do not hate you," Lucinda said to the berserker when it had her alone for interrogation. "You are an accident, like a planet-quake, like a pellet of dust hitting a ship near

light-speed. Nogara and his people are the ones I hate. If his brother was not dead I would kill him with my own hands and willingly bring you his body."

"Courier Captain? This is Governor Mical, speaking for the High Lord Nogara. Bring your two prisoners over to *Nirvana* at once."

"At once, sir," Holt acknowledged.

After coming out of C-plus travel within sight of *Nirvana*, the assassin-machine had taken Holt and Lucinda from the lifeboat. Then it had let the boat, with Holt's crew still on it, drift out between the two ships, as if men were using it to check the courier's field. The men on the boat were to be the berserker's hostages, and its shield if it was discovered. And by leaving them there, it doubtless wanted to make more credible the prospect of their eventual release.

Holt had not known how to tell Lucinda of her brother's fate, but at last he had managed somehow. She had wept for a minute, and then she had become very calm.

Now the berserker put Holt and Lucinda into a launch for the trip to *Nirvana*. The machine that had been Lucinda's brother was aboard the launch already, waiting, slumped and broken-looking as the man had been in the last days of his life.

When she saw that figure, Lucinda stopped. Then in a clear voice she said: "Machine, I wish to thank you. You have done my brother a kindness no human would do for him. I think I would have found a way to kill him myself before his enemies could torture him any more."

The *Nirvana's* airlock was strongly armored, and equipped with automated defenses that would have repelled a rush of boarding machines, just as *Nirvana's* beams and missiles would have beaten off any heavy-weapons attack a courier, or a dozen couriers, could launch. The berserker had foreseen all this.

An officer welcomed Holt aboard. "This way, Captain. We're all waiting."

"All?"

The officer had the well-fed, comfortable look that came

with safe and easy duty. His eyes were busy appraising Lucinda. "There's a celebration under way in the Great Hall. Your prisoners' arrival has been much anticipated."

Music throbbed in the Great Hall, and dancers writhed in costumes more obscene than any nakedness. From a table running almost the length of the Hall, serving machines were clearing the remnants of a feast. In a thronelike chair behind the center of the table sat the High Lord Nogara, a rich cloak thrown over his shoulders, pale wine before him in a crystal goblet. Forty or fifty revelers flanked him at the long table, men and women and a few of whose sex Holt could not at once be sure. All were drinking and laughing, and some were donning masks and costumes, making ready for further celebration.

Heads turned at Holt's entrance, and a moment of silence was followed by a cheer. In all the eyes and faces turned now toward his prisoners, Holt could see nothing like pity.

"Welcome, Captain," said Nogara in a pleasant voice, when Holt had remembered to bow. "Is there news from Flamlant?"

"None of great importance, sir."

A puffy-faced man who sat at Nogara's right hand leaned forward on the table. "No doubt there is great mourning for the late governor?"

"Of course, sir." Holt recognized Mical. "And much anticipation of the new."

Mical leaned back in his chair, smiling cynically. "I'm sure the rebellious population is eager for my arrival. Girl, were you eager to meet me? Come, pretty one, round the table, here to me." As Lucinda slowly obeyed, Mical gestured to the serving devices. "Robots, set a chair for the man—there, in the center of the floor. Captain, you may return to your ship."

Felipe Nogara was steadily regarding the manacled figure of his old enemy Janda, and what Nogara might be thinking was hard to say. But he seemed content to let Mical give what orders pleased him.

"Sir," said Holt to Mical. "I would like to see—the remains of Johann Karlsen."

That drew the attention of Nogara, who nodded. A serving



machine drew back sable draperies, revealing an alcove in one end of the Hall. In the alcove, before a huge viewport, rested the coffin.

Holt was not particularly surprised; on many planets it was the custom to feast in the presence of the dead. After bowing to Nogara he turned and saluted and walked toward the alcove. Behind him he heard the shuffle and clack of Janda's manacled movement, and held his breath. A muttering passed along the table, and then a sudden quieting in which even the throbbing music ceased. Probably Nogara had gestured permission for Janda's walk, wanting to see what the brainwashed man would do.

Holt reached the coffin and stood over it. He hardly saw the frozen face inside it, or the blur of the hypermass outside the port. He hardly heard the whispers and giggles of the revelers. The only picture clear in his mind showed the faces of his crew as they waited helpless in the grip of the berserker.

The machine clothed in Janda's flesh came shuffling up beside him, and its eyes of glass stared down into those of ice. A photograph of retinal patterns taken back to the waiting berserker for comparison with old captured records would tell it that this man was really Karlsen.

A faint cry of anguish made Holt look back toward the long table, where he saw Lucinda pulling herself away from Mical's clutching arm. Mical and his friends were laughing.

"No, Captain, I am no Karlsen," Mical called down to him, seeing Holt's expression. "And do you think I regret the difference? Johann's prospects are not bright. He is rather bounded by a nutshell, and can no longer count himself king of infinite space!"

"Shakespeare!" cried a sycophant, showing appreciation of Mical's literary erudition.

"Sir." Holt took a step forward. "May I—may I now take the prisoners back to my ship?"

Mical misinterpreted Holt's anxiety. "Oh, ho! I see you appreciate some of life's finer things, Captain. But as you know, rank has its privileges. The girl stays here."

He had expected them to hold on to Lucinda, and she was better here than with the berserker.

"Sir, then if—if the man alone can come with me. In a prison hospital on Esteel he may recover—"

"Captain." Nogara's voice was not loud, but it hushed the table. "Do not *argue* here."

"No, sir."

Mical shook his head. "My thoughts are not yet of mercy to my enemies, Captain. Whether they may soon turn in that direction—well, that depends." He again reached out a leisurely arm to encircle Lucinda. "Do you know, Captain, that hatred is the true spice of love?"

Holt looked helplessly back at Nogara. Nogara's cold eye said: One more word, courier, and you find yourself in the brig. I do not give two warnings.

If Holt cried berserker now, the thing in Janda's shape might kill everyone in the Hall before it could be stopped. He knew it was listening to him, watching his movements.

"I—I am returning to my ship," he stuttered. Nogara looked away, and no one else paid him much attention. "I will . . . return here . . . in a few hours perhaps. Certainly before I drive for Esteel."

Holt's voice trailed off as he saw that a group of the revelers had surrounded Janda. They had removed the manacles from the outlaw's dead limbs, and were putting a horned helmet on his head, giving him a shield and a spear and a cloak of fur, equipage of an old Norse warrior of Earth—first to coin and bear the dread name of berserker.

"Observe, Captain," mocked Mical's voice. "At our masked ball we do not fear the fate of Prince Prospero. We willingly bring in the semblance of the terror outside!"

"Poe!" shouted the sycophant, in glee.

Prospero and Poe meant nothing to Holt, and Mical was disappointed.

"Leave us, Captain," said Nogara, making a direct order of it.

"Leave, Captain Holt," said Lucinda in a firm, clear voice. "We all know you wish to help those who stand in danger here. Lord Nogara, will Captain Holt be blamed in any way for what happens here when he has gone?"

There was a hint of puzzlement in Nogara's clear eyes.

But he shook his head slightly, granting the asked-for absolution.

And there was nothing for Holt to do but go back to the berserker to argue and plead with it for his crew. If it was patient, the evidence it sought might be forthcoming. If only the revelers would have mercy on the thing they thought was Janda.

Holt went out. It had never entered his burdened mind that Karlsen was only frozen.

Mical's arm was about her hips as she stood beside his chair, and his voice purred up at her. "Why, how you tremble, pretty one . . . it moves me that such a pretty one as you should tremble at my touch, yes, it moves me deeply. Now, we are no longer enemies, are we? If we were, I should have to deal harshly with your brother."

She had given Holt time to get clear of the *Nirvana*. Now she swung her arm with all her strength. The blow turned Mical's head halfway round, and made his neat gray hair fly wildly.

There was a sudden hush in the Great Hall, and then a roar of laughter that reddened all of Mical's face to match the handprint on his cheek. A man behind Lucinda grabbed her arms and pinned them. She relaxed until she felt his grip loosen slightly, and then she grabbed up a table knife. There was another burst of laughter as Mical ducked away and the man behind Lucinda seized her again. Another man came to help him and the two of them, laughing, took away the knife and forced her to sit in a chair at Mical's side.

When the governor spoke at last his voice quavered slightly, but it was low and almost calm.

"Bring the man closer," he ordered. "Seat him there, just across the table from us."

While his order was being carried out, Mical spoke to Lucinda in conversational tones. "It was my intent, of course, that your brother should be treated and allowed to recover."

"Lying piece of filth," she whispered, smiling.

Mical only smiled back. "Let us test the skill of my mind-control technicians," he suggested. "I'll wager no bonds will

be needed to hold your brother in his chair, once I have done this." He made a curious gesture over the table, toward the glassy eyes that looked out of Janda's face. "So. But he will still be aware, with every nerve, of all that happens to him. You may be sure of that."

She had planned and counted on something like this happening, but now she felt as if she was exhausted from breathing evil air. She was afraid of fainting, and at the same time wished that she could.

"Our guest is bored with his costume." Mical looked up and down the table. "Who will be first to take a turn at entertaining him?"

There was a spattering of applause as a giggling effeminate arose from a nearby chair.

"Jamy is known for his inventiveness," said Mical in pleasant tones to Lucinda. "I insist you watch closely, now. Chin up!"

On the other side of Mical, Felipe Nogara was losing his air of remoteness. As if reluctantly, he was being drawn to watch. In his bearing was a rising expectancy, winning out over disgust.

Jamy came giggling, holding a small jeweled knife.

"Not the eyes," Mical cautioned. "There'll be things I want him to see, later."

"Oh, certainly!" Jamy twittered. He set the horned helmet gingerly aside, and wiped the touch of it from his fingers. "We'll just start like this on one cheek, with a bit of skin—"

Jamy's touch with the blade was gentle, but still too much for the dead flesh. At the first peeling tug, the whole lifeless mask fell red and wet from around the staring eyes, and the steel berserker-skull grinned out.

Lucinda had just time to see Jamy's body flung across the Hall by a steel-boned arm before the men holding her let go and turned to flee for their lives, and she was able to duck under the table. Screaming bedlam broke loose, and in another moment the whole table went over with a crash before the berserker's strength. The machine, finding itself discovered, thwarted in its primary function of getting away with the evidence on Karlsen, had reverted to the old

berserker goal of simple slaughter. It killed efficiently. It moved through the Hall, squatting and hopping grotesquely, mowing its way with scythelike arms, harvesting howling panic into bundles of bloody stillness.

At the main door, fleeing people jammed one another into immobility, and the assassin worked methodically among them, mangling and slaying. Then it turned and came down the Hall again. It came to Lucinda, still kneeling where the table-tipping had exposed her; but the machine hesitated, recognizing her as a semipartner in its prime function. In a moment it had dashed on after another target.

It was Nogara, swaying on his feet, his right arm hanging broken. He had come up with a heavy handgun from somewhere, and now he fired left-handed as the machine charged down the other side of the overturned table toward him. The gunblasts shattered Nogara's friends and furniture but only grazed his moving target.

At last one shot hit home. The machine was wrecked, but its impetus carried it on to knock Nogara down again.

There was a shaky quiet in the Great Hall, which was wrecked as if by a bomb. Lucinda got unsteadily to her feet. The quiet began to give way to sobs and moans and gropings, everywhere, but no one else was standing.

She picked her way dazedly over to the smashed assassin-machine. She felt only a numbness, looking at the rags of clothing and flesh that still clung to its metal frame. Now in her mind she could see her brother's face as it once was, strong and smiling.

Now, there was something that mattered more than the dead, if she could only recall what it was—of course, the berserker's hostages, the good kind spacemen. She could try to trade Karlsen's body for them.

The serving machines, built to face emergencies on the order of spilled wine, were dashing to and fro in the nearest thing to panic that mechanism could achieve. They impeded Lucinda's progress, but she had the heavy coffin wheeled half-way across the Hall when a weak voice stopped her. Nogara had dragged himself up to a sitting position against the overturned table.

He croaked again: "—alive."

"What?"

"Johann's alive. Healthy. See? It's a freezer."

"But we all told the berserker he was dead." She felt stupid with the impact of one shock after another. For the first time she looked down at Karlsen's face, and long seconds passed before she could tear her eyes away. "It has hostages. It wants his body."

"No." Nogara shook his head. "I see, now. But no. I won't give him to berserkers, alive." A brutal power of personality still emanated from his broken body. His gun was gone, but his power kept Lucinda from moving. There was no hatred left in her now.

She protested: "But there are seven men out there."

"Berserker's like me." Nogara bared pain-clenched teeth. "It won't let prisoners go. Here. The key . . ."

He pulled it from inside his torn-open tunic.

Lucinda's eyes were drawn once again to the cold serenity of the face in the coffin. Then on impulse she ran to get the key. When she did so Nogara slumped over in relief, unconscious or nearly so.

The coffin lock was marked in several positions, and she turned it to EMERGENCY REVIVAL. Lights sprang on around the figure inside, and there was a hum of power.

By now the automated systems of the ship were reacting to the emergency. The serving machines had begun a stretcher-bearer service, Nogara being one of the first victims they carried away. Presumably a robot medic was in action somewhere. From behind Nogara's throne chair a great voice was shouting:

"This is ship defense control, requesting human orders! What is nature of emergency?"

"Do not contact the courier ship!" Lucinda shouted back. "Watch it for an attack. But don't hit the lifeboat!"

The glass top of the coffin had become opaque. Lucinda ran to the viewport, stumbling over the body of Mical and going on without a pause. By putting her face against the port and looking out at an angle she could just see the berserker-courier, pinkly visible in the wavering light of the

hypermass, its lifeboat of hostages a small pink dot still in place before it.

How long would it wait, before it killed the hostages and fled?

When she turned away from the port, she saw that the coffin's lid was open and the man inside was sitting up. For just a moment, a moment that was to stay in Lucinda's mind, his eyes were like a child's fixed helplessly on hers. Then power began to grow behind his eyes, a power somehow completely different from his brother's and perhaps even greater.

Karlsen looked away from her, taking in the rest of his surroundings, the devastated Great Hall and the coffin. "Felipe," he whispered, as if in pain, though his half-brother was no longer in sight.

Lucinda moved toward him and started to pour out her story, from the day in the Flamland prison when she had heard that Karlsen had fallen to the plague.

Once he interrupted her. "Help me out of this thing, get me space armor." His arm was hard and strong when she grasped it, but when he stood beside her he was surprisingly short. "Go on, what then?"

She hurried on with her tale, while serving machines came to arm him. "But why were you frozen?" she ended, suddenly wondering at his health and strength.

He ignored the question. "Come along to Defense Control. We must save those men out there."

He went familiarly to the nerve center of the ship and hurled himself into the combat chair of the Defense Officer, who was probably dead. The panel before Karlsen came alight and he ordered at once: "Get me in contact with that courier."

Within a few moments a flat-sounding voice from the courier answered routinely. The face that appeared on the communication screen was badly lighted; someone viewing it without advance warning would not suspect that it was anything but human.

"This is High Commander Karlsen speaking, from the *Nirvana*." He did not call himself governor or lord, but by

his title of the great day of the Stone Place. "I'm coming over there. I want to talk to you men on the courier."

The shadowed face moved slightly on the screen. "Yes, sir."

Karlsen broke off the contact at once. "That'll keep its hopes up. Now. I need a launch. You, robots, load my coffin aboard the fastest one available. I'm on emergency revival drugs now and I may have to refreeze for a while."

"You're not really going over there?"

Up out of the chair again, he paused. "I know berserkers. If chasing me is that thing's prime function it won't waste a shot or a second of time on a few hostages while I'm in sight."

"You can't go," Lucinda heard herself saying. "You mean too much to all men—"

"I'm not committing suicide, I have a trick or two in mind." Karlsen's voice changed suddenly. "You say Felipe's not dead?"

"I don't think he is."

Karlsen's eyes closed while his lips moved briefly, silently. Then he looked at Lucinda and grabbed up paper and a stylus from the Defense Officer's console. "Give this to Felipe," he said, writing. "He'll set you and the captain free if I ask it. You're not dangerous to his power. Whereas I . . ."

He finished writing and handed her the paper. "I must go. God be with you."

From the Defense Officer's position, Lucinda watched Karlsen's crystalline launch leave the *Nirvana* and take a long curve that brought it near the courier at a point some distance from the lifeboat.

"You on the courier," Lucinda heard him say. "You can tell it's really me here on the launch, can't you? You can DF my transmission? Can you photograph my retinas through the screen?"

And the launch darted away with a right-angle swerve, dodging and twisting at top acceleration, as the berserker's weapons blasted the space where it had been. Karlsen had been right. The berserker spent not a moment's delay or a single shot on the lifeboat, but hurled itself instantly after Karlsen's launch.



"Hit that courier!" Lucinda screamed. "Destroy it!" A salvo of missiles left the *Nirvana*, but it was a shot at a receding target, and it missed. Perhaps it missed because the courier was already in the fringes of the distortion surrounding the hypermass.

Karlsen's launch had not been hit, but it could not get away. It was a glassy dot vanishing behind a screen of blasts from the berserker's weapons, a dot being forced into the maelstrom of the hypermass.

"Chase them!" cried Lucinda, and saw the stars tint blue ahead; but almost instantly the *Nirvana's* autopilot countermanded her order, barking mathematical assurance that to accelerate any further in that direction would be fatal to all aboard.

The launch was now going certainly into the hypermass, gripped by a gravity that could make any engines useless. And the berserker-ship was going headlong after the launch, caring for nothing but to make sure of Karlsen.

The two specks tinted red, and redder still, racing before an enormous falling cloud of dust as if flying into a planet's sunset sky. And then the red shift of the hypermass took them into invisibility, and the universe saw them no more.

Soon after the robots had brought the men from the lifeboat safe aboard *Nirvana*, Holt found Lucinda alone in the Great Hall, gazing out the viewport.

"He gave himself to save you," she said. "And he'd never even seen you."

"I know." After a pause Holt said: "I've just been talking to the Lord Nogara. I don't know why, but you're to be freed, and I'm not to be prosecuted for bringing the damned berserker aboard. Though Nogara seems to hate both of us . . ."

She wasn't listening, she was still looking out the port.

"I want you to tell me all about him someday," Holt said, putting his arm around Lucinda. She moved slightly, ridding herself of a minor irritation that she had hardly noticed. It was Holt's arm, which dropped away.

"I see," Holt said, after a while. He went to look after his men.

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*And so, among men the struggle for power went on whenever the universe would allow it. On at least one planet a fight for leadership had long ago flared into civil war; and on that planet war and plague and isolation had destroyed civilization and history.*

*From afar my mind, powerless to give help, roamed unperceived among the minds of a barbaric people. They were a people who seemed as helpless as the sheep they tended, when there came down upon them one of the ancient bloody wolves of deep space.*

## SIGN OF THE WOLF

The dark shape, big as a man, came between the two smallest of the three watchfires, moving in silence like that of sleep. Out of habit, Duncan had been watching that downwind direction, though his mind was heavy with tiredness and with the thoughts of life that came with sixteen summers' age.

Duncan raised his spear and howled, and charged the wolf. For a moment the fire-eyes looked steadily at him, appearing to be a full hand apart. Then the wolf turned away; it made one deep questioning sound, and was gone into the darkness out beyond the firelight.

Duncan stopped, drawing a gasping breath of relief. The wolf would probably have killed him if it had faced his charge, but it did not yet dare to face him in the firelight.

The sheeps' eyes were on Duncan, a hundred glowing spots in the huddled mass of the flock. One or two of the animals bleated softly.

He paced around the flock, sleepiness and introspection jarred from his mind. Legends said that men in the old Earthland had animals called dogs that guarded sheep. If that were true, some might think that men were fools for ever leaving Earthland.

But such thoughts were irreverent, and Duncan's situation called for prayer. Every night now the wolf came, and all too often it killed a sheep.

Duncan raised his eyes to the night sky. "Send me a sign, sky-gods," he prayed, routinely. But the heavens were quiet. Only the stately fireflies of the dawn zone traced their steady random paths, vanishing halfway up the eastern sky. The stars themselves agreed that three fourths of the night was gone. The legends said that Earthland was among the stars, but the younger priests admitted such a statement could only be taken symbolically.

The heavy thoughts came back, in spite of the nearby wolf. For two years now Duncan had prayed and hoped for his mystical experience, the sign from a god that came to mark the future life of every youth. From what other young men whispered now and then, he knew that many faked their signs. That was all right for lowly herdsman, or even for hunters. But how could a man without genuine vision ever be much more than a tender of animals? To be a priest, to study the things brought from old Earthland and saved—Duncan hungered for learning, for greatness, for things he could not name.

He looked up again, and gasped, for he saw a great sign in the sky, almost directly overhead. A point of dazzling light, and then a bright little cloud remaining among the stars. Duncan gripped his spear, watching, for a moment even forgetting the sheep. The tiny cloud swelled and faded very slowly.

Not long before, a berserker machine had come sliding out of the interstellar intervals toward Duncan's planet, drawn from afar by the Sol-type light of Duncan's sun. This sun and this planet promised life, but the machine knew that some planets were well defended, and it bent and slowed its hurtling approach into a long cautious curve.

There were no warships in nearby space, but the berserker's telescopes picked out the bright dots of defensive satellites, vanishing into the planet's shadow and reappearing. To probe for more data, the berserker computers loosed a spy missile.

The missile looped the planet, and then shot in, testing the defensive net. Low over nightside, it turned suddenly into a bright little cloud.

Still, defensive satellites formed no real obstacle to a berserker. It could gobble them up almost at leisure if it moved in close to them, though they would stop long-range missiles fired at the planet. It was the other things the planet might have, the buried things, that held the berserker back from a killing rush.

It was very strange that this defended planet had no cities to make sparks of light on its nightside, and also that no radio signals came from it into space.

With mechanical caution the berserker moved in, toward the area scouted by the spy missile.

In the morning, Duncan counted his flock—and then recounted, scowling. Then he searched until he found the slaughtered lamb. The wolf had not gone hungry, after all. That made four sheep lost, now, in ten days.

Duncan tried to tell himself that dead sheep no longer mattered so much to him, that with a sign such as he had been granted last night his life was going to be filled with great deeds and noble causes. But the sheep still did matter, and not only because their owners would be angry.

Looking up sullenly from the eaten lamb, he saw a brown-robed priest, alone, mounted on a donkey, climbing the long grassy slope of the grazing valley from the direction of the Temple Village. He would be going to pray in one of the caves in the foot of the mountain at the head of the valley.

At Duncan's beckoning wave—he could not leave the flock to walk far toward the priest—the man on the donkey changed course. Duncan walked a little way to meet him.

"Blessings of Earthland," said the priest shortly, when he came close. He was a stout man who seemed glad to dismount and stretch, arching his back and grunting.

He smiled as he saw Duncan's hesitation. "Are you much alone here, my son?"

"Yes, Holy One. But—last night I had a sign. For two years I've wanted one, and just last night it came."

"Indeed? That is good news." The priest's eyes strayed to the mountain, and to the sun, as if he calculated how much time he could spare. But he said, with no sound of impatience: "Tell me about it, if you wish."

When he heard that the flash in the sky was Duncan's sign, the priest frowned. Then he seemed to keep himself from smiling. "My son, that light was seen by many. Today the elders of a dozen villages of most of the Tribe, have come to the Temple Village. Everyone has seen something different in the sky flash, and I am now going to pray in a cave, because of it."

The priest remounted, but when he had looked at Duncan again, he waited to say: "Still, I was not one of those chosen to see the sky-gods' sign; and you were. It may be a sign for you as well as for others, so do not be disappointed if it is not only for you. Be faithful in your duties, and the sign will come." He turned the donkey away.

Feeling small, Duncan walked slowly back to his flock. How could he have thought that a light seen over half the world was meant for one shepherd? Now his sign was gone, but his wolf remained.

In the afternoon, another figure came into sight, walking straight across the valley toward the flock from the direction of Colleen's village. Duncan tightened the belt on his woolen tunic, and combed grass from his hair with his fingers. He felt his chin, and wished his beard would really begin to grow.

He was sure the visitor was Colleen when she was still half a mile away. He kept his movements calm and made himself appear to first notice her when she came in sight on a hilltop within hailing distance. The wind moved her brown hair and her garments.

"Hello, Colleen."

"Hello, Duncan the Herdsman. My father sent me to ask about his sheep."

He ran an anxious eye over the flock, picking out individuals. Praise be to gods of land and sky. "Your father's sheep are well."

She walked closer to him. "Here are some cakes. The other sheep are not well?"

Ah, she was beautiful. But no mere herdsman would ever have her.

"Last night the wolf killed again." Duncan gestured with empty hands. "I watch, I light fires. I have a spear and a club, and I rush at him when he comes, and I drive him away. But sooner or later he comes on the wrong side of the flock, or a sheep strays."

"Another man should come from the village," she said. "Even a boy would help. With a big clever wolf, any herdsman may need help."

He nodded, faintly pleased at her implying he was a man. But his troubles were too big to be soothed away. "Did you see the sky flash, last night?" he asked, remembering with bitterness his joy when he had thought the sign was his.

"No, but all the village is talking about it. I will tell them about the wolf, but probably no man will come to help you for a day or two. They are all dancing and talking, thinking of nothing but the sky flash." She raised puzzled eyes beyond Duncan. "Look."

It was the priest, rushing past half a mile from them on his way down-Valley from the caves, doing his best to make his donkey gallop toward the Temple Village.

"He may have met your wolf," Colleen suggested.

"He doesn't look behind him. Maybe in the caves he received an important sign from the earth-gods."

They talked a while longer, sitting on the grass, while he ate the cakes she had brought him.

"I must go!" She sprang up. The sun was lowering and neither of them had realized it.

"Yes, hurry! At night the wolf may be anywhere on the plain."

Watching her hurry away, Duncan felt the wolf in his own blood. Perhaps she knew it, for she looked back at him strangely from the hilltop. Then she was gone.

On a hillside, gathering dried brush for the night's watchfires, Duncan paused for a moment, looking at the sunset.

"Sky-gods, help me," he prayed. "And earth-gods, the dark

wolf should be under your dominion. If you will not grant me a sign, at least help me deal with the wolf." He bent routinely and laid his ear to a rock. Every day he asked some god for a sign, but never—

He heard a voice. He crouched there, listening to the rock, unable to believe. Surely it was a waterfall he heard, or running cattle somewhere near. But no, it was a real voice, booming and shouting in some buried distance. He could not make out the words, but it was a real god-voice from under the earth.

He straightened up, tears in his eyes, even the sheep for a moment forgotten. This wonderful sign was not for half the world, it was for him! And he had doubted that it would ever come.

To hear what it said was all-important. He bent again and listened. The muffled voice went on unceasingly, but he could not understand it. He ran a few steps up the hill, and put his ear against another exposed earth-bone of rock. Yes, the voice was plainer here; sometimes he could distinguish a word. "Give," said the voice. Mumble, mumble. "Defend," he thought it said. Even the words he recognized were spoken in strange accents.

He realized that darkness was falling, and stood up, in fearful indecision. The sheep were still his responsibility, and he had to light watchfires, he *had* to, for the sheep would be slaughtered without them. And at the same time he had to listen to this voice.

A form moved toward him through the twilight, and he grabbed up his club—then he realized it was Colleen.

She looked frightened. She whispered: "The sun went down, and I feared the dark. It was a shorter way back to you than on to the village."

The berserker moved in toward the night side of the planet, quickly now, but still with caution. It had searched its memory of thousands of years of war against a thousand kinds of life, and it had remembered one other planet like this, with defensive satellites but no cities or radios. The fortifiers of that planet had fought among themselves, weakening



themselves until they could no longer operate their defenses, had even forgotten what their planet-weapons were.

The life here might be shamming, trying to lure the berserker within range of the planet-weapons. Therefore the berserker sent its mechanical scouts ahead, to break through the satellite net and range over the land surface, killing, until they provoked the planet's maximum response.

The fires were built, and Colleen held the spear and watched the sheep. Wolf or not, Duncan had to follow his sign. He made his way up the dark hillside, listening at rock after rock. And ever the earth-god voice grew stronger.

In the back of his mind Duncan realized that Colleen had arranged to be trapped with him for the night, to help him defend the sheep, and he felt limitless gratitude and love. But even that was now in the back of his mind. The voice now was everything.

He held his breath, listening. Now he could hear the voice while he stood erect. There, ahead, at the foot of a cliff, were slabs of rock tumbled down by snowslides. Among them might be a cave.

He reached the slabs, and heard the voice rumble up between them. "Attack in progress. Request human response. Order one requested. This is defense control. Attack in progress—"

On and on it went. Duncan understood some of it. Attack, request, human. Order one requested—that must mean one wish was to be granted, as in the legends. Never again would Duncan laugh at legends, thinking himself wise. This was no prank of the other young men; no one could hide in a cave and shout on and on in such a voice.

No one but a priest should enter a cave, but probably not even the priests knew of this one. It was Duncan's, for his sign had led him here. He had been granted a tremendous sign.

More awed than fearful, he slid between slabs of rock, finding the way down, rock and earth and then metal under his feet. He dropped into a low metal cave, which was as he had heard the god-caves described, very long, smooth, round

and regular, except here where it was bent and torn under the fallen rocks. In the cave's curving sides were glowing places, like huge animal eyes, giving light enough to see.

And here the shouting was very loud. Duncan moved toward it.

*We have reached the surface, the scouts radioed back to the berserker, in their passionless computer-symbol language. Here intelligent life of earth-type lives in villages. So far we have killed eight hundred and thirty-nine units. We have met no response from dangerous weapons.*

A little while longer the berserker waited, letting the toll of life-units mount. When the chance of this planet's being a trap had dropped in computer-estimation to the vanishing point, the berserker moved in to close range, and began to mop the remaining defensive satellites out of its way.

"Here I am." Duncan fell on his knees before the metal thing that bellowed. In front of the god-shape lay woven twigs and eggshells, very old. Once priests had sacrificed here, and then they had forgotten this god.

"Here I am," said Duncan again, in a louder voice.

The god heeded him, for the deafening shouting stopped.

"Response acknowledged, from defense control alternate 9,864," said the god. "Planetary defenses now under control of post 9,864."

How could you ask a god to speak more plainly?

After a very short time of silence, the god said: "Request order one."

That seemed understandable, but to make sure, Duncan asked: "You will grant me one wish, mighty one?"

"Will obey your order. Emergency. Satellite sphere ninety percent destroyed. Planet-weapon responses fully programmed, activation command requested."

Duncan, still kneeling, closed his eyes. One wish would be granted him. The rest of the words he took as a warning to choose his wish with care. If he wished, the gods would make him the wisest of chiefs or the bravest of warriors. The god would give him a hundred years of life or a dozen young wives.

Or Colleen.

But Colleen was out in the darkness, now, facing the wolf. Even now the wolf might be prowling near, just beyond the circle of firelight, watching the sheep, and watching the tender girl. Even now Colleen might be screaming—

Duncan's heart sank utterly, for he knew the wolf had beaten him, had destroyed this moment on which the rest of his life depended. He was still a herdsman. And if he could make himself forget the sheep, he would not want to forget Colleen.

"Destroy the wolf! Kill it!" he choked out.

"Term wolf questioned."

"The killer! To destroy the killer! That is the only wish I can make!" He could stand the presence of the god no longer, and ran away through the cave, weeping for his ruined life. He ran to find Colleen.

*Recall*, shouted the electronic voice of the berserker. *Trap. Recall.*

Hearing, its scattered brood of scout machines rose at top acceleration from their planet work, curving and climbing toward their great metal mother. Too slow. They blurred into streaks, into fireworks of incandescent gas.

The berserker was not waiting for them. It was diving for deep-space, knowing the planet-weapons reached out for it. It wasted no circuits now trying to compute why so much life had been sacrificed to trap it. Then it saw new force fields thrown up ahead of it, walling it in. No escape.

The whole sky was in flames, the bones of the hills shuddered underfoot, and at the head of the valley the top of the mountain was torn away and an enormous shaft of something almost invisible poured from it infinitely up into the sky.

Duncan saw Colleen huddling on the open ground, shouting to him, but the buried thunder drowned her voice. The sheep were running and leaping, crying under the terrible sky. Duncan saw the dark wolf among them, running with them in circles, too frightened to be a wolf. He picked up his club and ran, staggering with the shaking earth, after the beast.

He caught the wolf, for he ran toward it, while it ran in circles without regard for him. He saw the sky reflected in its eyes, facing him, and he swung his club just as it crouched to leap.

He won. And then he struck again and again, making sure.

All at once there was a blue-white, moving sun in the sky, a marvelous sun that in a minute turned red, and spread itself out to vanish in the general glow. Then the earth was still at last.

Duncan walked in a daze, until he saw Colleen trying to round up the sheep. Then he waved to her, and trotted after her to help. The wolf was dead, and he had a wonderful sign to tell. The gods had not killed him. Beneath his running feet, the steadiness of the ground seemed permanent.

*I have seen, and I still see, a future in which you, the Earth-descended, may prevail over the wolves of planets and the wolves of space. For at every stage of your civilizations there are numbers of you who put aside selfishness and dedicate their lives in service to something they see as being greater than themselves.*

*I say you may prevail, I say not that you will. For in each of your generations there are men who choose to serve the gods of darkness.*

## IN THE TEMPLE OF MARS

Something was driving waves of confusion through his mind, so that he knew not who he was, or where. How long ago what was happening had started or what had gone before it he could not guess. Nor could he resist what was happening, or even decide if he wanted to resist.

A chant beat on his ears, growled out by barbaric voices:

*On the wall there was painted a forest  
In which there lived neither man nor beast  
With knotty, gnarled, barren tees, old . . .*

And he could see the forest around him. Whether the trees and the chanting voices were real or not was a question he could not even formulate, with the confusion patterns racking his mind.

*Through broken branches hideous to behold  
There ran a cold and sighing wind  
As if a storm would break down every bough  
And downward, at the bottom of a hill*

*Stood the temple of Mars who is mighty in arms.*

And he saw the temple. It was of steel, curved in the dread shape of a berserker's hull, and half-sunken in dark earth. At the entrance, gates of steel sang and shuddered in the cold wind rushing out of the temple, rushing out endlessly to rage through the shattered forest. The whole scene was

gray, and lighted from above by an auroral flickering.

*The northern lights shone in at the doors*

*For mere was no window on the walls*

*Through which men might any light discern . . .*

He seemed to pass, with a conqueror's strides, between the clawlike gates, toward the temple door.

*The door was of eternal adamant*

*Bound lengthways and sideways with tough iron*

*And to make the temple stronger, every pillar*

*Was thick as a barrel, of iron bright and shiny.*

The inside of the temple was a kaleidoscope of violence, a frantic abattoir. Hordes of phantasmal men were mowed down in scenes of war, women were slaughtered by machines, children crushed and devoured by animals. He, the conqueror, accepted it all, exulted in it all, even as he became aware that his mind, under some outer compulsion, was building it all from the words of the chant.

He could not tell how long it lasted. The end came abruptly—the pressure on his mind was eased, and the chanting stopped. The relief was such that he fell sprawling, his eyes closed, a soft surface beneath him. Except for his own breathing, all was quiet.

A gentle thud made him open his eyes. A short metal sword had been dropped or tossed from somewhere to land near him. He was in a round, softly lighted, familiar room. The circular wall was covered by a continuous mural, depicting a thousand variations on the theme of bloody violence. At one side of the room, behind a low altar, toward the statue of an armed man gripping chariot reins and battleax, a man who was larger than life and more than a man, his bronze face a mask of insensate rage.

All this he had seen before. He gave it little thought except for the sword. He was drawn to the sword like a steel particle to a magnet, for the power of his recent vision was still fresh and irresistible, and it was the power of destruction. He crawled to the sword, noticing dimly that he was dressed like the statue of the god, in a coat of mail. When he had the sword in his hand the power of it drew him to his feet. He looked round expectantly.

A section of the continuous mural-wall opened into a door, and a figure entered the temple. It was dressed in a neat, plain uniform, and its face was lean and severe. It looked like a man, but it was not a man, for no blood gushed out when the sword hewed in.

Joyfully, thoughtlessly, he hacked the plastic-bodied figure into a dozen pieces. Then he stood swaying over it, drained and weary. The metal pommel of the sword grew suddenly hot in his hand, so that he had to drop it. All this had happened before, again and again.

This painted door opened once more. This time it was a real man who entered, a man dressed in black, who had hypnotic eyes under bushy brows.

"Tell me your name," the black-uniform ordered. His voice compelled.

"My name is Jor."

"And mine?"

"You are Katsulos," said Jor dully, "the Esteeler secret police."

"Yes. And where are we?"

"In space, aboard the *Nirvana II*. We are taking the High Lord Nogara's new space-going castle out to him, out to the rim of the galaxy. And when he comes aboard, I am supposed to entertain him by killing someone with a sword. Or another gladiator will entertain him by killing me."

"Normal bitterness," remarked one of Katsulos' men, appearing in the doorway behind him.

"Yes, this one always snaps right back," Katsulos said. "But a good subject. See the brain rhythms?" He showed the other a torn-off piece of chart from some recording device.

They stood there discussing Jor like a specimen, while he waited and listened. They had taught Jor to behave. They thought they had taught him permanently—but one of these days he was going to show them. Before it was too late. He shivered in his mail coat.

"Take him back to his cells Katsulos ordered at last. "I'll be along in a moment."

Jor looked about him confusedly as he was led out of the temple and down some stairs. His recollection of the

treatment he had just undergone was already becoming uncertain; and what he did remember was so unpleasant that he made no effort to recall more. But his sullen determination to strike back stayed with him, stronger than ever. He had to strike back, somehow, and soon.

Left alone in the temple, Katsulos kicked the pieces of the plastic dummy into a pile, to be ready for careful salvage. He trod heavily on the malleable face, making it unrecognizable, just in case someone beside his own men should happen to see it.

Then he stood for a moment looking up into the maniacal bronze face of Mars. And Katsulos' eyes, that were cold weapons when he turned them on other men, were now alive.

A communicator sounded, in what was to be the High Lord Nogara's cabin when he took delivery of *Nirvana II*. Admiral Hemphill, alone in the cabin, needed a moment to find the proper switch on the huge, unfamiliar desk. "What is it?"

"Sir, our rendezvous with the Solarian courier is completed; we're ready to drive again, unless you have any last-minute messages to transmit?"

"Negative. Our new passenger came aboard?"

"Yes, sir. A Solarian, named Mitchell Spain, as we were advised."

"I know the man, Captain. Will you ask him to come to this cabin as soon as possible? I'd like to talk to him at once."

"Yes sir."

"Are those police still snooping around the bridge?"

"Not at the moment, Admiral."

Hemphill shut off the communicator and leaned back in the thronelike chair from which Felipe Nogara would soon survey his Esteeler empire; but soon the habitually severe expression of Hemphill's lean face deepened and he stood up. The luxury of this cabin did not please him.

On the blouse of Hemphill's neat, plain uniform were seven ribbons of scarlet and black, each representing a battle in which one or more berserker machines had been destroyed. He wore no other decorations except his insignia



of rank, granted him by the United Planets, the anti-berserker league, of which all worlds were at least nominal members.

Within a minute the cabin door opened. The man who entered, dressed in civilian clothes, was short and muscular and rather ugly. He smiled at once, and came toward Hemphill, saying: "So it's High Admiral Hemphill now. Congratulations. It's a long time since we've met."

"Thank you. Yes, not since the Stone Place." Hemphill's mouth bent upward slightly at the corners, and he moved around the desk to shake hands. "You were a captain of marines, then, as I recall."

As they gripped hands, both men thought back to that day of victory. Neither of them could smile at it now, for the war was going badly again.

"Yes, that's nine years ago," said Mitchell Spain. "Now—I'm a foreign correspondent for Solar News Service. They're sending me out to interview Nogara."

"I've heard that you've made a reputation as a writer." Hemphill motioned Mitch to a chair. "I'm afraid I have no time myself for literature or other nonessentials."

Mitch sat down, and dug out his pipe. He knew Hemphill well enough to be sure that no slur was intended by the reference to literature. To Hemphill, everything was nonessential except the destruction of berserker machines; and today such a viewpoint was doubtless a good one for a High Admiral.

Mitch got the impression that Hemphill had serious business to talk about, but was uncertain of how to broach the subject. To fill the hesitant silence, Mitch remarked: "I wonder if the High Lord Nogara will be pleased with his new ship." He gestured around the cabin with the stem of his pipe.

Everything was as quiet and steady as if rooted on the surface of a planet. There was nothing to suggest that even now the most powerful engines ever built by Earth-descended man were hurling this ship out toward the rim of the galaxy at many times the speed of light.

Hemphill took the remark as a cue. Leaning slightly

forward in his uncomfortable-looking seat, he said: "I'm not concerned about his liking it. What concerns me is how it's going to be used."

Since the Stone Place, Mitch's left hand was mostly scar tissue and prosthetics. He used one plastic finger now to tamp down the glowing coal of his pipe. "You mean Nogara's idea of shipboard fun? I caught a glimpse just now of the gladiatorial arena. I've never met him, but they say he's gone bad, really bad, since Karlsen's death."

"I wasn't talking about Nogara's so-called amusements. What I'm really getting at is this: Johann Karlsen may be still alive."

Hemphill's calm, fantastic statement hung in the quiet cabin air. For a moment Mitch thought that he could sense the motion of the C-plus ship as it traversed spaces no man understood, spaces where it seemed time could mean nothing and the dead of all the ages might still be walking.

Mitch shook his head. "Are we talking about the same Johann Karlsen?"

"Of course."

"Two years ago he went down into a hypermassive sun, with a berserker-controlled ship on his tail. Unless that story's not true?"

"It's perfectly true, except we think now that his launch went into orbit around the hypermass instead of falling into it. Have you seen the girl who's aboard?"

"I passed a girl, outside your cabin here. I thought . . ."

"No, I have no time for that. Her name is Lucinda, single names are the custom on her planet. She's an eyewitness of Karlsen's vanishing."

"Oh. Yes, I remember the story. But what's this about his being in orbit?"

Hemphill stood up and seemed to become more comfortable, as another man would be sitting down. "Ordinarily, the hypermass and everything near it is invisible, due to the extreme red shift caused by its gravity. But during the last year some scientists have done their best to study it. Their ship didn't compare to this one"—Hemphill turned his head for a moment, as if he could hear the mighty

engines—"but they went as close as they dared, carrying some new instruments, long-wave telescopes. The star itself was still invisible, but they brought back these."

Hemphill stood behind him. "That's what space looks like near the hypermass. Remember, it has about a billion times the mass of Sol, packed into roughly the same volume. Gravity like that does things we don't yet understand."

"Interesting. What forms these dark lines?"

"Falling dust that's become trapped in lines of gravitic force, like the lines round a magnet. Or so I'm told."

"And where's Karlsen supposed to be?"

Hemphill's finger descended on a photo, pointing out a spot of crystalline roundness, tiny as a raindrop within a magnified line of dust. "We think this is his launch. Its orbiting about a hundred million miles from the center of the hypermass. And the berserker-controlled ship that was chasing him is here, following him in the same dust-line. Now they're both stuck. No ordinary engines can drive a ship down there."

Mitch stared at the photos, looking past them into old memories that came flooding back. "And you think he's alive."

"He had equipment that would let him freeze himself into suspended animation. Also, time may be running quite slowly for him. He's in a three-hour orbit."

"A three-hour orbit, at a hundred million miles . . . wait a minute."

Hemphill almost smiled. "I told you, things we don't understand yet."

"All right." Mitch nodded slowly. "So you think there's a chance? He's not a man to give up. He'd fight as long as he could, and then invent a way to fight some more."

"Yes, I think there is a chance." Hemphill's face had become iron again. "You saw what efforts the berserkers made to kill him. They feared him, in their iron guts, as they feared no one else. Though I never quite understood why . . . so, if we can save him, we must do so without delay. Do you agree?"

"Certainly, but how?"

"With this ship. It has the strongest engines ever built—trust Nogara to have seen to that, with his own safety in mind."

Mitch whistled softly. "Strong enough to match orbits with Karlsen and pull him out of there?"

"Yes, mathematically. Supposedly."

"And you mean to make the attempt before this ship is delivered to Nogara."

"Afterwards may be too late; you know he wanted Karlsen out of the way. With these police aboard I've been keeping my rescue plan a secret."

Mitch nodded. He felt a rising excitement. "Nogara may rage if we save Karlsen, but they'll be nothing he can do. How about the crew, are they willing?"

"I've already sounded out the captain; he's with me. And since I hold my admiral's rank from the United Planets I can issue legal orders on any ship, if I say I'm acting against berserkers." Hemphill began to pace. "The only thing that worries me is this detachment of Nogara's police we have aboard; they're certain to oppose the rescue."

"How many of them are there?"

"A couple of dozen. I don't know why there are so many, but they outnumber the rest of us two to one. Not counting their prisoners, who of course are helpless."

"Prisoners?"

"About forty young men, I understand. Sword fodder for the arena."

Lucinda spent a good deal of her time wandering, restless and alone, through the corridors of the great ship. Today she happened to be in a passage not far from the central bridge and flag quarters when a door opened close ahead of her and three men came into view. The two who wore black uniforms held a single prisoner, clad in a shirt of chain mail, between them.

When she saw the black uniforms, Lucinda's chin lifted. She waited, standing in their path.

"Go round me, vultures," she said in an icy voice when they came up to her. She did not look at the prisoner; bitter

experience had taught her that showing sympathy for Nogara's victims could bring added suffering upon them.

The black uniforms halted in front of her. "I am Katsulos," said the bushy-browed one. "Who are you?"

"Once my planet was Flamland," she said, and from the corner of her eye she saw the prisoner's face turn up. "One day it will be my home again, when it is freed of Nogara's vultures."

The second black uniform opened his mouth to reply, but never got out a word, for just then the prisoner's elbow came smashing back into his belly. Then the prisoner, who till now had stood meek as a lamb, shoved Katsulos off his feet and was out of sight around a bend of corridor before either policeman could recover.

Katsulos bounced quickly to his feet. His gun drawn, he pushed past Lucinda to the bend of the corridor.

Then she saw his shoulders slump.

Her delighted laughter did not seem to sting Katsulos in the least.

"There's nowhere he can go," he said. The look in his eyes choked off her laughter in her throat.

Katsulos posted police guards on the bridge and in the engine room, and secured all lifeboats. "The man Jor is desperate and dangerous," he explained to Hemphill and to Mitchell Spain. "Half of my men are searching for him continuously, but you know how big this ship is. I ask you to stay close to your quarters until he's caught."

A day passed, and Jor was not caught. Mitch took advantage of the police dispersal to investigate the arena—Solar News would be much interested.

He climbed a short stair and emerged squirming in imitation sunlight, under a high-domed ceiling as blue as Earth's sky. He found himself behind the upper row of the approximately two hundred seats that encircled the arena behind a sloping crystalline wall. At the bottom of the glassy bowl, the oval-shaped fighting area was about thirty yards long. It was floored by a substance that looked like sand but was doubtless something more cohesive, that

would not fly up in a cloud if the artificial gravity chanced to fail.

In this facility as slickly modern as a death-ray the worst vices of ancient Rome could be most efficiently enjoyed. Every spectator would be able to see every drop of blood. There was only one awkward-looking feature: set at equal intervals around the upper rim of the arena, behind the seats, were three buildings, each as large as a small house. Their architecture seemed to Mitch to belong somewhere on Ancient Earth, not here; their purpose was not immediately apparent.

Mitch took out his pocket camera and made a few photographs from where he stood. Then he walked behind the rows of seats to the nearest of the buildings. A door stood open, and he went in.

At first he thought he had discovered an entrance to Nogara's private harem; but after a moment he saw that the people in the paintings covering the walls were not all, or even most of them, engaged in sexual embraces. There were men and women and godlike beings, posed in a variety of relationships, in the costumes of Ancient Earth when they wore any costumes at all. As Mitch snapped a few more photos he gradually realized that each painted scene was meant to depict some aspect of human love. It was puzzling. He had not expected to find love here, or in any part of Felipe Nogara's chosen environment.

As he left the temple through another door, he passed a smiling statue, evidently the resident goddess. She was bronze, and the upper part of her beautiful body emerged nude from glittering sea-green waves. He photographed her and moved on.

The second building's interior paintings showed scenes of hunting and of women in childbirth. The goddess of this temple was clothed modestly in bright green, and armed with a bow and quiver. Bronze hounds waited at her feet, eager for the chase.

As he moved on to the last temple, Mitch found his steps quickening slightly. He had the feeling that something was drawing him on.

Whatever attraction might have existed was annihilated in revulsion as soon as he stepped into the place. If the first building was a temple raised to love, surely this one honored hate.

On the painted wall opposite the entrance, a sowlike beast thrust its ugly head into a cradle, devouring the screaming child. Beside it, men in togas faces glowing with hate, stabbed one of their number to death. All around the walls men and women and children suffered pointlessly and died horribly, without hope. The spirit of destruction was almost palpable within this room. It was like a berserker's—

Mitch took a step back and closed his eyes, bracing his arms against the sides of the entrance. Yes, he could feel it. Something more than painting and lighting had been set to work here, to honor Hate. Something physical, that Mitch found not entirely unfamiliar.

Years ago, during a space battle, he had experienced the attack of a berserker's mind beam. Men had learned how to shield their ships from mind beams—did they now bring the enemy's weapons inside deliberately?

Mitch opened his eyes. The radiation he felt now was very weak, but it carried something worse than mere confusion.

He stepped back and forth through the entrance. Outside the thick walls of the temple, thicker than those of the other buildings, the effect practically disappeared. Inside, it was definitely perceptible, an energy that pricked at the rage centers of the brain. Slowly, slowly, it seemed to be fading, like a residual charge from a machine that had been turned off. If he could feel it now, what must this temple be like when the projector was on?

More importantly, why was such a thing here at all? Only to goad a few gladiators on to livelier deaths? Possibly. Mitch glanced at this temple's towering bronze god, riding his chariot over the world, and shivered. He suspected something worse than the simple brutality of Roman games.

He took a few more pictures, and then remembered seeing an intercom station near the first temple he had entered. He walked back there, and punched out the number of Ship's Records on the intercom keys.

When the automated voice answered, he ordered: "I want some information about the design of this arena, particularly the three structures spaced around the upper rim."

The voice asked if he wanted diagrams.

"No. At least not yet. Just tell me what you can about the designer's basic plan."

There was a delay of several seconds. Then the voice said: "The basic designer was a man named Oliver Mical, since deceased. In his design programming, frequent reference is made to descriptive passages within a literary work by one Geoffrey Chaucer of Ancient Earth. The quote fantastic unquote work is titled *The Knight's Tale*."

The name of Chaucer rang only the faintest of bells for Mitch. But he remembered that Oliver Mical had been one of Nogara's brainwashing experts, and also a classical scholar.

"What kind of psychoelectronic devices are built into these three structures?"

"There is no record aboard of any such installation."

Mitch was sure about the hate-projector. It might have been built in secretly; it probably *had* been, if his worst suspicions were true.

He ordered: "Read me some of the relevant passages of this literary work."

"The three temples are those of Mars, Diana, and Venus," said the intercom. "A passage relevant to the temple of Mars follows, in original language:

"First on the wal was peynted a forest  
In which there dwelleth neither man ne beast  
With knotty, knarry, barreyn trees olde  
Of stubbes sharp and hidous to biholde."

Mitch knew just enough of ancient languages to catch a word here and there, but he was not really listening now. His mind had stopped on that phrase "temple of Mars." He had heard it before, recently, applied to a newly risen secret cult of berserker-worshippers.

*"And downward from a hill, under a bente  
Ther stood the temple of Mars armipotente  
Wrought all of burned steel, of which the entree  
Was long and streit, and gastly for to see."*



There was a soft sound behind Mitch, and he turned quickly. Katsulos stood there. He was smiling, but his eyes reminded Mitch of Mars' statue.

"Do you understand the ancient language, Spain? No? Then I shall translate." He took up the verse in a chanting voice:

*"Then saw I first the dark imagining  
Of felony, and all its compassing  
The cruel ire, red as any fire  
The pickpurse, and also the pale dread  
The smiler with the knife under his cloak  
The stable burning with the black smoke  
The treason of the murdering in the bed  
The open war, with all the wounds that bled . . ."*

"Who are you, really?" Mitch demanded. He wanted it out in the open. And he wanted to gain time, for Katsulos wore a pistol at his belt. "What is this to you? Some kind of religion?"

"Not some religion!" Katsulos shook his head, while his eyes glowed steadily at Mitch. "Not a mythology of distant gods, not a system of pale ethics for dusty philosophers. No!" He took a step closer. "Spain, there is no time now for me to proselyte with craft and subtlety. I say only this—the temple of Mars stands open to you. The new god of all creation will accept your sacrifice and your love."

"You pray to that bronze statue?" Mitch shifted his weight slightly, getting ready.

"No!" The fanatic's words poured out faster and louder. "The figure with helmet and sword is our symbol and no more. Our god is new, and real, and worthy. He wields deathbeam and missile, and his glory is as the nova sun. He is the descendant of Life, and feeds on Life as is his right. And we who give ourselves to any of his units become immortal in him, though our flesh perish at his touch!"

"I've heard there were men who prayed to berserkers," said Mitch. "Somehow I never expected to meet one." Faintly in the distance he heard a man shouting, and feet pounding down a corridor. Suddenly he wondered if he, or Katsulos, was more likely to receive reinforcement.

"Soon we will be everywhere," said Katsulos loudly. "We are here now, and we are seizing this ship. We will use it to save the unit of our god orbiting the hypermass. And we will give the badlife Karlsen to Mars, and we will give ourselves. And through Mars we will live forever!"

He looked into Mitch's face and started to draw his gun, just as Mitch hurled himself forward.

Katsulos tried to spin away, Mitch failed to get a solid grip on him, and both men fell sprawling. Mitch saw the gun muzzle swing round on him, and dived desperately for shelter behind a row of seats. Splinters flew around him as the gun blasted. In an instant he was moving again, in a crouching run that carried him into the temple of Venus by one door and out by another. Before Katsulos could sight at him for another shot, Mitch had leaped down an exit stairway, out of the arena.

As he emerged into a corridor, he heard gunfire from the direction of the crew's quarters. He went the other way, heading for Hemphill's cabin. At a turn in the passage a black uniform stepped out to bar his way, aiming a pistol. Mitch charged without hesitation, taking the policeman by surprise. The gun fired as Mitch knocked it aside, and then his rush bowled the black-uniform over. Mitch sat on the man and clobbered him with fists and elbows until he was quiet.

Then, captured gun in hand, Mitch hurried on to Hemphill's door. It slid open before he could pound on it, and closed again as soon as he had jumped inside.

A dead black-uniform sat leaning against the wall, unseeing eyes aimed at Mitch, bullet-holes patterned across his chest.

"Welcome," said Hemphill drily. He stood with his left hand on an elaborate control console that had been raised from a place of concealment inside the huge desk. In his right hand a machine pistol hung casually. "It seems we face greater difficulties than we expected."

Lucinda sat in the darkened cabin that was Jor's hiding place, watching him eat. Immediately after his escape she had started roaming the ship's passages, looking for him,

whispering his name, until at last he had answered her. Since then she had been smuggling him food and drink.

He was older than she had thought at first glance; a man of about her own age, with tiny lines at the corners of his suspicious eyes. Paradoxically, the more she helped him, the more suspicious his eyes became.

Now he paused in his eating to ask: "What do you plan to do when we reach Nogara, and a hundred men come aboard to search for me? They'll soon find me, then."

She wanted to tell Jor about Hemphill's plan for rescuing Karlsen. Once Johann Karlsen was aboard, no one on this ship would have to fear Nogara, or so she felt. But just because Jor still seemed suspicious of her, she hesitated to trust him with a secret.

"You knew you'd be caught eventually," she countered. "So why did you run away?"

"You don't know what it's like, being their prisoner."

"I do know."

He ignored her contradiction. "They trained me to fight in the arena with the others. And then they singled me out, and began to train me for something even worse. Now they flick a switch somewhere, and I start to kill, like a berserker."

"What do you mean?"

He closed his eyes, his food forgotten. "I think there's a man they want me to assassinate. Every day or so they put me in the temple of Mars and drive me mad, and then the image of this man is always sent to me. Always it's the same face and uniform. And I must destroy the image, with a sword or a gun or with my hands. I have no choice when they flip that switch, no control over myself. They've hollowed me out and filled me up with their own madness. They're madmen. I think they go into the temple themselves, and turn the foul madness on, and wallow in it, before their idol."

He had never said so much to her in one speech before. She was not sure how much of it was true, but she felt he believed it all. She reached for his hand.

"Jor? I do know something about them. That's why I've helped you. And I've seen other men who were really

brainwashed. They haven't really destroyed you, you'll be all right again someday."

"They want me to look normal." He opened his eyes, which were still suspicious. "Why are you on this ship, anyway?"

"Because." She looked into the past. "Two years ago I met a man called Johann Karlsen. Yes, the one everyone knows of. I spent about ten minutes with him . . . if he's still alive, he's certainly forgotten me, but I fell in love with him."

"In love!" Jor snorted, and began to pick his teeth.

Or I thought I fell in love, she said to herself. Watching Jor now, understanding and forgiving his sullen mistrust, she realized she was no longer able to visualize Karlsen's face clearly.

Something triggered Jor's taut nerves, and he jumped up to peek out of the cabin into the passage. "What's that noise? Hear? It sounds like fighting."

"So." Hemphill's voice was grimmer than usual. "The surviving crewmen are barricaded in their quarters, surrounded and under attack. The damned berserker-lovers hold the bridge, and the engine room. In fact they hold the ship, except for this." He patted the console that he had raised from concealment inside Nogara's innocent-looking desk. "I know Felipe Nogara, and I thought he'd have a master control in his cabin, and when I saw all the police I thought I might possibly need it. That's why I quartered myself in here."

"What all does it control?" Mitch asked, wiping his hands. He had just dragged the dead man into a closet. Katsulos should have known better than to send only one against the High Admiral.

"I believe it will override any control on the bridge or in the engine room. With it I can open or close most of the doors and hatches on the ship. And there seem to be scanners hidden in a hundred places, connected to this little viewscreen. The berserker-lovers aren't going anywhere with this ship until they've done a lot of rewiring or gotten us out of this cabin."

"I don't suppose we're going anywhere either," said Mitch. "Have you any idea what's happened to Lucy?"

"No. She and that man Jor may be free, and they may do

us some good, but we can't count on it. Spain, look here." Hemphill pointed to the little screen. "This is a view inside the guardroom and prison, under the arena's seats. If all those individual cells are occupied, there must be about forty men in there."

"That's an idea. They may be trained fighters, and they'll certainly have no love for the black uniforms."

"I could talk to them from here," Hemphill mused. "But how can we free them and arm them? I can't control their individual cell doors, though I can keep the enemy locked out of that area, at least for a while. Tell me, how did the fighting start? What set it off?"

Mitch told Hemphill what he knew. "It's almost funny. The cultists have the same idea you have, of taking this ship out to the hypermass and going after Karlsen. Only of course they want to give him to the berserkers." He shook his head. "I suppose Katsulos hand-picked cultists from among the police for this mission. There must be more of them around than any of us thought."

Hemphill only shrugged. Maybe he understood fairly well those fanatics out there whose polarity happened to be opposite from his own.

Lucinda would not leave for now, nor let him leave her. Like hunted animals they made their way through the corridors, which she knew well from her days of restless walking. She guided him around the sounds of fighting to where he wanted to go.

He peered around the last corner, and brought his head back to whisper: "There's no one at the guardroom door."

"But how will you get in? And some of the vultures may be inside, and you're not armed."

He laughed soundlessly. "What have I to lose? *My life?*" He moved on around the corner.

Mitch's fingers suddenly dug into Hemphill's arm. "Look! Jor's there, with the same idea you had. Open the door for him, quick!"



Most of the painted panels had been removed from the interior walls of the temple of Mars. Two black-uniformed men were at work upon the mechanism thus revealed, while Katsulos sat at the altar, watching Jor's progress through his own secret scanners. When he saw Jor and Lucinda being let into the guardroom, Katsulos pounced.

"Quick, turn on the beam and focus on him. Boil his brain with it! He'll kill everyone in there, and then we can take our time with the others."

Katsulos' two assistants hurried to obey, arranging cables and a directional antenna. One asked: "He's the one you were training to assassinate Hemphill?"

"Yes. His brain rhythms are on the chart. Focus on him quickly!"

"Set them free and arm them!" Hemphill's image shouted, from a guardroom viewscreen. "You men there! Fight with us and I promise to take you to freedom when the ship is ours; and I promise we'll take Johann Karlsen with us, if he's alive."

There was a roar from the cells at the offer of freedom, and another roar at Karlsen's name. "With him, we'd go on to Esteel itself!" one prisoner shouted.

When the beam from the temple of Mars struck downward, it went unfelt by everyone but Jor. The others in the guardroom had not been conditioned by repeated treatments, and the heat of their emotions was already high.

Just as Jor picked up the keys that would open the cells; the beam hit him. He knew what was happening, but there was nothing he could do about it. In a paroxysm of rage he dropped the keys, and grabbed an automatic weapon from the arms rack. He fired at once, shattering Hemphill's image from the viewscreen.

With the fragment of his mind that was still his own, Jor felt despair like that of a drowning man. He knew he was not going to be able to resist what was coming next.

When Jor fired at the viewscreen, Lucinda understood what was being done to him.

"Jor, no!" She fell to her knees before him. The face of

Mars looked down at her, frightening beyond anything she had ever seen. But she cried out to Mars: "Jor, stop! I love you!"

Mars laughed at her love, or tried to laugh. But Mars could not quite manage to point the weapon at her. Jor was trying to come back into his own face again, now coming back halfway, struggling terribly.

"And you love me, Jor. I know. Even if they force you to kill me, remember I know that."

Jor, clinging to his fragment of sanity, felt a healing power come to him, setting itself against the power of Mars. In his mind danced the pictures he had once glimpsed inside the temple of Venus. Of course! There must be a countering projector built in there, and someone had managed to turn it on.

He made the finest effort he could imagine. And then, with Lucinda before him, he made a finer effort still.

He came above his red rage like a swimmer surfacing, lungs bursting, from a drowning sea. He looked down at his hands, at the gun they held. He forced his fingers to begin opening. Mars still shouted at him, louder and louder, but Venus' power grew stronger still. His hands opened and the weapon fell.

Once the gladiators had been freed and armed the fight was soon over, though not one of the cultists even tried to surrender. Katsulos and the two with him fought to the last from inside the temple of Mars, with the hate projector at maximum power and the recorded chanting voices roaring out their song. Perhaps Katsulos still hoped to drive his enemies to acts of self-destructive rage, or perhaps he had the projector on as an act of worship.

Whatever his reasons, the three inside the temple absorbed the full effect themselves. Mitch had seen bad things before, but when he at last broke open the temple door, he had to turn away for a moment.

Hemphill showed only satisfaction at seeing how the worship of Mars had culminated aboard *Nirvana II*. "Let's see to the bridge and the engine room first. Then we can get this mess cleaned up and be on our way."

Mitch was glad to follow, but he was detained for a moment by Jor.

"Was it you who managed to turn on the counter-projector? If it was, I owe you much more than my life."

Mitch looked at him blankly. "Counter-projector? What're you talking about?"

"But there must have been . . ."

When the others had hurried away, Jor remained in the arena, looking in awe at the thin walls of the temple of Venus, where no projector could be hidden. Then a girl's voice called, and Jor too hurried out.

There was a half minute of silence in the arena.

"Emergency condition concluded," said the voice of the intercom station to the rows of empty seats. "Ship's records returning to normal operation. Last question asked concerned basis of temple designs. Chaucer's verse relevant to temple of Venus follows, in original language:

*"I recche nat if it may bettre be  
To have victorie of them, or they of me  
So that I have myne lady in myne armes.  
For though so be that Mars is god of Armes,  
Your vertu is so great in hevene above  
That, if yow list, I shall wel have my love . . ."*

Venus smiled half-risen from her glittering waves.



*Men always project their beliefs and their emotions into their vision of the world. Machines can be made to see in a wider spectrum, to detect every wavelength precisely as it is, undistorted by love or hate or awe.*

*But still men's eyes see more than lenses do.*

## THE FACE OF THE DEEP

After five minutes had gone by with no apparent change in his situation, Karlsen realized that he might be going to live for a while yet. And as soon as this happened, as soon as his mind dared open its eyes again, so to speak, he began to see the depths of space around him and what they held.

There followed a short time during which he seemed unable to move; a few minutes passed while he thought he might go mad.

He rode in a crystalline bubble of a launch about twelve feet in diameter. The fortunes of war had dropped him here, halfway down the steepest gravitational hill in the known universe.

At the unseeable bottom of this hill lay a sun so massive that not a quantum of light could escape it with a visible wavelength. In less than a minute he and his raindrop of a boat had fallen here, some unmeasurable distance out of normal space, trying to escape an enemy. Karlsen had spent that falling minute in prayer, achieving something like calm, considering himself already dead.

But after that minute he was suddenly no longer falling. He seemed to have entered an orbit—an orbit that no man had ever traveled before, amid sights no eyes had ever seen.

He rode above a thunderstorm at war with a sunset—a ceaseless, soundless turmoil of fantastic clouds that filled half the sky like a nearby planet. But this cloud-mass was immeasurably bigger than any planet, vaster even than most

giant stars. Its core and its cause was a hypermassive sun a billion times the weight of Sol.

The clouds were interstellar dust swept up by the pull of the hypermass; as they fell they built up electrical static which was discharged in almost continuous lightning. Karlsen saw as blue-white the nearer flashes, and those ahead of him as he rode. But most of the flashes, like most of the clouds, were far below him, and so most of his light was sullen red, wearied by climbing just a section of this gravity cliff.

Karlsen's little bubble-ship had artificial gravity of its own, and kept turning itself so its deck was down, so Karlsen saw the red light below him through the translucent deck, flaring up between his space-booted feet. He sat in the one massive chair which was fixed in the center of the bubble, and which contained the boat's controls and life-support machinery. Below the deck were one or two other opaque objects, one of these a small but powerful space-warping engine. All else around Karlsen was clear glass, holding in air, holding out radiation, but leaving his eyes and soul naked to the deeps of space around him.

When he had recovered himself enough to move again, he took a full breath and tried his engine, tried to lift himself up out of here. As he had expected, full drive did nothing at all. He might as well have been working bicycle pedals.

Even a slight change in his orbit would have been immediately visible, for his bubble was somehow locked in position within a narrow belt of rocks and dust that stretched like a thread to girdle the vastness below him. Before the thread could bend perceptibly on its great circle it lost its identity in distance, merging with other threads into a thicker strand. This in turn was braided with other strands into a heavier belt, and so on, order above order of size, until at last (a hundred thousand miles ahead? a million?) the first bending of the great ring-pattern was perceptible; and then the arc, rainbow-colored at that point by lightning, deepened swiftly, plunging out of sight below the terrible horizon of the hypermass's shroud of dust. The fantastic cloud-shapes of that horizon, which Karlsen knew

must be millions of miles away, grew closer while he looked at them. Such was the speed of his orbit.

His orbit, he guessed, must be roughly the size of Earth's path around Sol. But judging by the rate at which the surface of clouds was turning beneath him, he would complete a full circuit every fifteen minutes or so. This was madness, to out-speed light in normal space—but then, of course, space was not really normal here. It could not be. These insane orbiting threads of dust and rock suggested that here gravity had formed itself into lines of force, like magnetism.

The orbiting threads of debris above Karlsen's traveled less rapidly than his. In the nearer threads below him, he could distinguish individual rocks, passing him up like the teeth of a buzzsaw. His mind recoiled from those teeth, from the sheer grandeur of speed and distance and size.

He sat in his chair looking up at the stars. Distantly he wondered if he might be growing younger, moving backward in the time of the universe from which he had fallen . . . he was no professional mathematician or physicist, but he thought not. That was one trick the universe could not pull, even here. But the chances were that in this orbit he was aging quite slowly compared with the rest of the human race.

He realized that he was still huddling in his chair like an awed child, his fingers inside their gauntlets cramping painfully with the strength of his grip on the chair arms. He forced himself to try to relax, to begin thinking of routine matters. He had survived worse things than this display of nature, if none more awful.

He had air and water and food enough, and power to keep recycling them as long as necessary. His engine would be good for that much.

He studied the line of force, or whatever it was, that held him prisoner. The larger rocks within it, some of which approached his bubble in size, seemed never to change their relative positions. But smaller chunks drifted with some freedom backward and forward, at very low velocities.

He got up from his chair and turned. A single step to the rear brought him to the curve of glass. He looked out,

trying to spot his enemy. Sure enough, following half a mile behind him, caught in the same string of space debris, was the berserker-ship whose pursuit had driven him here. Its scanners would be fixed on his bubble now, and it would see him moving and know he was alive. If it could get at him, it would do so. The berserker-computers would waste no time in awed contemplation of the scenery, that much was certain.

As if to register agreement with his thought, the flare of a beam weapon struck out from the berserker-ship. But the beam looked odd and silvery, and it plowed only a few yards among exploding rocks and dust before fizzling away like a comic firework. It added dust to a cloud that seemed to be thickening in front of the berserker. Probably the machine had been firing at him all along, but this weird space would not tolerate energy weapons. Missiles, then?

Yes, missiles. He watched the berserker launch one. The lean cylinder made one fiery dart in his direction, then disappeared. Where had it gone? Fallen in toward the hypermass? At invisible speed, if so.

As soon as he spotted the first flare of another missile, Karlsen on a hunch turned his eyes quickly downward. He saw an instant spark and puff in the next lower line of force, a tooth knocked out of the buzzsaw. The puff where the missile had struck flew ahead at insane speed, passing out of Karlsen's sight almost at once. His eyes were drawn after it, and he realized he had been watching the berserker-ship not with fear but with something like relief, as a distraction from facing . . . all this.

"Ah, God," he said aloud, looking ahead. It was a prayer, not an oath. Far beyond the slow-churning infinite horizon, monstrous dragon-head clouds were rearing up. Against the blackness of space their mother-of-pearl heads seemed to be formed by matter materializing out of nothingness to plunge toward the hypermass. Soon the dragons' necks rose over the edge of the world, wattled with rainbow purls of matter that dripped and fell with unreal-looking speed. And then appeared the dragon-bodies, clouds throbbing with blue-white lightning, suspended above the red bowels of hell.

The vast ring, in which Karlsen's thread of rocks was one component, raced like a circular sawblade toward the prominence. As they rushed in from the horizon they rose up far beyond Karlsen's level. They twisted and reared like mad horses. They must be bigger than planets, he thought, yes, bigger than a thousand Earths or Esteels. The whirling band he rode was going to be crushed between them—and then he saw that even as they passed they were still enormously distant from him on either side.

Karlsen let his eyes close. If men ever dared to pray, if they ever dared even to think of a Creator of the universe, it was only because their tiny minds had never been able to visualize a thousandth part . . . a millionth part . . . there were no words, no analogues for the mind to use in grasping such a scene.

And, he thought, what of men who believe only in themselves, or in nothing? What must it do to them to look nakedly at such odds as these?

Karlsen opened his eyes. In his belief a single human being was of more importance than any sun of whatever size. He made himself watch the scenery. He determined to master this almost superstitious awe.

But he had to brace himself again when he noticed for the first time how the stars were behaving. They were all blue-white needles, the wavefronts of their light jammed together in a stampede over this cliff of gravity. And his speed was such that he saw some stars moving slightly in parallax shifts. He could have depth perception in light-years, if his mind could stretch that far.

He stepped back to his chair, sat down and fastened himself in. He wanted to retreat within himself. He wanted to dig himself a tunnel, down into the very core of a huge planet where he could hide . . . but what were even the biggest planets? Poor lost specks, hardly bigger than this bubble.

Here, he faced no ordinary spaceman's view of infinity. Here there was a terrible *perspective*, starting with rocks an arm's length outside the glass and drawing the mind on and out, rock by rock and line by line, step by inescapable step, on and on and on—

All right. At least this was something to fight against, and fighting something was better than sitting here rotting. To begin with, a little routine. He drank some water, which tasted very good, and made himself eat a bite of food. He was going to be around for a while yet.

Now, for the little job of getting used to the scenery. He faced in the direction of his bubble's flight. Half a dozen meters ahead of him the first large rock, massive as the bodies of a dozen men, hung steadily in the orbit-line of force. With his mind he weighed this rock and measured it, and then moved his thought on to the next notable chunk, a pebble's throw further. The rocks were each smaller than his bubble and he could follow the string of them on and on, until it was swallowed in the converging pattern of forcelines that at last bent around the hypermass, defining the full terror of distance.

His mind hanging by its fingertips swayed out along the intervals of grandeur . . . like a baby monkey blinking in jungle sunlight, he thought. Like an infant climber who had been terrified by the size of trees and vines, who now saw them for the first time as a network of roads that could be mastered.

Now he dared to let his eyes grab hard at that buzzsaw rim of the next inner circle of hurtling rocks, to let his mind ride it out and away. Now he dared to watch the stars shifting with his movement, to see with the depth perception of a planet.

He had been through a lot even before falling here, and sleep overtook him. The next thing he knew loud noises were waking him up. He came full awake with a start of fear. The berserker was not helpless after all. Two of its man-sized machines were outside his glassy door, working on it. Karlsen reached automatically for his handgun. The little weapon was not going to do him much good, but he waited, holding it ready. There was nothing else to do.

Something was strange in the appearance of the deadly robots outside; they were silvered with a gleaming coating. It looked like frost except that it formed only on their forward

surfaces, and streamed away from them toward the rear in little fringes and tails, like an artist's speed-lines made solid. The figures were substantial enough. Their hammer blows at his door . . . but wait. His fragile door was not being forced. The metal killers outside were tangled and slowed in the silvery webbing with which this mad rushing space had draped them. The stuff damped their laser beams, when they tried to burn their way in. It muffled the explosive they set off.

When they had tried everything they departed, pushing themselves from rock to rock back toward their metal mother, wearing their white flaming surfaces like hoods of shame in their defeat.

He yelled relieving insults after them. He thought of opening his door and firing his pistol after them. He wore a spacesuit, and if they could open the door of the berserker-ship from inside he should be able to open this one. But he decided it would be a waste of ammunition.

Some deep part of his mind had concluded that it was better for him, in his present situation, not to think about time. He saw no reason to argue with this decision, and so he soon lost track of hours and days—weeks?

He exercised and shaved, he ate and drank and eliminated. The boat's recycling systems worked very well. He still had his "coffin," and might choose a long sleep—but no thanks, not yet. The possibility of rescue was in his thoughts, mixing hope with his fears of time. He knew that on the day he fell down here there was no ship built capable of coming after him and pulling him out. But ships were always being improved. Suppose he could hang on here for a few weeks or months of subjective time while a few years passed outside. He knew there were people who would try to find him and save him if there was any hope.

From being almost paralyzed by his surroundings, he passed through a stage of exaltation, and then quickly reached—boredom. The mind had its own business, and turned itself away from all these eternal blazing miracles. He slept a good deal.

In a dream he saw himself standing alone in space. He was viewing himself at the distance where the human figure dwindles almost to a speck in the gaze of the unaided human eye. With an almost invisible arm, himself-in-the-distance waved good-bye, and then went walking away, headed out toward the blue-white stars. The striding leg movements were at first barely perceptible, and then became nothing at all as the figure dwindled, losing existence against the face of the deep. . . .

With a yell he woke up. A space boat had nudged against his crystal hull, and was now bobbing a few feet away. It was a solid metal ovoid, of a model he recognized, and the numbers and letters on its hull were familiar to him. He had made it. He had hung on. The ordeal was over.

The little hatch of the rescue boat opened, and two suited figures emerged, one after the other, from its sheltered interior. At once these figures became silver-blurred as the berserker's machines had been, but these men's features were visible through their faceplates, their eyes looking straight at Karlsen. They smiled in steady encouragement, never taking their eyes from his.

Not for an instant.

They rapped on his door, and kept smiling while he put on his spacesuit. But he made no move to let them in; instead he drew his gun.

They frowned. Inside their helmets their mouths formed words: Open up! He flipped on his radio, but if they were sending nothing was coming through in this space. They kept on gazing steadily at him.

Wait, he signaled with an upraised hand. He got a slate and stylus from his chair, and wrote them a message.

**LOOK AROUND AT THE SCENERY FOR A WHILE.**

He was sane but maybe they thought him mad. As if to humor him, they began to look around them. A new set of dragon-head prominences were rising ahead, beyond the stormy horizon at the rim of the world. The frowning men looked ahead of them at dragons, around them at buzzsaw rainbow whirls of stone, they looked down into the deadly



depths of the inferno, they looked up at the stars' poisonous blue-white spears sliding visibly over the void.

Then both of them, still frowning uncomprehendingly, looked right back at Karlсен.

He sat in his chair, holding his drawn gun, waiting, having no more to say. He knew the berserker-ship would have boats aboard, and that it could build its killing machines into the likenesses of men. These were almost good enough to fool him.

The figures outside produced a slate of their own from somewhere.

WE TOOK BERS. FROM BEHIND. ALL OK & SAFE.  
COME OUT.

He looked back. The cloud of dust raised by the berserker's own weapons had settled around it, hiding it and all the forceline behind it from Karlсен's view. Oh, if only he could believe that these were men . . .

They gestured energetically, and lettered some more.

OUR SHIP WAITING BACK THERE BEHIND DUST.  
SHE'S TOO BIG TO HOLD THIS LEVEL LONG.

And again:

KARLSEN, COME WITH US! ! ! THIS YOUR ONLY  
CHANCE!

He didn't dare read any more of their messages for fear he would believe them, rush out into their metal arms, and be torn apart. He closed his eyes and prayed. After a long time he opened his eyes again. His visitors and their boats were gone.

Not long afterward—as time seemed to him—there were flashes of light from inside the dust cloud surrounding the berserker. A fight, to which someone had brought weapons that would work in this space? Or another attempt to trick him? He would see.

He was watching alertly as another rescue boat, much like the first, inched its way out of the dustcloud toward him. It drew alongside and stopped. Two more spacesuited figures got out and began to wear silver drapery.

This time he had his sign ready.

LOOK AROUND AT THE SCENERY FOR A WHILE.

As if to humor him, they began to look around them. Maybe they thought him mad, but he was sane. After about a minute they still hadn't turned back to him—one's face looked up and out at the unbelievable stars, while the other slowly swiveled his neck, watching a dragon's head go by. Gradually their bodies became congealed in awe and terror, clinging and crouching against his glass wall.

After taking half a minute more to check his own helmet and suit, Karlsen bled out his cabin air and opened his door.

"Welcome, *men*," he said, over his helmet radio. He had to help one of them aboard the rescue boat. But they made it.

*Once more I, Third historian of the Carmpan race, thankful to Earth-descended humans for their defense of my world and of many worlds, have recorded for them a series of my visions. Relatively unfettered by time or space, my mind has roamed the Galaxy in past and future to gather pieces of the truth of the great war of life against unliving death. What I have set down is far from the whole truth of that war, yet it is true.*

*Most of the higher intellects of the galaxy will shrink from war, even when survival depends upon it absolutely. Yet from the same matter that supports their lives came the berserkers. Were their Builders uniquely evil? Would that it were so . . .*

## THE SMILE

The berserker attack upon the world called St. Gervase had ended some four standard months before the large and luxurious private yacht of the Tyrant Yoritomo appeared amid the ashclouds and rainclouds that still monotonized the planet's newly lifeless sky. From the yacht a silent pair of waspish-looking launches soon began a swift descent, to land on the denuded surface where the planet's capital city had once stood.

The crews disembarking from the launches were armored against hot ash and hot mud and residual radiation. They knew what they were looking for, and in less than a standard hour they had located the vaulted tunnel leading down, from what had been a sub-basement of the famed St. Gervase Museum. The tunnel was partially collapsed in places, but still passable, and they followed its steps downward, stumbling here and there on debris fallen from the surface. The battle had not been completely one-sided in its early stages, and scattered amid the wreckage of the once-great city were fragments of berserker troop-landers and of their robotic shock-troops. The unliving metal killers had had

to force a landing, to neutralize the defensive field generators, before the bombardment could begin in earnest.

The tunnel terminated in a large vault a hundred meters down. The lights, on an independent power supply, were still working, and the air conditioning was still trying to keep out dust. There were five great statues in the vault, including one in the attached workshop where some conservator or restorer had evidently been treating it. Each one was a priceless masterwork. And scattered in an almost casual litter throughout the shelter were paintings, pottery, small works in bronze and gold and silver, the least a treasure to be envied.

At once the visitors radioed news of their discovery to one who waited eagerly in the yacht hovering above. Their report concluded with the observation that someone had evidently been living down here since the attack. Beside the workshop, with its power lamp to keep things going, there was a small room that had served as a repository of the Museum's records. A cot stood in it now, there had been food supplies laid in, and there were other signs of human habitation. Well, it was not too strange that there should have been a few survivors, out of a population of many millions.

The man who had been living alone in the shelter for four months came back to find the landing party going busily about their work.

"Looters," he remarked, in a voice that seemed to have lost the strength for rage, or even fear. Not armored against radiation or anything else, he leaned against the terminal doorway of the battered tunnel, a long-haired, unshaven, once-fat man whose frame was now swallowed up in clothes that looked as if they might not have been changed since the attack.

The member of the landing party standing nearest looked back at him silently, and drummed fingers on the butt of a holstered handgun, considering. The man who had just arrived threw down the pieces of metallic junk he had brought with him, conveying in the gesture his contempt.

The handgun was out of its holster, but before it was

leveled, an intervention from the leader of the landing party came in the form of a sharp gesture. Without taking his eyes off the man in the doorway, the leader at once reopened communication with the large ship waiting above.

"Your Mightiness, we have a survivor here," he informed the round face that soon appeared upon the small portable wallscreen. "I believe it is the sculptor Antonio Nobrega."

"Let me see him at once. Bring him before the screen." The voice of His Mightiness was inimitable and terrible, and no less terrible, somehow, because he always sounded short of breath. "Yes, you are right, although he is much changed. Nobrega, how fortunate for us both! This is indeed another important find."

"I knew you would be coming to St. Gervase now," Nobrega told the screen, in his empty voice. "Like a disease germ settling in a mangled body. Like some great fat cancer virus. Did you bring along your woman, to take charge of our Culture?"

One of the men beside the sculptor knocked him down. A breathless little snarl came from the screen at this, and Nobrega was quickly helped back to his feet, then put into a chair.

"He is an artist, my faithful ones," the screen-voice chided. "We must not expect him to have any sense of the fitness of things outside his art. No. We must get the maestro here some radiation treatment, and then bring him along with us to the Palace, and he will live and work there as happily, or unhappily, as elsewhere."

"Oh no," said the artist from his chair, more faintly than before. "My work is done."

"Pish-posh. You'll see."

"I knew you were coming . . ."

"Oh?" The small voice from the screen was humoring him. "And how did you know that?"

"I heard . . . when our fleet was still defending the approaches to the system, my daughter was out there with it. Through her, before she died, I heard how you brought your own fleet in-system, to watch what was going to happen, to judge our strength, our chance of resisting the berserkers."

I heard how your force vanished when they came. I said then that you'd be back, to loot the things you could never get at in any other way."

Nobrega was quiet for a moment, then lunged from his chair—or made the best attempt at lunging that he could. He grabbed up a long metal sculptor's tool and drew it back to swing at *Winged Truth Rising*, a marble Poniatowski eleven centuries old. "Before I'll see you take this—"

Before he could knock a chip of marble loose, he was overpowered, and put into restraint.

When they approached him again an hour later, to take him up to the yacht for medical examination and treatment, they found him already dead. Autopsy on the spot discovered several kinds of slow and gentle poison. Nobrega might have taken some deliberately. Or he might have been finished by something the berserkers had left behind, to ensure that there would be no survivors, as they moved on to carry out their programmed task of eradicating all life from the Galaxy.

On his voyage home from St. Gervase, and for several months thereafter, Yoritomo was prevented by pressing business from really inspecting his new treasures. By then the five great statues had been installed, to good esthetic advantage, in the deepest, largest, and best-protected gallery of the Palace. Lesser collections had been evicted to make room and visual space for *Winged Truth Rising*; Lazamon's *Laughing* (or *Raging*) *Bacchus*; *The Last Provocation*, by Sarapion; Lazienki's *Twisting Room*; and *Remembrance of Past Wrongs*, by Prajapati.

It chanced that at this time the Lady Yoritomo was at the Palace too. Her duties, as Cultural Leader of the People, and High Overseer of Education for the four tributary planets, kept her on the move, and it often happened that she and her Lord did not see each other for a month or longer at a time.

The two of them trusted each other more than they trusted anyone else. Today they sat alone in the great gallery and sipped tea, and spoke of business.

The Lady was trying to promote her latest theory, which

was that love for the ruling pair might be implanted genetically in the next generation of people on the tributary worlds. Several experimental projects had already begun. So far these had achieved little but severe mental retardation in the subjects, but there were plenty of new subjects and she was not discouraged.

The Lord spoke mainly of his own plan, which was to form a more explicit working arrangement with the berserkers. In this scheme the Yoritomos would furnish the killer machines with human lives they did not need, and planets hard to defend, in exchange for choice works of art and, of course, immunity from personal attack. The plan had many attractive features, but the Lord had to admit that the difficulty of opening negotiations with berserkers, let alone establishing any degree of mutual trust, made it somewhat impractical.

When a pause came in the conversation, Yoritomo had the banal thought that he and his wife had little to talk about anymore, outside of business. With a word to her, he rose from the alcove where they had been sitting, and walked to the far end of the gallery of statues to replenish the tea pot. For esthetic reasons he refused to allow robots in here; nor did he want human servitors around while this private discussion was in progress. Also, he thought, as he retraced his steps, the Lady could not help but be flattered, and won toward his own position in a certain matter where they disagreed, when she was served personally by the hands of one so mighty . . .

He rounded the great metal flank of *The Last Provocation* and came to a dumb halt, in shocked surprise so great that for a moment his facial expression did not even alter. Half a minute ago he had left her vivacious and thoughtful and full of graceful energy. She was still in the same place, on the settee, but slumped over sideways now, one arm extended with its slender, jeweled finger twitching upon the rich brown carpet. The Lady's hair was wildly disarranged; and small wonder, he thought madly, for her head had been twisted almost completely around, so her dead eyes now looked over one bare shoulder almost straight at Yoritomo. Upon

her shoulder and her cheek were bruised discolorations . . .

He spun around at last, dropping the fragile masterpiece that held his tea. His concealed weapon was half-drawn before it was smashed out of his grip. He had one look at death, serenely towering above him. He had not quite time enough to shriek, before the next blow fell.

The wind had not rested in the hours since Ritwan's arrival, and with an endless howl it drove the restless land before it. He could quite easily believe that in a few years the great pit left by the destruction of the old Yoritomo Palace had been completely filled. The latest dig had ended only yesterday, and already the archaeologists' fresh pits were beginning to be reoccupied by sand.

"They were actually more pirates than anything else," Iselin, the chief archaeologist, was saying. "At the peak of their power two hundred years ago they ruled four systems. Ruled them from here, though there's not much showing on the surface now but this old sandpile."

"Ozymandias," Ritwan murmured.

"What?"

"An ancient poem." He pushed back sandy hair from his forehead with a thin, nervous hand. "I wish I'd got here in time to see the statues before you crated them and stowed them on your ship. You can imagine I came as fast as I could from Sirgol, when I heard there was a dig in progress here."

"Well." Iselin folded her plump arms and frowned, then smiled, a white flash in a dark Indian face. "Why don't you ride with us back to Esteel system? I really can't open the crates for anything until we get there. Not under the complicated rules of procedure we're stuck with on these jointly sponsored digs."

"My ship does have a good autopilot."

"Then set it to follow ours, and hop aboard. When we unpack on Esteel you can be among the first to look your fill. Meanwhile we can talk. I wish you'd been with us all along, we've missed having a really first-rate art historian."

"All right, I'll come." They offered each other enthusiastic



smiles. "It's true, then, you really found most of the old St. Gervase collection intact?"

"I don't know that we can claim that. But there's certainly a lot."

"Just lying undisturbed here, for about two centuries."

"Well, as I say, this was the Yoritomos' safe port. But it looks like no more than a few thousand people ever lived on this world at any one time, and no one at all has lived here for a considerable period. Some intrigue or other evidently started among the Tyrant's lieutenants—no one's ever learned exactly how or why it started, but the thieves fell out. There was fighting, the Palace destroyed, the rulers themselves killed, and the whole thing collapsed. None of the intriguers had the ability to keep it going, I suppose, with the so-called Lord and Lady gone."

"Just when was that?"

Iselin named a date.

"The same year St. Gervase fell. That fits. The Yoritomos could have gone there after the berserkers left, and looted at their leisure. That would fit with their character, wouldn't it?"

"I'm afraid so . . . you see, the more I learned of them, the more I felt sure that they must have had a deeper, more secret shelter than any that was turned up in the early digs a century ago. The thing is, the people who dug here then found so much loot they were convinced they'd found it all."

Ritwan was watching the pits fill slowly in.

Iselin gave his arm a friendly shake. "And—did I tell you? We found two skeletons, I think of the Yoritomos themselves. Lavishly dressed in the midst of their greatest treasures. Lady died of a broken neck, and the man of multiple . . ."

The wind was howling still, when the two ships lifted off.

Aboard ship on the way to Esteel, things were relaxed and pleasant, if just a trifle cramped. With Ritwan along, they were six on board, and had to fit three to a cabin in narrow bunks. It was partially the wealth of the find that crowded them, of course. There were treasures almost beyond

imagining stowed in plastic gratings almost everywhere one looked. The voyagers could expect a good deal of leisure time en route to marvel at it all. Propulsion and guidance and life-support were taken care of by machinery, with just an occasional careful human glance by way of circumspection. People in this particular portion of the inhabited Galaxy traveled now, as they had two hundred years before, in relative security from berserker attack. And now there were no human pirates.

Lashed in place in the central cargo bay stood the five great, muffled forms from which Ritwan particularly yearned to tear the pads and sheeting. But he made himself be patient. On the first day out he joined the others in the cargo bay, where they watched and listened to some of the old recordings found in the lower ruins of the Yoritomo Palace. There were data stored on tapes, in crystal cubes, around old permafrozen circuit rings. And much of the information was in the form of messages recorded by the Tyrant himself.

"The Gods alone know why he recorded this one," sighed Oshogbo. She was chief archivist of a large Esteel museum, one of the expedition's sponsoring institutions. "Listen to this. Look at him. He's ordering a ship to stand by and be boarded, or face destruction."

"The ham actor in him, maybe," offered Chi-nan, who on planet had been an assistant digger for the expedition, but in space became its captain. "He needed to study his delivery."

"Every one of his ships could carry the recording," suggested Klyuchevski, expert excavator. "So their victims wouldn't know if the Tyrant himself were present or not—I'm not sure how much difference it would make."

"Let's try another," said Granton, chief record-keeper and general assistant.

Within the next hour they sampled recordings in which Yoritomo: (1) ordered his subordinates to stop squabbling over slaves and concubines, (2) pleaded his case, to the Interworlds Government, as that of a man unjustly maligned, the representative of a persecuted people; (3) conducted

a video tour, for some supposed audience whose identity was never made clear, of the most breathtaking parts of his vast collection of art . . .

"Wait!" Ritwan broke in. "What was that bit? Would you run that last part once more?"

The Tyrant's asthmatic voice repeated: "The grim story of how these magnificent statues happened to be saved. Our fleet had made every effort but still arrived *too* late to be of any help to the heroic defenders of St. Gervase. For many days we searched in vain for survivors; we found just one. And this man's identity made the whole situation especially poignant to me, for it was the sculptor Antonio Nobrega. Sadly, our help had come too late, and he shortly succumbed to the berserker poisons. I hope that the day will come soon, when all governments will heed my repeated urgings, to prosecute a war to the finish against these scourges of . . ."

"So!" Ritwan looked pleased, a man who has just had an old puzzle solved for him. "That's where Nobrega died, then. We've thought for some time it was likely—most of his family was there—but we had no hard evidence before."

"He was the famous forger, wasn't he?" asked Granton.

"Yes. A really good artist in his own right, though the shady side of his work has somewhat overshadowed the rest." Ritwan allowed time for the few small groans earned by the pun, and went on: "I'd hate to accept the old Tyrant's word on anything. But I suppose he'd have no reason to lie about Nobrega."

Iselin was looking at her wrist. "Lunch time for me. Maybe the rest of you want to spend all day in here."

"I can resist recordings." Ritwan got up to accompany her. "Now, if you were opening up the crates—"

"No chance, friend. But I can show you holograms—didn't I mention that?"

"You didn't!"

Oshogbo called after them: "Here's the Lord and Lady both, on this one"

They did not stop. Chi-nan came out with them, leaving three people still in the cargo bay.

In the small ship's lounge, the three who had left set up lunch with a floor show.

"This is really decadence. Pea soup with ham and—what have we here? Lazienki. Marvelous!"

The subtle grays and reds of *Twisting Room* (was it the human heart?) came into existence, projected by hidden devices in the corners of the lounge, and filling up the center. Iselin with a gesture made the full-size image rotate slowly.

"Captain?" the intercom asked hoarsely, breaking in.

"I knew it—just sit down, and—"

"I think we have some kind of cargo problem here." It sounded like Granton's voice, perturbed, "Something seems to be breaking up, or . . . Iselin, you'd better come too, and take a look at your . . ."

A pause, with background smashing noises. Then incoherent speech, in mixed voices, ending in a hoarse cry.

Chi-nan was already gone. Ritwan, sprinting, just kept in sight of Iselin's back going around corners. Then she stopped so suddenly that he almost ran into her.

The doorway to the cargo hold, left wide open when they came out of it a few minutes before, was now sealed tightly by a massive sliding door, a safety door designed to isolate compartments in case of emergencies like fire or rupture of the hull.

On the deck just outside the door, a human figure sprawled. Iselin and Chi-nan were already crouched over it; as Ritwan bent over them, a not-intrinsically-unpleasant smell of scorched meat reached his nostrils.

"Help me lift her . . . careful . . . sick bay's that way."

Ritwan helped Iselin. Chi-nan sprang to his feet, looked at an indicator beside the heavy door, and momentarily rested a hand on its flat surface.

"Something burning in there," he commented tersely, and then came along with the others on the quick hustle to sickbay. At his touch the small door opened for them, lights springing on inside.

"What's in our cargo that's not fireproofed?" Iselin demanded, as if all this were some personal insult hurled her way by Fate.

Dialogue broke off for a while. The burn-tank hissing brim-full twenty seconds after the proper studs were punched, received Oshogbo's scorched dead weight, clothes and all, and went to work upon her with a steady sloshing. Then, while Iselin stayed in sick bay, Ritwan followed Chinnan on another scrambling run, back to the small bridge. There the captain threw himself into an acceleration chair and laid swift hands on his controls, demanding an accounting from his ship.

In a moment he had switched his master intercom to show conditions inside the cargo bay, where two people were still unaccounted for. On the deck in there lay something clothed, a bundle-of-old-rags sort of something. In the remaining moment of clear vision before the cargo bay pickup went dead, Ritwan and Chinnan both glimpsed a towering, moving shape.

The captain stared for a moment at the gray noise which came next, then switched to sick bay. Iselin appeared at once.

"How's she doing?" Chinnan demanded.

"Signs are stabilizing. She's got a crack in the back of her skull as well as the burns on her torso, the printout says. As if something heavy had hit her on the head."

"Maybe the door clipped her, sliding closed, just as she got out." The men in the control room could see into the tank, and the captain raised his voice. "Oshy, can you answer me? What happened to Granton and Klu?"

The back of Oshogbo's neck was cradled on a rest of ivory plastic. Her body shook and shimmied lightly, vibrating with the dark liquid, as if she might be enjoying her swim. Here and there burnt shreds of clothing were now drifting free. She looked around and seemed to be trying to locate Chinnan's voice. Then she spoke: "It . . . grabbed them. I . . . ran."

"What grabbed them? Are they still alive?"

"Granton's head came . . . it pulled off his head. I got out. Something hit . . ." The young woman's eyes rolled, her voice faded.

Iselin's face came into view again. "She's out of it; I think

the medic just put her to sleep. Should I try to get it to wake her again?"

"Not necessary." The captain sounded shaken. "I think we must assume the others are finished. I'm not going to open that door, anyway, until I know more about our problem."

Ritwan asked: "Can we put down on some planet quickly?"

"Not one where we can get help," the captain told him over one shoulder. "There's no help closer than Esteel. Three or four days."

The three of them quickly talked over the problem, agreeing on what they knew. Two people were sure that they had seen, on intercom, something large moving about inside the cargo bay.

"And," Iselin concluded, "our surviving firsthand witness says that 'it' tore off someone's head."

"Sounds like a berserker," Ritwan said impulsively. "Or could it possibly be some animal—? Anyway, how could anything that big have been hiding in there?"

"An animal's impossible," Chi-nan told him flatly, "And you should have seen how we packed that space, how carefully we checked to see if we were wasting any room. The only place anyone or anything *could* have been hidden was inside one of those statuary crates."

Iselin added: "And I certainly checked out every one of them. We formed them to fit closely around the statues, and they couldn't have contained anything else of any size. What's that noise?"

The men in the control room could hear it too, a muffled, rhythmic banging, unnatural for any space ship that Ritwan had ever ridden. He now, for some reason, suddenly thought of what kind of people they had been whose Palace had provided this mysterious cargo; and for the first time since the trouble had started he began to feel real fear.

He put a hand on the other man's shoulder. "Chi-nan—what exactly did we see on the intercom screen?"

The captain thought before answering. "Something big, taller than a man, anyway. And moving by itself. Right?"

"Yes, and I'd say it was dark . . . beyond that, I don't know."

"I would have called it light-colored." The muffled pounding sounds had grown a little steadier, faster, louder. "So, do you think one of our statues has come alive on us?"

Iselin's voice from sick bay offered: "I think 'alive' is definitely the wrong word."

Ritwan asked: "How many of the statues have movable joints?" *Twisting Room*, which he had seen in hologram, did not. But articulated sculpture had been common enough a few centuries earlier.

"Two did," said Iselin.

"I looked at all the statues closely," Chi-nan protested. "Iselin, you did too. We all did, naturally. And they were genuine."

"We never checked inside them, for controls, power supplies, robotic brains. Did we?"

"Of course not. There was no reason."

Ritwan persisted: "So it is a berserker. It can't be anything else. And it waited until now to attack, because it wants to be sure to get the ship."

Chi-nan pounded his chair-arm with a flat hand. "No! I can't buy that. Do you think that emergency door would stop a berserker? We'd all be dead now, and it would have the ship. And you're saying it's a berserker that looks just like a masterpiece by a great artist, enough alike to fool experts; and that it stayed buried there for two hundred years without digging itself out; and that—"

"Nobrega," Ritwan interrupted suddenly.

"What?"

"Nobrega . . . he died on St. Gervase, we don't know just how. He had every reason to hate the Yoritomos. Most probably he met one or both of them at the St. Gervase Museum, after the attack, while they were doing what they called their collecting.

"You said Nobrega was a great forger. Correct. A good engineer, too. You also said that no one knows exactly how the Yoritomos came to die, only that their deaths were violent. And occurred among these very statues."

The other two, one on screen and one at hand, were very quiet, watching him.

"Suppose," Ritwan went on, "Nobrega knew somehow that the looters would be coming, and he had the time and the means to concoct something special for them. Take a statue with movable limbs, and build in a power lamp, sensors, controls—a heat-projector, maybe, as a weapon. And then add the electronic brain from some small berserker unit."

Chi-nan audibly sucked in his breath.

"There might easily have been some of those lying around on St. Gervase, after the attack. Everyone agrees it was a fierce defense."

"I'm debating with myself," said Chi-nan, "whether we should all pile into the lifeboat, and head for your ship, Ritwan. It's small, as you say, but I suppose we'd fit, in a pinch."

"There's no real sick bay."

"Oh." They all looked at the face of the young woman in the tank, unconscious now, dark hair dancing round it upon the surface of the healing fluid.

"Anyway," the captain resumed, "I'm not sure it couldn't take over the controls here, catch us, ram us somehow. Maybe, as you think, it's not a real berserker. But it seems to be too close to the real thing to just turn over our ship to it. We're going to have to stay and fight."

"Bravo," said Iselin. "But with what? It seems to me we stowed away our small arms in the cargo bay somewhere."

"We did. Let's hope Nobrega didn't leave it brains enough to look for them, and it just keeps banging on that door. Meanwhile, let's check what digging equipment we can get at."

Iselin decided it was pointless for her to remain in sick bay, and came to help them, leaving the intercom channel open so they could look in on Oshogbo from time to time.

"That door to the cargo bay is denting and bulging, boys," she told them as she ducked into the cramped storage space beneath the lounge where they were rummaging "Let's get something organized in the way of weapons."

Ritwan grunted, dragging out a long, thick-bodied tool, evidently containing its own power supply. "What's this, an autohammer? Looks like it would do a job."



"Sure," said Chi-nan. "If you get within arm's length. We'll save that for when we're really desperate."

A minute later, digging through boxes of electrical-looking devices strange to Ritwan, the captain murmured: "If he went to all the trouble of forging an old master he must have had good reason. Well, it'd be the one thing the Yoritomos might accept at face value. Take it right onto their ship, into their private rooms. He must have been out to get the Lord and Lady both."

"I guess that was it. I suppose just putting a simple bomb in the statue wouldn't have been sure enough, or selective enough."

"Also it might have had to pass some machines that sniff out explosives, before it got into the inner . . . Ritwan! When that thing attacked, just now, what recording were they listening to in the cargo bay?"

Ritwan stopped in the middle of opening another box. "Oshogbo called it out to us as we were leaving. You're right, one with both the Yoritomos on it. Nobrega must have set his creation to be triggered by their voices, heard together."

"How it's supposed to be turned off, is what I'd like to know."

"It did turn off, for some reason, didn't it? And lay there for two centuries. Probably Nobrega didn't foresee that the statue might survive long enough for the cycle to be able to repeat. Maybe if we can just hold out a little longer, it'll turn itself off again."

Patient and regular as a clock, the muffled battering sounded on.

"Can't depend on that, I'm afraid." Chi-nan kicked away the last crate to be searched. "Well, this seems to be the extent of the hardware we have for putting together weapons. It looks like whatever we use is going to have to be electrical. I think we can rig up something to electrocute—if that's the right word—or fry, or melt, the enemy. We've got to know first, though, just which of those statues is the one we're fighting. There are only two possible mobile ones, which narrows it down. But still."

"*Laughing Bacchus*," Iselin supplied. "And *Remembrance of Past Wrongs*."

"The first is basically steel. We can set up an induction field strong enough to melt it down, I think. A hundred kilos or so of molten iron in the middle of the deck may be hard to deal with, but not as hard as what we've got now. But the other statue, or anyway its outer structure, is some kind of very hard and tough ceramic. That one will need something like a lightning bolt to knock it out." A horrible thought seemed to strike Chi-nan all at once. "You don't suppose there could be *two*?"

Ritwan gestured reassurance. "I think Nobrega would have put all his time and effort into perfecting one."

"So," said Iselin, "it all comes down to knowing which one he forged, and which is really genuine. The one he worked on must be forged; even if he'd started with a real masterpiece to build his killing device, by the time he got everything implanted the surface would have to be almost totally reconstructed."

"So I'm going up to the lounge," the art historian replied. "And see those holograms. If we're lucky I'll be able to spot it."

Iselin came with him, muttering: "All you have to do, friend, is detect a forgery that got past Yoritomo and *his* experts . . . maybe we'd better think of something else."

In the lounge the holograms of the two statues were soon displayed full size, side by side and slowly rotating. Both were tall, roughly humanoid figures, and both in their own ways were smiling.

A minute and a half had passed when Ritwan said, decisively: "This one's the forgery. Build your lightning device."

Before the emergency door at last gave way under that mindless, punch-press pounding, the electrical equipment had been assembled and moved into place. On either side of the doorway Chi-nan and Iselin crouched, manning their switches. Ritwan (counted the most expendable in combat) stood in plain view opposite the crumpling door, garbed

in a heat-insulating spacesuit and clutching the heavy autohammer to his chest.

The final failure of the door was sudden. One moment it remained in place, masking what lay beyond; next moment, it had been torn away. For a long second of the new silence, the last work of Antonio Nobrega stood clearly visible, bone-white in the glare of lamps on every side, against the blackened ruin of what had been the cargo bay.

Ritwan raised the hammer, which suddenly felt no heavier than a microprobe. For a moment he knew what people felt, who face the true berserker foe in combat.

The tall thing took a step toward him, serenely smiling. And the blue-white blast came at it from the side, faster than any mere matter could be made to dodge.

A couple of hours later the most urgent damage-control measures had been taken, two dead bodies had been packed for preservation—with real reverence if without gestures—and the pieces of Nobrega's work, torn asunder by the current that the ceramic would not peacefully admit, had cooled enough to handle.

Ritwan had promised to show the others how he had known the forgery; and now he came up with the fragment he was looking for. "This," he said.

"The mouth?"

"The smile. If you've looked at as much Federation era art as I have, the incongruity is obvious. The smile's all wrong for Prajapati's period. It's evil, cunning—when the face was intact you could see it plainly. Gloating. Calm and malevolent at the same time."

Iselin asked: "But Nobrega himself didn't see that? Or Yoritomo?"

"For the period they lived in, the smile's just fine, artistically speaking. They couldn't step forward or backward two hundred years, and get a better perspective. I suppose revenge is normal in any century, but tastes in art are changeable."

Chi-nan said: "I thought perhaps the subject or the title gave you some clue."

*“Remembrance of Past Wrongs*—no, Prajapati did actually do something very similar in subject, as I recall. As I say, I suppose revenge knows no cultural or temporal boundaries.”

*Normal in any century.* Oshogbo, watching via intercom from the numbing burn-treatment bath shivered and closed her eyes. *No boundaries.*

*The universe has given life its own arsenal of weapons, and I am no longer surprised that even tenderness may sometimes be counted among them. Even the most gentle and humble of living things may demonstrate surprising strength . . .*

## 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 road 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 ever 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 planetoid-sized berserker; and before they 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, perhaps fifty long, twelve or fifteen feet high. Evidently all interior decks and paneling, everything nonessential, had been ripped out. There was left the inner hull, some plumbing some light, artificial gravity 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 among them.

"How do," said one man to Gil, as the door closed behind the machines again. The speaker was a thin guy 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—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 at least sounded normal.

"This is Mr. Hudak," said Ensign Rom, indicating another young, once-authoritative 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, always there was 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 processed 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, 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 it 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 in control of these other life-units. 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." Rom 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 that maybe now, for the first time in his life, 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 spoke again his low voice was charged with excitement. "Feel that? We're going 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, *has* to be spread out along that plastic bulkhead at the forward end of this compartment we're in. On the control room side there's another plastic slab 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 along 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 rear 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 food-growing. Gil thought it over briefly. "I don't need no 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 a small passage leading to the door. The trays furthest 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 at a steady two feet 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; 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 kind of 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 yards 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 extended 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 nothing but 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 the 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 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 few feet above the trays.

Gil lay still on his platform, watching cautiously. Ensign Rom came charging across the trays and past him, trampling the crop unheedingly, 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 he, followed by the others, scrambled over trays to help Rom.

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 sideways out of its null 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, though? There's no fighting, no other ships around—"

He fell silent as he joined Hudak in staring down into the narrow space between the furthest 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. Five thousand pounds pressure per square inch. 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 printed circuits.

"I hope it was slow," Gil said. "I hope it felt the whole thing."





*A truth can be a potent weapon. So can a lie. I touched a scrupulous and honest mind, that lied to enforce honesty . . .*

## THE ANNIHILATION OF ANGKOR APEIRON

The battle was a long one for deep space, lasting well over a standard hour, and as fierce as any fight in which the losing side can have no expectation of survival. Commander Ridolfi had fought his heavy cruiser, the *Dipavamsa*, with a desperate skill that twice in a matter of minutes forestalled instant destruction by the berserker's missiles, and each member of his crew performed superbly well in making such combat decisions as could be handled slowly enough to let human brains cooperate with their slave computers.

The human crew of course faced death or worse if they should lose. And the berserker, their unliving foe, faced its own analogue of death and worse-than-death. To lose would mean destruction—which was nothing to a berserker if destruction could bring victory. But destruction in defeat meant certain failure to achieve any further progress toward its programmed goal, the annihilation of all life, whenever and wherever it could be attacked.

Aboard the *Dipavamsa* there were only four civilian passengers, including Otto Novotny, who in his long life had never come close to taking part in a battle before and who felt a great deal too old and paunchy for such endeavors now. Nevertheless he was more alert than any of the other civilians, and had begun to don his requisite suit of space armor as soon as the Battle Stations klaxon sounded, while the other three were still wondering aloud if it was only practice.

Ten seconds later the first berserker missile blew against the cruiser's defensive screens, a mere kilometer from her hull, and they all knew better.



*Dipavamsa* was fighting for her life several light years from any star, along a trade route where in these last few standard months no unarmed vessels had dared to try to pass. The berserker machine, a sphere some forty or fifty kilometers in diameter, all armor and combat computers and heavy weapons and drive, had waited like a spider in the midst of the net of detectors it had planted in subspace. The region where its detectors existed was conterminous to one in normal space where a strait of hard vacuum bent between two nebulae, forming a bottleneck only a few billion kilometers wide in which a reasonably fast passage could be achieved. When a manned ship dared to try the strait—heavy cruiser or not—the berserker jumped to the attack.

Locked together with their armaments of fields and counterfields like grappling ocean ships of old, the contending metallic giants rolled into normal space, there to remain until the issue was decided. After the first enemy missile-blast reverberated through the cruiser's hull, Novotny thought that the battle would probably be over one way or the other before he could get himself completely into the unfamiliar armor. His efforts were complicated by a sudden lack of artificial gravity; every erg of the cruiser's energies was suddenly needed for more important things than maintaining a rightsideup.

But he persevered, working with the same methodical speed with which he usually solved problems of quite a different kind, and finally got the armor on. No sooner had he sealed its last seam and begun to wonder what to do next, when *Dipavamsa's* hull was breached by blast and beam. Hatches slammed to seal compartments, but the air in their compartment could not be held and Novotny saw the lives of his companions who had been too slow snuffed out like candle flames.

After that the battle became a scrambling confusion of largely physical effort for the humans who took part in it. For Novotny especially, who had less idea of what to expect than did any of the cruiser's crew and who was not in as good shape as they were either. Now the berserker chose to hurl some of its auxiliary machines across the narrow

no-man's-land of space to try to board the cruiser. It could use the ship if it could capture it still reasonably intact, and probably it wanted living prisoners.

Prisoners of course were useful for interrogation, after which a berserker generally killed them quickly; it was programmed only to pursue death, not suffering, though of course it was quite willing to apply judicious torture to extract information of value in advancing the cause of death. And prisoners were needed for experiments that the berserkers carried on extensively, in an effort to learn what made Homo Sapiens, a species now spread across this part of the Galaxy, such a resistant life-form to their relentless program of sterilization.

The berserkers were automated warships, made by an unknown race to fight in an interstellar war that had been over ages since; they had outlasted their original enemies and their makers as well, having been programmed and equipped to rebuild and reproduce themselves. Still trying to carry out their originally programmed task, they had made an age-long progress across the spiral arms, leaving nothing living in their wake.

While following the motions of the Commander's arms, which were gesturing to shovel suited people from one wrecked-looking compartment to another, Novotny had a chance to look out through the holed hull to catch his first glimpse of the enemy. The monstrous spherical hull of the berserker was visible by the cherry-glow of craters that the cruiser's weapons had pocked across its armored hide. One crater flared anew while Novotny watched, flamed with some power that seemed to be eating like a cancer into the enemy's metal bowels. But again the cruiser was rocked and shaken in its turn. Novotny and Commander Ridolfi were picked up by the same invisible hand and slammed together into a bulkhead, saved only by their suits from broken bones.

Now some of the berserker's boarding machines, which were a little bigger than men and of diverse shapes, managed to get aboard *Dipavamsa*, and Novotny had a chance to see the enemy at close range. Men, some of whom were

hardened veterans, were screaming around him in terror, but his own unconsciously-maintained attitude was that under conditions like these one could hardly spare the time to be frightened. Vaguely he thought of this situation as resembling an impossible editorial deadline—one thing that could never help was panic. He followed as best he could the Commander's waved and shouted orders, and kept alert. At last he got his own chance to blaze away at the foe, with a small recoilless rifle he had snatched up from a fallen crewman's hands.

By that time—as Novotny confusedly understood, from scraps of combat jargon that came into his helmet—commander Ridolfi had ordered his Second Officer and a picked crew to leave the cruiser in an armed launch that could take shelter among the drifts and waves of nebular material in space nearby, darting through where the bulky berserker could not pass at speed. It was a feigned acknowledgment of defeat, intended to make the enemy think they were abandoning ship, a battle tactic to lure the damaged enemy in where a sharp counterattack might still destroy it.

Ridolfi himself, as the cruiser's commanding officer, and Novotny, as more or less useless baggage, were among those who stayed aboard her and tried to fight a delaying action through her corridors. The vacuum around Novotny's helmet continued to buzz and sing with the strange energies of this battle; he clutched his recoilless rifle and continued to fire it toward the enemy's boarding machines whenever he caught a glimpse of one of them. He could not have said whether or not his shots were doing any good. He also tried to stay close to Ridolfi's side; whether he felt in slightly less hopeless danger there, or was hoping thus to improve his chances of being useful, he did not pause to consider. Ridolfi indeed kept snapping orders, but they were meant for members of his crew.

The two of them were still together, trying to defend the central control room of the ship, when Death struck closer to them than at any moment yet.

It came very suddenly. One moment Novotny was still

looking toward Ridolfi for a hint of what they might try to do next—and the next moment a berserker machine that looked like a cross between a centipede and a crab had thrown itself upon them and they were prisoners. Steel claws that moved with the force of atomic power effortlessly tore Novotny's rocket launcher away and wrenched the Commander's sidearm from his hand. The berserker shifted its grip then, holding each pair of human arms helpless with a single claw—and then machine and men went down together in a tangle as a new force slammed at the cruiser from outside. The Second Officer and his picked crew, in their fresh and undamaged launch, had begun their counterattack.

The crab-centipede was wrecked, sheared almost in two, as the launch sent something like the Angel of the Lord passing almost invisibly through the embattled ship, cutting selectively, passing over fragile human bodies and machinery that it could somehow identify as human property.

The mass of his late captor, and its tenacious grip which had not relaxed with the destruction of its computer-brain, pinned Novotny in an angle between deck and bulkhead, surrounded by wreckage. Beside him Ridolfi grunted and struggled in similar difficulties. Then they abruptly ceased their efforts to get free, simultaneously ceased even to breathe—another berserker machine was entering the damaged control room.

If it was aware of them, it did not turn. It moved straight to one of the panels before which a human astrogator normally sat, and with a startling delicacy began to remove the panel from its mounting. Neatly—almost timidly, it seemed—it probed for the panel fasteners, teasing and tickling at them with grasping devices that could have ripped the panel free like so much tissue paper.

... it was working so carefully, and now it almost had what it was after. It reached inside and pulled out ... very slowly ...

... a small metal case ...

That burst into a flaming snowball even as the berserker oh so gently tugged it free of its connections, a blaze that

here in free fall sent out its flames in a sunburst of straight radii, a wad of radiant glory that the enemy instantly hurled away. Without pause the enemy turned to snatch up a small bundle of paper printout that writhed weightlessly across the deck. It shoved this inside itself, door slamming shut protectively across the orifice—and the machine was gone, lunging with inhuman speed out of the room again.

"Novotny." The two of them gasped for breath again and once more struggled against the dead claws that held them prisoner. "Look—can you shift your weight this way? Lean on it here, maybe I can get a hand out of this claw . . ."

After a minute or two of cooperative effort both of them were free. From some comparatively great distance the shocks and slams of battle were still coming to them through the hull. "Novotny, listen to me." The Commander talked while looking for his pistol, which he at last grabbed from a turning swirl of other weightless debris that drifted in the middle of the room. "It was going after our astrogational databank just then. After that thing that burst into flame?"

"I saw."

"It didn't get what it wanted because the bank's destructor charge worked when it was pulled out. But it must need astrogational information badly, or it wouldn't have sent a machine after it, before the battle's even over. Maybe its own banks have been shot up."

Novotny moved his head inside his helmet, showing that he understood so far.

The Commander had his pistol back, held absently in his right hand, and his left hand clamped briefly on Novotny's suited arm. "I believe you have in your quarters something it could use as a substitute. I understand you're traveling with the whole new edition of *Encyclopedia Galactica* in microstorage—and the EG gives galactic coordinates for all inhabited systems, right?"

Novotny agreed again. Now that he had been almost immobile for a little while, his muscles were starting to stiffen from the unaccustomed workout. He could hear the wheezings from inside his own chest, and his body was beginning to feel like so much fluid lead. If they weren't

in free fall he would certainly be dizzy and have to sit down. Decades at a senior executive's desk had left him too fat and old for this kind of nonsense.

But he was moving again now, keeping up with the agile Commander as they picked their way out of the ruined control room, which now looked not in fit shape for controlling anything.

"Then we've got to get to your quarters," the Commander was saying, "while there's still a chance. You've got just the one copy of the encyclopedia there?"

"Yes."

"We must see that it's destroyed."

They had started down a corridor, and there came a glimpse of a machine moving ahead of them, and the vibrations of its massy passage came through the bulkheads to their gripping hands. Taking shelter together in a doorway, they waited for it to get out of their way.

The Commander kept trying to make contact with his Second Officer by suit radio, but seemed unable to get any reply. Maybe, thought Novotny, it's only that the space between is far too noisy . . .

"Commander," he asked, when there was a momentary opportunity, "What sector are we in now? Of the Galaxy, I mean, in Revised Galactic Coordinates?"

Ridolfi's eyes came to full focus on him for what might have been the first time. "Omicron Sector, Ring Eleven—what does it matter? Oh, you mean you want to know which volumes of your set it will be most important to destroy. Good thinking. That damned machine will be too shot up itself to get out of Omicron without help. I don't think it'll be able to catch another ship, even if one should come along. It'll be trying to find an undefended planet nearby, within a light year or two if possible, preferably an inhabited one where there'll be machines it can take over and some ready-made materials that it can use to repair itself."

"And my encyclopedia is now the only means by which it can locate such a planet?"

"That's the way I read the situation. It can't just go visiting stars at random, the chance of success is far too small . . .

remember that printout it picked up from the control room floor? That was a copy of what we call the Military Information Sheet, which we got when we filed our flight plan. Among other things it contains a list of all the defended planets along our projected course—all the places where we might be able to look for help in case of an emergency. I suppose it'll go for one of them if it can't find anything better. But in your reference book it's likely to get the address of some undefended one . . . the war's a recent thing in this neck of the galactic woods, remember?"

Novotny's face bore a doubtful look, but the Commander was no longer watching him.

Coast's clear, Novotny. Let's move." Then the two of them were in motion again, diving and scrambling in free fall. For the moment their luck held; no more berserkers came in sight as they reached the stateroom corridor and swam along it to the door of Novotny's cabin. The door had been jammed shut by some warping of the battered ship around it, and it took the men an agonizing moment or two to force it free.

Then they were inside. "Where is it?"

"There on the table, Commander. Already plugged into the reading machine. But wait." A new anxiety had come into Novotny's voice. "I'm not sure that destruction is our wisest move."

Commander Ridolfi only looked at him. "Get back."

But Novotny had not moved when a third figure suddenly joined them in the little cabin; the crab-centipede's cousin, which raised a multitude of claws.

The Commander aimed his gun again, but not at the berserker. He thought his own life and battle now lost anyway, and more important than perhaps damaging one more of the berserker's machines would be denying it this information on new targets. He aimed at the reading machine that sat like some dull sculpture on the table.

Novotny reached out deliberately and knocked Ridolfi's arm aside.

The berserker, on the verge of killing both of them, hesitated fractionally as it observed their struggle. Did one



of these life-units wish to become goodlife, a willing ally of the cause of Death? Such conversions had happened before, more than a few times, and a goodlife could be very useful. And what on the table was so important that a life-unit struggled to destroy it—?

From the armed launch came the next phase of counter-attack. The cabin was nearly ripped apart. The berserker lashed out at Ridolfi, and the Commander saw that his pistol was gone again, before it could be fired, and his arm gone with it almost to the shoulder. The suit will seal itself around the wound, he thought, in sudden massive shock that made all things seem trivial. He saw the reading machine snatched up from the table in the claws of the berserker, and the launch's weapons struck again. A fresh gust of escaping atmosphere whirled through the cruiser from a newly-ruptured compartment, and with the last glow of his consciousness the Commander could see stars.

His first feeling when his wits came back was sheer astonishment at being still alive. Astonishment deepened when he realized that he had somehow been brought on board the armored launch. All four bunks in its tiny sick bay were full of wounded, and men and women and machines were steadily at work, passing back and forth continually in the small space between the bunks.

The Second Officer came in to report, relief dawning on his face when he saw that Ridolfi was getting up and evidently in shape to resume his command. Shock and loss of blood had been treated, pain blocked, and bandages sealed the wound from which a new arm could one day be made to grow.

The Second made his report concisely. The launch was now some half a million kilometers within the nebula, its defenses alertly repelling or safely detonating—so far—all the torpedoes that the berserker had sent after it. The battle had ground to a halt, otherwise, in mutual though incomplete destruction. What was left of the cruiser had now been abandoned by both contending forces. Before pulling back deep within the nebula, the launch had dared to delay long

enough to follow distress signals and pick up two suited survivors who had, it seemed, somehow been blown clean away from the embattled cruiser in the last stages of the fighting. One of the survivors was Commander Ridolfi himself. The other . . .

"That makes nineteen people on the air and food," the Second Officer mused, as they stood looking down at the collapsed shape of Otto Novotny, slumped in total exhaustion in a corner of the small dayroom where there hardly seemed room for his gross form. "Still, we should be able to recycle, and make supplies last until we're eventually picked up . . ."

"I don't know if there'll be nineteen or not, for very long." Ridolfi's voice was hard as that of one just going into battle, not coming out of it, and his eyes were welded on the fat civilian.

"Sir?" The Second didn't get it at all, not yet.

"I mean, Mister, that unless I get some questions answered by this man here, and answered damn fast, I'm going to convene a formal court and press charges against him of voluntarily aiding a berserker."

There were only six people in the dayroom when the first informal inquiry began; the Commander didn't want to prejudice possible jurors if the thing came to a formal trial, which he was empowered to give even civilians when in space and in the face of the enemy.

As Novotny, by now somewhat recovered though still slow of movement and blinking a bit bewilderedly, was ushered in and shown to the seat across the table from him, the Commander was simultaneously handed a note from the other side. It informed him that the berserker had just been observed dropping out of normal space in the area of the battle. Instruments showed it departing the local area, having evidently completed such emergency repairs as it could manage on the spot. A reading on the subspace signals of its departure gave a vector for its probable destination that deepened the lines carved down through Ridolfi's cheeks.

A silence grew in the room, until Ridolfi spoke.

"This is not yet a trial, Mr. Novotny. But I warn you that

there may be one before we get back to a planet, if we ever do; or are picked up by another human ship, if we ever are. If there is a trial, you will be charged with voluntarily aiding a berserker, and conviction will carry an almost certain penalty of death."

Exhaustion and puzzlement seemed to be absorbed almost at once within the layers of fat as Novotny pulled himself together. "Ah. I stand ready, of course, Commander, to answer any questions on my behavior that you may have."

"That's good. Frank answers will be required." Ridolfi tried to keep his one hand from fidgeting before him on the table. "On board the cruiser, in a combat situation, you deliberately interfered with my attempt to destroy the databank containing your encyclopedia. Do you deny it?"

Novotny was sitting very still, as if he feared that movement might land him in further trouble of some kind. He thought before answering, and his face maintained a frown. "No, I do not deny that, Commander."

The Commander paused, then put his arm out on the table, fingers opened, elbow straight, a dominating gesture. "You do not. Very well. My intention in destroying that data, sir, was to prevent its use as an astrogational aid by the berserker. If you wanted to save it, it was surely not for yourself. Did you expect that the berserker might accord you some favorable treatment if you . . ."

Novotny was shaking his head. "I very seriously doubt that the data in the encyclopedia will do the enemy the least bit of good, in this case. Nor did I wish to help the enemy."

The Commander's voice was relentlessly unchanged. "On the cruiser, you and I both saw the berserker going after the astrogational databank, which it evidently needed but didn't get."

"We also know the enemy is severely damaged, which means it will be looking for some comparatively near planet where it can commandeer machinery and materials to repair itself; in addition, of course, to wiping out as many unprotected human lives there as it can reach. Because we fought it to a standstill here in space doesn't mean it won't

be able to poison an atmosphere and depopulate a planet, if it comes on one only lightly defended or takes one unaware. Is all this news to you?"

"I think I understand all this, Commander."

"Let those who are here with us be witness that you do." Ridolfi glanced briefly round at the faces of the others, all of them staring now at the accused. "Because so far you are answering yourself right into a trial, Mister Novotny. There are only two things, basically, that a berserker ever wants or needs: victims, and facilities for repair and refitting. And you've shown this one where to go for both of them."

Novotny slumped a little in his chair and closed his eyes. But when he opened them his voice was as steady as before. "Commander, if I am indeed on trial for my life, or likely to be, then I would like to hear the charges and the evidence as fully as possible before I try to answer them. Go on."

"Very well." Ridolfi nodded grimly. "You came on board the *Dipavamsa* with two copies of your new edition, one of which was subsequently and routinely stowed aboard this launch, along with some other baggage not immediately in use. That copy is still here and available, and since going off combat alert I've fed it into our computer and asked for a readout—as the berserker can readily do with the copy you gave it—of all inhabited planets within seven light years of where our battle was fought. That's about as far as that berserker is going to get without repairs; and extending the radius another light year or so brings no new planets in."

The Commander had a paper which he now consulted. "There are seven inhabited planets to be found, according to the *Encyclopedia Galactica*, within that radius. They are Angkor Apeiron, Comparettia, Epirus, Francavilla, Han Kao, Ileissner, and Yang Ch'i. Exact coordinates, RGC, are given for each." He put one piece of paper on the table and took another from a pocket of his shirt. "I have here part of a spare copy of the Military Information Sheet given us when we filed our flight plan before departing on this trip. Among other things, it lists the six inhabited planets in this same region that have notable ground defenses, or fleet units standing by, or both. As one more bit of evidence,

Mr. Novotny, let me state now that you were also a witness with me that a copy of this list of the six defended planets was also seized by the berserker. Any denials yet?" Ridolfi's fingers were shaking and he put the second paper down.

"Not yet, Commander."

"Though whether you understood the full implications of that seizure at the time . . ."

"I had . . . some idea, I suppose, of what the implications were. Proceed."

Ridolfi read: "The six defended planets on the military list for this region are: Comparettia, Epirus, Francavilla, Han Kao, Reissner, and Yang Ch'i. Notably missing from this military list is Angkor Apeiron." The Commander pushed his second paper out on the table beside the first, where anyone who wished might look them over, and then produced a third.

He went on: "According to the latest census figures, as given in this EG article, this world has about eleven million, six hundred thousand inhabitants. Its chief export industries are crystal growing and natural honey. The spaceport is small, but probably the berserker could plunder it for useful machines and materials after it has wiped out what appears to be an undefended populace.

The Commander needed a moment before he could continue. "Angkor Apeiron was discovered by Chang Izanagi, of Hathor, in 7626 CE . . . first colonized only ten standard years later." His voice was starting to shake a little like his hand. "I suppose your reference work is quite reliable in these particulars? I mean, about there being eleven million people there, especially?"

Novotny paused for thought, began to speak, then stopped and shook his head and tried again. "The EG is the most reliable general reference work in human history, Your Honor Commander—whatever I am to call you now—"

"'Commander' will still do."

"—when it is used for the purposes for which it is intended. Which is to say that it was never meant to serve as a manual of do-it-yourself medicine, or law, or astrology either. It is a means by which one can verify, or learn, a fact; check a

date or name; obtain entree to almost any field of knowledge, and learn where to go for further . . .”

“Yes. Spare us the sales talk, we’re not in the market for a set right now.” Nobody cracked a smile. “Now here in your reliable reference work, which you gave the enemy as a present, are the precise coordinates for the Apeiron system: Sector Omicron 111.254, Ring Eleven 87.58, Galactic Latitude 7.54 North. These figures are correct, are they not? Hasn’t the EG a competent editorial staff, with the technical and scientific knowledge . . .”

“The staff at the home office is more than competent, Commander. It is very good indeed. I speak from personal experience.”

The Commander leaned forward. “Then what, Mr. Novotny, is going to save the inhabitants of Angkor Apeiron from the consequences of your action?”

Novotny leaned back, somewhat haughtily, as if he had at last taken affront. “Only the fact, Commander, that the inhabitants of Angkor Apeiron do not exist.”

There was a silence in the dayroom, as if each person who looked at the speaker were waiting for his last words to somehow clear themselves out of the air, or for some great hand to reach in from outside the little ship and mend the broken spring of sanity.

The Commander, his shakiness shocked away was the first to reply: “You mean . . . you claim to have some knowledge . . . that the planet has already been evacuated, or wiped out?”

“I mean, sir, that the star Apeiron has no planets. It has never had any. When the berserker arrives there it will find no victims and no material help; and if your estimate of its damaged condition is as accurate as I would like to believe, before it can go on to some other world it will have died, if that is the proper word, of the injuries your crew has so gallantly inflicted on it.”

“But . . .” The Second Officer was starting a disbelieving protest.

Novotny rounded on him sharply. “Why do you suppose the military authorities protected six settled planets in this region and ignored a seventh?”

"Lack of sufficient forces . . ."

"Bah. Correct me if I am wrong, Commander, but would not the general or admiral in charge be more likely to spread his forces thinner, and not leave eleven million people totally undefended, since this sector has become a combat zone? Of course his forces are probably spread all too thin already, which is why I thought it good to direct our late antagonist to a desert system, rather than letting it go challenge some of them."

Ridolfi had recovered, or almost. "Desert system? But this EG entry . . . you claim your encyclopedia is the most reliable . . ."

Novotny was holding up a pudgy, magisterial hand, and his face had eased into something that approached a smile. "I will explain, as I have promised. But to do so I must briefly go far afield from berserkers and space warfare.

His accuser had not yet relaxed a bit. "Do so. Go as far as you like. But be sure that you come back."

Novotny took another moment to marshall his thoughts before he spoke. "Suppose . . . suppose that you, Commander, are a ruthlessly good businessman, back on Earth or one of the other crowded worlds. And you decide that there is money to be made in purveying information to the public, even as EG makes money. You decide that you will compile and sell a general reference work. Or perhaps one more specialized—on galactography, let us say, listing and describing all the inhabited and explored planets as well as other bodies in the Galaxy that are for some reason interesting.

"You decide that you will put a great deal less work into your encyclopedia than we put into ours, and therefore be able to sell yours for a great deal less money, while including the same information we include. How? The most direct expedient is of course to copy all your articles verbatim from ours; but this the laws and courts, alas for your enterprise, are never going to allow. You are forced to the inconvenience of at least rewriting our material somewhat as you crib.

"Given a little computer help, to rearrange the syntax and replace words with their synonyms, this will not be such an arduous task as might at first appear. Even our several

billions of words might be rehashed and reprinted, in slightly different format, in a quite reasonable time. Behold! And Commander Ridolfi's Encyclopedia of All Knowledge is available for the home databank, at a much lower fee than ours . . . never mind that you will not provide your customers with the constant updating service that ours receive.

"So! Even with much rewriting, your basic idea is still illegal, still infringes upon our copyrights, does it not? Well, now the answer is no longer quite so clear-cut. But believe me, our lawyers will try, *have* tried in similar cases, to sue you for a bundle, as soon as they find out what you have done.

"Now you show up for trial, and are on the witness stand, though not with your life at stake of course . . . Commander Ridolfi, I the prosecuting attorney ask you: Is it true or not, that you have compiled your so-called reference work virtually entirely from EG? Now think carefully, for on your answer your whole defense will stand or fall.

"Of course it is not true! you answer ringingly. You used the Merchant Astrogation banks, you used periodicals and the records from dusty archives, you looked in books, you queried eminent authorities in many fields, just as does the great EG itself.

"Ohh? I ask, and now my voice is of the softest, and I cast an eye toward the jury. Then tell me, sir, which of these many indispensable sources did you use to cross-check your information on the planet Angkor Apeiron?"

There was another silence in the dayroom, a different sort of silence this time, and death that had all along seemed close was suddenly light years off again, at one with the berserker's wake that faded in subspace.

Novotny felt the difference and began to sag. "Because you see, sir, we have made this entry up, population industries, discovery date and all, as encyclopedists have made up entries for the same reason from very ancient times. We made it up to catch such plagiaristic fish as you, and put it as bait for you within the great EG, and nowhere else in the great universe of worlds or information storage does Angkor Apeiron exist . . . there are a number of other



baits like this one, Commander, among our forty million entries. Quite a few, like this one, I had a hand in making up myself; but how many there are altogether I do not know; no one man or woman knows them all. The ordinary user is of course never going to hear of Angkor Apeiron anywhere and is therefore never going to look it up. If he comes upon it while browsing at his reading machine, he is only treated to a dull and minor fantasy that he will soon forget."

Novotny let himself sink back into a chair that no longer seemed to be a dock above the edge of death. Then he turned his head to a wallscreen showing space, and looked off into the nebular cloudbanks of the Deep. "I wonder if it can even *wonder* how it was tricked, or how it tricked itself . . . I know that it could never understand."

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1010 spectrophotometer. The concentration of chlorophyll was expressed as  $\mu\text{g mL}^{-1}$  of the sample.

100

*There are times when no weapon less strong and direct than the truth will serve. But, to use the truth, one first must find it out.*

## INHUMAN ERROR

When the dreadnought *Hamilcar Barca* came out of the inhuman world of plus-space 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, his lean frame strapped firmly into the 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, C-plus drive in a gravitational field this strong was dangerous, to put it mildly—but the orbit of the one planet of 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 remote-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 human 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. He smoothed graying hair back from his high forehead with an habitual gesture, and tried to determine what was going on.

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 an hour.

What these three ships were up to, and whether they were controlled by human beings or berserker machines, was 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 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. No one took 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, hoping fervently that the berserker fleet that was known to be on its way here had not already come and gone and left the helpless colony destroyed, Liao meanwhile studied his instruments critically. "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 come and gone. 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 the emergency signals. There's a lot of noise around too, 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 simply lost.

Communications was on the ball; already they 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 DOT-DASH CODE STOP LOTS OF NOISE BECAUSE SUN IS FLARING AND WE COULDNT READ YOUR SIGNAL VERY WELL

The letters 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 massive head gloomily, knitted heavy brows, 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 more than a lifeboat. Extrapolating backward from its present course and position 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 OR 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 colony on Meitner's Planet was awaiting shipment of a space inverter to complete and activate their defensive system of protective force-screens and beam-projecting weapons. Until the inverter 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 the Second, 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 INVERTER 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 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 transmitter 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 in-system here at any moment, and is virtually certain to arrive within the next six to eight 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 that's not all, Second. Tell me this—is this conceivably just some misunderstanding, and both of those ships are really manned by human beings?"

"Not a chance," the Second 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." Miller swiveled away in his heavy chair.

"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, but getting nowhere. Berserkers had awesome powers, not only as physical fighting machines, but as computers. They could not counterfeit either human appearance or human behavior successfully when under close observation; but Liao was not certain that a battery of psychologists with several days to work in would be able to say with certainty whether it was a living man or a lying berserker that answered their questions in dot-dash.

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 the 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 outlined a coherent 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 post-graduate trip. Somewhere on the outskirts of the solar system that contained the heavily industrialized planet Esteel, a courier ship bound 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 MADE IT STOP LIVING IN LIFEBOAT AND WORKING RIDDLED SHIP IN SPACESUITS YOU CANT STOP US NOW AFTER ALL WE HAVE 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 WE ARE 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 *Etruria* flowed in:

I HAVE 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 THAT 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 OKAY I GIVE UP SHOOT US BOTH DOWN THEN END MESSAGE

The Second Officer thumped a fist on the arm of his massive 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 expect 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.

"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 proven, 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 armed 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. This 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 for the last 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 by means of 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 as yet had no clear evidence regarding that occupant's humanity, nor even a firm idea of what evidence he was looking for. He only hoped that it 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. Liao followed, on a vertiginous twisting passage through the wreck.

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 needed 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, 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 (or 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 face-plate 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 or 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 plea for help from the damaged and harried courier, hotly pursued by berserkers that were not thought 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 isolated 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 more heroic and romantic, Two 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 gravity's gone, Astrogator's position is wiped out, 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 intership 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, simple telescope and spectroscope. You've been thinking it over, now how about it? Possible?"

There was a pause. Barbara would be tapping at her console with a pencil. "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, lifeboats 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 any artificial 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:

OSS AND HIS NOBLE CLASSMATES WISH THE  
WHOLE WORLD

And then nothingness, the remainder of the message having gone when Oss and his noble classmates went and the upper half of this wall went 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:

<i>Oh</i>	<i>Kiss</i>
<i>Be</i>	<i>Me</i>
<i>A</i>	<i>Right</i>
<i>Fine</i>	<i>Now</i>
<i>Girl</i>	<i>Sweetie</i>

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 and forty seconds, sir. That's cutting it thin."

"Thanks." Liao fell silent, looking off across the universe. If 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 spacesuits 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 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, sir. 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 into 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 accomplish the same ruin upon a colony deprived of any chance of protecting itself.

Liao adjusted his throat muscles so that his voice when it came out would be firm and certain, and then he flipped 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 . . ."

"Yes, sir."

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 no more lessons about the stars.*

The stars . . .

Oh, be a fine girl . . .

O, B, A, F, G, K, . . .

"Second Officer!"

"Sir!"

"Cancel my previous order! Let the lifeboat land. Hit the *Etruria*! Unload on that bloody damned berserker with everything we've got, right now!"

"Yessir!"

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 energies released pass twistily through all their bones. Now the huge leaden slugs would begin skipping in and out of normal space, homing on their tiny target, far out-racing 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 hit, Captain." There was no need to amplify on that.

"Good shots, 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 system, found an armed and ready colony, with *Hamilcar Barca* hanging by for heavy hit-and-run support, skirmished briefly and then decided to decline battle and departed. A few hours after that, the human fleet arrived and decided to

pause 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 her 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, slender and too fragile-looking for what she had been through, 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 . . ."



*And the search for truth may be the lifework of a human mind. Praise be to those who have such a purpose—truly—in their hearts!*

## SOME EVENTS AT THE TEMPLAR RADIANT

All his years of past work, and more than that, his entire future too, hung balanced on this moment.

A chair forgotten somewhere behind him, Sabel stood tall in the blue habit that often served him as laboratory coat. His hands gripped opposite corners of the high, pulpit-like control console. His head was thrown back, eyes closed, sweat-dampened dark hair hanging in something more than its usual disarray over his high, pale forehead.

He was alone, as far as any other human presence was concerned. The large, stone-walled chamber in which he stood was for the moment quiet.

All his years of work . . . and although during the past few days he had mentally rehearsed this moment to the point of exhaustion, he was still uncertain of how to start. Should he begin with a series of cautious, testing questions, or ought he leap toward his real goal at once?

Hesitancy could not be long endured, not now. But caution, as it usually had during his mental rehearsals, prevailed.

Eyes open, Sabel faced the workbenches filled with equipment that were arranged before him. Quietly he said: "You are what human beings call a berserker. Confirm or deny."

"Confirm." The voice was familiar, because his hookup gave it the same human-sounding tones in which his own laboratory computer ordinarily spoke to him. It was a familiarity that he must not allow to become in the least degree reassuring.

So far, at least, success. "You understand," Sabel pronounced, "that I have restored you from a state of nearly complete destruction. I—"

"Destruction," echoed the cheerful workbench voice.

"Yes. You understand that you no longer have the power to destroy, to take life. That you are now constrained to answer all my—"

"To take life."

"Yes. Stop interrupting me." He raised a hand to wipe a trickle of fresh sweat from an eye. He saw how his hand was quivering with the strain of its unconscious grip upon the console. "Now," he said, and had to pause, trying to remember where he was in his plan of questioning.

Into the pause, the voice from his laboratory speakers said: "In you there is life."

"There is." Sabel managed to reassert himself, to pull himself together. "Human life." Dark eyes glaring steadily across the lab, he peered at the long, cabled benches whereon his captive enemy lay stretched, bound down, vitals exposed like those of some hapless human on a torture rack. Not that he could torture what had no nerves and did not live. Nor was there anything like a human shape in sight. All that he had here of the berserker was fragmented. One box here, another there, between them a chemical construct in a tank, that whole complex wired to an adjoining bench that bore rows of semi-material crystals.

Again his familiar laboratory speaker uttered alien words: "Life is to be destroyed."

This did not surprise Sabel; it was only a restatement of the basic programmed command that all berserkers bore. They were machines fabricated by unknown builders on an unknown world, at a time perhaps before any creature living on Sari had been able to see stars as anything more than points of light. That the statement was made so boldly now roused in Sabel nothing but hope; it seemed that at least the thing was not going to begin by trying to lie to him.

It seemed also that he had established a firm physical control. Scanning the indicators just before him on the console, he saw no sign of danger . . . he knew that, given the slightest chance, his prisoner was going to try to implement its basic programming. He had of course

separated it from anything obviously useful as a weapon. But he was not absolutely certain of the functions of all the berserker components that he had brought into his laboratory and hooked up. And the lab of course was full of potential weapons. There were fields, electric and otherwise, quite powerful enough to extinguish human life. There were objects that could be turned into deadly projectiles by only a very moderate application of force. To ward off any such improvisations Sabel had set defensive rings of force to dancing round the benches upon which his foe lay bound. And, just for insurance, another curtain of fields hung round him and the console. The fields were almost invisible, but the ancient stonework of the lab's far wall kept acquiring and losing new flavorings of light at the spots where the spinning field-components brushed it and eased free again.

Not that it seemed likely that the berserker-brain in its present disabled and almost disembodied state could establish control over weaponry enough to kill a mouse. Nor did Sabel ordinarily go overboard on the side of caution. But, as he told himself, he understood very well just what he was dealing with.

He had paused again, seeking reassurance from the indicators ranked before him. All appeared to be going well, and he went on: "I seek information from you. It is not military information so whatever inhibitions have been programmed into you against answering human questions do not apply." Not that he felt at all confident that a berserker would meekly take direction from him. But there was nothing to be lost by the attempt.

The reply from the machine was delayed longer than he had expected, so that he began to hope his attempt had been successful. But then the answer came.

"I may trade certain classes of information to you, in return for lives to be destroyed."

The possibility of some such proposition had crossed Sabel's mind some time ago. In the next room a cage of small laboratory animals was waiting.

"I am a cosmophysicist," he said. "In particular I strive

to understand the Radiant. In the records of past observations of the Radiant there is a long gap that I would like to fill. This gap corresponds to the period of several hundred standard years during which berserkers occupied this fortress. That period ended with the battle in which you were severely damaged. Therefore I believe that your memory probably contains some observations that will be very useful to me. It is not necessary that they be formal observations of the Radiant. Any scene recorded in light from the Radiant may be helpful. Do you understand?"

"In return for my giving you such records, what lives am I offered to destroy?"

"I can provide several. Eagerly Sabel once more swept his gaze along his row of indicators. His recording instruments were probing hungrily, gathering at an enormous rate the data needed for at least a partial understanding of the workings of his foe's unliving brain. At a score of points their probes were fastened in its vitals.

"Let me destroy one now," its human-sounding voice requested.

"Presently. I order you to answer one question for me first."

"I am not constrained to answer any of your questions. Let me destroy a life."

Sabel turned a narrow doorway for himself through his defensive fields, and walked through it into the next room. In a few seconds he was back. "Can you see what I am carrying?"

"Then it is not a human life you offer me."

"That would be utterly impossible."

"Then it is utterly impossible for me to give you information."

Without haste he turned and went to put the animal back into the cage. He had expected there might well be arguments, bargaining. But this argument was only the first level of Sabel's attack. His data-gathering instruments were what he really counted on. The enemy doubtless knew that it was being probed and analyzed. But there was evidently nothing it could do about it. As long as Sabel supplied it

power, its brain must remain functional. And while it functioned, it must try to devise ways to kill.

Back at his console, Sabel took more readings. DATA PROBABLY SUFFICIENT FOR ANALYSIS, his computer screen at last informed him. He let out breath with a sigh of satisfaction, and at once threw certain switches, letting power die. Later if necessary he could turn the damned thing on again and argue with it some more. Now his defensive fields vanished, leaving him free to walk between the workbenches, where he stretched his aching back and shoulders in silent exultation.

Just as an additional precaution, he paused to disconnect a cable. The demonic enemy was only hardware now. Precisely arranged atoms, measured molecules, patterned larger bits of this and that. Where now was the berserker that humanity so justly feared? That had given the Templars their whole reason for existence? It no longer existed except in potential. Take the hardware apart, on even the finest level, and you would not discover any of its memories. But, reconnect this and that, reapply power here and there, and back it would bloom into reality, as malignant and clever and full of information as before. A non-material artifact of matter. A pattern.

No way existed, even in theory, to torture a machine into compliance, to extort information from it. Sabel's own computers were using the Van Holt algorithms, the latest pertinent mathematical advance. Even so they could not entirely decode the concealing patterns, the trapdoor functions, by which the berserker's memory was coded and concealed. The largest computer in the human universe would probably not have time for that before the universe itself came to an end. The unknown Builders had built well.

But there were other ways besides pure mathematics with which to circumvent a cipher. Perhaps, he thought, he would have tried to find a way to offer it a life, had that been the only method he could think of.

Certainly he was going to try another first. There had to be, he thought, some way of disabling the lethal purpose of a berserker while leaving its calculating abilities and

memory intact. There would have been times when the living Builders wanted to approach their creations, at least in the lab, to test them and work on them. Not an easy or simple way, perhaps, but something. And that way Sabel now instructed his own computers to discover, using the mass of data just accumulated by measuring the berserker in operation.

Having done that, Sabel stood back and surveyed his laboratory carefully. There was no reason to think that anyone else was going to enter it in the near future, but it would be stupid to take chances. To the Guardians, an experiment with viable berserker parts would stand as *prima facie* evidence of goodlife activity; and in the Templar code, as in many another system of human law, any such willing service of the berserker cause was punishable by death.

Only a few of the materials in sight might be incriminating in themselves. Coldly thoughtful, Sabel made more disconnections, and rearrangements. Some things he locked out of sight in cabinets, and from the cabinets he took out other things to be incorporated in a new disposition on the benches. Yes, this was certainly good enough. He suspected that most of the Guardians probably no longer knew what the insides of a real berserker looked like.

Sabel made sure that the doors leading out of the lab, to the mall-level corridor, and to his adjoining living quarters, were both locked. Then, whistling faintly, he went up the old stone stair between the skylights, that brought him out upon the glassed-in roof.

Here he stood bathed in the direct light of the Radiant itself. It was a brilliant point some four kilometers directly above his head—the pressure of the Radiant's inverse gravity put it directly overhead for everyone in the englobing structure of the Fortress. It was a point brighter than a star but dimmer than a sun, not painful to look at. Around Sabel a small forest of sensors, connected to instruments in his laboratory below, raised panels and lenses in a blind communal stare, to that eternal noon. Among these he began to move about as habit led him, mechanically checking the sensors' operation, though for once he was not really thinking

about the Radiant at all. He thought of his success below. Then once more he raised his own two human eyes to look.

It made its own sky, out of the space enclosed by the whitish inner surface of the Fortress's bulk. Sabel could give from memory vastly detailed expositions of the spectrum of the Radiant's light. But as to exactly what color it was, in terms of perception by the eye and brain—well, there were different judgments on that, and for his part he was still uncertain.

Scattered out at intervals across the great curve of interior sky made by the Fortress's whitish stonework, Sabel could see other glass portals like his own. Under some of them, other people would be looking up and out, perhaps at him. Across a blank space on the immense concavity, an echelon of maintenance machines were crawling, too far away for him to see what they were working at. And, relatively nearby, under the glass roof of a great ceremonial plaza, something definitely unusual was going on. A crowd of thousands of people, exceptional at any time in the Fortress with its relatively tiny population, were gathered in a circular mass, like live cells attracted to some gentle biological magnet at their formation's center.

Sabel had stared at this peculiarity for several seconds, and was reaching for a small telescope to probe it with, when he recalled that today was the Feast of Ex. Helen, which went a long way toward providing an explanation. He had in fact deliberately chosen this holiday for his crucial experiment, knowing that the Fortress's main computer would today be freed of much routine business, its full power available for him to tap if necessary.

And in the back of his mind he had realized also that he should probably put in an appearance at at least one of the day's religious ceremonies. But this gathering in the plaza—he could not recall that any ceremony, in the years since he had come to the Fortress, had ever drawn a comparable crowd.

Looking with his telescope up through his own glass roof and down through the circular one that sealed the plaza in from airless space, he saw that the crowd was centered on

the bronze statue of Ex. Helen there. And on a man standing in a little cleared space before the statue, a man with arms raised as if to address the gathering. The angle was wrong for Sabel to get a good look at his face, but the blue and purple robes made the distant figure unmistakable. It was the Potentate, come at last to the Fortress in his seemingly endless tour of his many subject worlds.

Sabel could not recall, even though he now made an effort to do so, that any such visitation had been impending—but then of late Sabel had been even more than usually isolated in his own work. The visit had practical implications for him, though, and he was going to have to find out more about it quickly. Because the agenda of any person of importance visiting the Fortress was very likely to include at some point a full-dress inspection of Sabel's own laboratory.

He went out through the corridor leading from laboratory to pedestrian mall, locking up carefully behind him, and thinking to himself that there was no need to panic. The guardians would surely call to notify him that a visit by the Potentate impended, long before it came. It was part of their job to see that such things went smoothly, as well as to protect the Potentate while he was here. Sabel would have some kind of official warning. But this was certainly an awkward time . . .

Along the pedestrian mall that offered Sabel his most convenient route to the ceremonial plaza, some of the shops were closed—a greater number than usual for a holiday, he thought. Others appeared to be tended only by machines. In the green parkways that intersected the zig-zag mall at irregular intervals, there appeared to be fewer strollers than on an ordinary day. And the primary school operated by the Templars had evidently been closed; a minor explosion of youngsters in blue-striped coveralls darted across the mall from parkway to playground just ahead of Sabel, their yells making him wince.

When you stood at one side of the great plaza and looked across, both the convexity of its glass roof and the corresponding concavity of the level-feeling floor beneath were



quite apparent. Especially now that the crowd was gone again. By the time Sabel reached the center of the plaza the last of the Potentate's entourage were vanishing through exits on its far side.

Sabel was standing uncertainly on the lowest marble step of Ex. Helen's central shrine. Her stat bronze statue dominated the plaza's center. Helen the Exemplar, Helen of the Radiant, Helen Dardan. The statue was impressive, showing a woman of extreme beauty in a togalike Dardanian garment, a diadem on her short curly hair. Of course long-term dwellers at the Fortress ignored it for the most part, because of its sheer familiarity. Right now, though, someone was stopping to look, gazing up at the figure with intent appreciation.

Sabel's attention, in turn, gradually became concentrated upon this viewer. She was a young, brown-haired girl of unusually good figure, and clad in a rather provocative civilian dress.

And presently he found himself approaching her. "Young woman? If you would excuse my curiosity?"

The girl turned to him. With a quick, cheerful curiosity of her own she took in his blue habit, his stature, and his face. "No excuse is needed, sir." Her voice was musical. "What question can I answer for you?"

Sabel paused a moment in appreciation. Everything about this girl struck him as quietly delightful. Her manner held just a hint of timidity, compounded with a seeming eagerness to please.

Then he gestured toward the far side of the plaza. "I see that our honored Potentate is here with us today. Do you by any chance know how long he plans to stay at the Fortress?"

The girl replied: "I heard someone say, ten standard days. It was one of the women wearing purple-bordered cloaks—?" She shook brown ringlets, and frowned with pretty regret at her own ignorance.

"Ah—one of the vestals. Perhaps you are a visitor here yourself?"

"A newcomer, rather. Isn't it always the way, sir, when

you ask someone for local information? 'I'm a newcomer here myself.' "

Sabel chuckled. *Forget the Potentate for now.* "Well, I can hardly plead newcomer status. It must be something else that keeps me from knowing what goes on in my own city. Allow me to introduce myself: Georgicus Sabel, Doctor of Cosmography."

"Greta Thamar." Her face was so pretty, soft, and young, a perfect match for her scantily costumed body. She continued to radiate an almost-timid eagerness. "Sir, Dr. Sabel, would you mind if I asked you a question about yourself?"

"Ask anything."

"Your blue robe. That means you are one of the monks here?"

"I belong to the Order of Ex. Helen. The word 'monk' is not quite accurate."

"And the Order of Ex. Helen is a branch of the Templars, isn't it?"

"Yes. Though our Order is devoted more to contemplation and study than to combat."

"And the Templars in turn are a branch of Christianity."

"Or they were." Sabel favored the girl with an approving smile. "You are more knowledgeable than many newcomers. And, time was when many Templars really devoted themselves to fighting, as did their ancient namesakes."

The girl's interest continued. By some kind of body-language agreement the two of them had turned around and were now strolling slowly back in the direction that Sabel had come from.

Greta said: "I don't know about that. The ancient ones, I mean. Though I tried to study up before I came here. Please, go on."

"Might I ask your occupation, Greta?"

"I'm a dancer. Only on the popular entertainment level, I'm afraid. Over at the *Contrat Rouge*. But I . . . please, go on."

On the Templar-governed Fortress, popular entertainers were far down on the social scale. *Seen talking to a dancer*

*in the plaza . . .* but no, there was really nothing to be feared from that. A minimal loss of status, perhaps, but counterbalanced by an increase in his more liberal acquaintances' perception of him as more fully human. All this slid more or less automatically through Sabel's mind, while the attractive smile on his face did not, or so he trusted, vary in the slightest.

Strolling on, he shrugged. "Perhaps there's not a great deal more to say, about the Order. We study and teach. Oh, we still officially garrison this Fortress. Those of us who are Guardians maintain and man the weapons, and make berserkers their field of study, besides acting as the local police. The main defenses out on the outer surface of the Fortress are still operational, though a good many decades have passed since we had a genuine alarm. There are no longer many berserkers in this part of the Galaxy." He smiled wryly. "And I am afraid there are no longer very many Templars, either, even in the parts of the Galaxy where things are not so peaceful."

They were still walking. Proceeding in the direction of Sabel's laboratory and quarters.

"Please, tell me more." The girl continued to look at him steadily with attention. "Please, I am really very interested."

"Well. We of the Order of Ex. Helen no longer bind ourselves to poverty—or to permanent celibacy. We have come to honor Beauty on the same level as Virtue, considering them both to be aspects of the Right. Our great patroness of course stands as Exemplar of both qualities."

"Ex. Helen . . . and she really founded the Order, hundreds of years ago? Or—"

"Or, is she really only a legend, as some folk now consider her? No. I think that there is really substantial evidence of her historical reality. Though of course the purposes of the Order are still valid in either case."

"You must be very busy. I hope you will forgive my taking up your time like this."

"It is hard to imagine anyone easier to forgive. Now, would you by chance like to see something of my laboratory?"

"Might I? Really?"

"You have already seen the Radiant, of course. But to get a look at it through some of my instruments will give you a new perspective . . ."

As Sabel had expected, Greta did not seem able to understand much of his laboratory's contents. But she was nevertheless impressed. "And I see you have a private space flyer here. Do you use it to go out to the Radiant?"

At that he really had to laugh. "I'm afraid I wouldn't get there. Oh, within a kilometer of it, maybe, if I tried. The most powerful spacecraft built might be able to force its way to within half that distance. But to approach any closer than that—impossible. You see, the inner level of the Fortress, where we are now, was built at the four-kilometer distance from the Radiant because that is the distance at which the effective gravity is standard normal. As one tries to get closer, the gravitic resistance goes up exponentially. No, I use the flyer for field trips. To the outer reaches of the Fortress, places where no public transport is available."

"Is that a hobby of some kind?"

"No, it's really connected with my work. I search for old Dardanian records, trying to find their observations of the Radiant . . . and in here is where I live."

With eyes suddenly become competent, Greta surveyed the tidy smallness of his quarters. "Alone, I see."

"Most of the time . . . my work demands so much. Now, Greta, I have given you something of a private showing of my work. I would be very pleased indeed if you were willing to do the same for me."

"To dance?" Her manner altered, in a complex way. "I suppose there might be room enough in here for dancing . . . if there were some suitable music."

"Easily provided." He found a control on the wall; and to his annoyance he noticed that his fingers were now quivering again.

In light tones Greta said: "I have no special costume with me, sir, just these clothes I wear."

"They are delightful—but you have one other, surely."

"Sir?" And she, with quick intelligence in certain fields of thought, was trying to repress a smile.

"Why, my dear, I mean the costume that nature gives to us all, before our clothes are made. Now, if it is really going to be up to me to choose . . ."

Hours later when the girl was gone, he went back to work, this time wearing a more conventional laboratory coat. He punched in a command for his computer to display its results, and, holding his breath, looked at the screen.

BASIC PROGRAMMING OF SUBJECT DEVICE MAY BE CIRCUMVENTED AS FOLLOWS: FABRICATE A DISABLING SLUG OF CESIUM TRIPHENYL METHYL, ISOTOPE 137 OF CESIUM, OF 99% PURITY, TO BE USED. SLUG TO BE CYLINDRICAL 2.346 CM DIAMETER, 5.844 CM LENGTH. COMPONENTS OF SUBJECT DEVICE NOW IN LABORATORY TO BE REASSEMBLED TO THOSE REMAINING IN FIELD, WITH SLUG CONNECTED ELECTRICALLY AND MECHANICALLY ACROSS PROBE POINTS OUR NUMBER 11 AND OUR NUMBER 12A IN ARMING MECHANISM OF DEVICE. PRIME PROGRAMMED COMMAND OF DEVICE WILL THEN BE DISABLED FOR TIME EQUAL TO ONE HALF-LIFE OF ISOTOPE Cs-137 . . .

There were more details on how the "subject device" was to be disabled—he had forbidden his own computer to ever display or store in memory the word berserker in connection with any of his work. But Sabel did not read all the details at once. He was busy looking up the half-life of cesium-137. It turned out to be thirty years! Thirty standard years!

He had beaten it. He had won. Fists clenched, Sabel let out exultation in a great, private, and almost silent shout . . .

This instinctive caution was perhaps well-timed, for at once a chime announced a caller, at the door that led out to the mall. Sabel nervously wiped the displayed words from his computer screen. Might the girl have come back? Not because she had forgotten something—she had brought nothing with her but her clothes.

But instead of the girl's face, his video intercom showed him the deceptively jovial countenance of Chief Deputy Guardian Gunavarman. Had Sabel not become aware of the Potentate's presence on the Fortress, he might have had a bad moment at the sight. As matters stood, he felt prepared; and after a last precautionary glance around the lab, he let the man in confidently.

"Guardian. It is not often that I am honored by a visit from you."

"Doctor Sabel." The black-robed visitor respectfully returned the scientist's bow. "It is always a pleasure, when I can find the time. I wish my own work were always as interesting as yours must be. Well. You know of course that our esteemed Potentate is now in the Fortress . . ."

The discussion, on the necessity of being prepared for a VIP inspection, went just about as Sabel had expected. Gunavarman walked about as he spoke, eyes taking in the lab, their intelligence operating on yet a different level than either Sabel's or Greta Thamar's. The smiling lips asked Sabel just what exactly, was he currently working on? What could he demonstrate, as dramatically as possible but safely of course, for the distinguished visitor?

Fortunately for Sabel he had been given a little advance time in which to think about these matters. He suggested now one or two things that might provide an impressive demonstration. "When must I have them ready?"

"Probably not sooner than two days from now, or more than five. You will be given advance notice of the exact time." But the Guardian, when Sabel pressed him, refused to commit himself on just how much advance notice would be given.

The real danger of this Potentate visit, thought Sabel as he saw his caller out, was that it was going to limit his mobility. A hurried field trip to the outer surface was going to be essential, to get incriminating materials out of his lab. Because he was sure that a security force of Guardians was going to descend on the place just before the Potentate appeared.

More or less politely, but thoroughly, they would turn it

inside out. There were those on every world of his dominion who for one reason or another wished the Potentate no good.

After a little thought, Sabel went to his computer terminal and punched in an order directed to the metallic fabrication machines in the Fortress's main workshops, an order for the disabling slug as specified by his computer. He knew well how the automated systems worked, and took care to place the order in such a way that no other human being would ever be presented with a record of it. The machines reported at once that delivery should take several hours.

The more he thought about it, the more essential it seemed for him to get the necessary field excursion out of the way as quickly as he could. Therefore while waiting for the slug to be delivered, he loaded up his flyer, with berserker parts hidden among tools in various containers. The vehicle was another thing that had been built to his special order. It was unusually small in all three dimensions, so he could drive it deeply into the caves and passages and cracks of ancient battle-damage that honeycombed the outer stonework of the Fortress.

A packet containing the slug he had ordered came with a clack into his laboratory through the old-fashioned pneumatic system still used for small deliveries, direct from the workshops. Sabel's first look at the cesium alloy startled him. A hard solid at room temperature, the slug was red as blood inside a statglass film evidently meant to protect it against contamination and act as a radiation shield for human handlers as well. He slid it into a pocket of his light spacesuit, and was ready.

The lab locked up behind him, he sat in his flyer's small open cab and exited the rooftop airlock in a modest puff of fog. The air and moisture were mostly driven back into recycling vents by the steady gravitic pressure of the Radiant above. His flyer's small, silent engine worked against the curve of space that the Radiant imposed, lifting him and carrying him on a hand-controlled flight path that skimmed over glass-roofed plazas and apartment complexes and offices. In its concavity, the inner surface of the Fortress fell more distant from his straight path, then reapproached.

Ahead lay the brightly lighted mouth of the traffic shaft that would lead him out to the Fortress's outer layers.

Under Sabel's briskly darting flyer there now passed a garish, glassed-in amusement mall. There entertainment, sex, and various kinds of drugs were all for sale. The *Contrat Rouge* he thought was somewhere in it. He wondered in passing if the girl Greta understood that here her occupation put her very near the bottom of the social scale, a small step above the level of the barely tolerable prostitutes? Perhaps she knew. Or when she found out, she would not greatly care. She would probably be moving on, before very long, to some world with more conventional mores.

Sabel had only vague ideas of how folk in the field of popular entertainment lived. He wondered if he might go sometime to watch her perform publicly. It was doubtful that he would. To be seen much in the *Contrat Rouge* could do harm to one in his position.

The wide mouth of the shaft engulfed his flyer. A few other craft, electronically guided, moved on ahead of his or flickered past. Strings of lights stretched vertiginously down and ahead. The shaft was straight; the Fortress had no appreciable rotation, and there was no need to take coriolis forces into account in traveling through it rapidly. With an expertise born of his many repetitions of this flight, Sabel waited for the precisely proper moment to take back full manual control. The gravitic pressure of the Radiant, behind him and above, accelerated his passage steadily. He fell straight through the two kilometers' thickness of stone and reinforcing beams that composed most of the Fortress's bulk. The sides of the vast shaft, now moving faster and faster past him, were ribbed by the zig-zag joints of titanic interlocking blocks.

*This is still Dardania, here*, he thought to himself, as usual at this point. The Earth-descended Dardanians, who had built the Fortress and flourished in it even before berserkers came to the human portion of the Galaxy, had wrought with awesome energy, and a purpose not wholly clear to modern eyes. The Fortress, after all, defended not much of anything except the Radiant itself, which hardly needed protection



from humanity. Their engineers must have tugged all the stone to build the Fort through interstellar distances, at God alone knew what expense of energy and time. Maybe Queen Helen had let them know she would be pleased by it, and that had been enough.

The Fortress contained about six hundred cubic kilometers of stone and steel and enclosed space, even without including the vast, clear central cavity. Counting visitors and transients, there were now at any moment approximately a hundred thousand human beings in residence. Their stores and parks and dwellings and laboratories and shops occupied, for the most part, only small portions of the inner surface, where gravity was normal and the light from the Radiant was bright. From the outer surface, nearby space was keenly watched by the sensors of the largely automated defense system; there was a patchy film of human activity there. The remainder of the six hundred cubic kilometers were largely desert now, honeycombed with cracks and designed passages, spotted with still-undiscovered troves of Dardanian tombs and artifacts, for decades almost unexplored, virtually abandoned except by the few who, like Sabel, researched the past.

Now he saw a routine warning begin to blink on the small control panel of his flyer. Close ahead the outer end of the transport shaft was yawning, and through it he could see the stars. A continuation of his present course would soon bring him into the area surveyed by the defense system.

As his flyer emerged from the shaft, Sabel had the stars beneath his feet, the bulk of the Fortress seemingly balanced overhead. With practiced skill he turned now at right angles to the Radiant's force. His flyer entered the marked notch of another traffic lane, this one grooved into the Fortress's outer armored surface. The bulk of it remained over his head and now seemed to rotate with his motion. Below him passed stars, while on the dark rims of the traffic lane to either side he caught glimpses of the antiquated but still operational defensive works. Blunt snouts of missile-launchers, skeletal fingers of mass-drivers and beam-projectors, the lenses and screens and domes of sensors and field generators. All the

hardware was still periodically tested, but in all his journeyings this way Sabel had never seen any of it looking anything but inactive. War had long ago gone elsewhere.

Other traffic, scanty all during his flight, had now vanished altogether. The lane he was following branched, and Sabel turned left, adhering to his usual route. If anyone should be watching him today, no deviation from his usual procedure would be observed. Not yet, anyway. Later . . . later he would make very sure that nobody was watching.

Here came a landmark on his right. Through another shaft piercing the Fortress a wand of the Radiant's light fell straight to the outer surface, where part of it was caught by the ruined framework of an auxiliary spaceport, long since closed. In that permanent radiance the old beams glowed like twisted night-flowers, catching at the light before it fell away to vanish invisibly and forever among the stars.

Just before he reached this unintended beacon, Sabel turned sharply again, switching on his bright running lights as he did so. Now he had entered a vast battle-crack in the stone and metal of the Fortress's surface, a dark uncharted wound that in Dardanian times had been partially repaired by a frail-looking spiderwork of metal beams. Familiar with the way, Sabel steered busily, choosing the proper passage amid obstacles. Now the stars were dropping out of view behind him. His route led him up again, into the lightless ruined passages where nothing seemed to have changed since Helen died.

Another minute of flight through twisting ways, some of them designed and others accidental. Then, obeying a sudden impulse, Sabel braked his flyer to a hovering halt. In the remote past this passage had been air-filled, the monumental length and breadth of it well suited for mass ceremony. Dardanian pictures and glyphs filled great portions of its long walls. Sabel had looked at them a hundred times before, but now he swung his suited figure out of the flyer's airless cab and walked close to the wall, moving buoyantly in the light gravity, as if to inspect them once again. This was an ideal spot to see if anyone was really following him. Not that he had any logical reason to think that someone was.

But the feeling was strong that he could not afford to take a chance.

As often before, another feeling grew when he stood here in the silence and darkness that were broken only by his own presence and that of his machines. Helen herself was near. In Sabel's earlier years there had been something religious in this experience. Now . . . but it was still somehow comforting.

He waited, listening, thinking. Helen's was not the only presence near, of course. On three or four occasions at least during the past ten years (there might have been more that Sabel had never heard about) explorers had discovered substantial concentrations of berserker wreckage out in these almost abandoned regions. Each time Sabel had heard of such a find being reported to the Guardians, he had promptly petitioned them to be allowed to examine the materials, or at least to be shown a summary of whatever information the Guardians might manage to extract. His pleas had vanished into the bureaucratic maw. Gradually he had come to understand that they would never tell him anything about berserkers. The Guardians were jealous of his relative success and fame. Besides, their supposed job of protecting humanity on the Fortress now actually gave them almost nothing to do. A few newly-discovered berserker parts could be parlayed into endless hours of technical and administrative work. Just keeping secrets could be made into a job, and they were not about to share any secrets with outsiders.

But, once Sabel had become interested in berserkers as a possible source of data on the Radiant he found ways to begin a study of them. His study was at first bookish and indirect, but it advanced; there was always more information available on a given subject than a censor realized, and a true scholar knew how to find it out.

And Sabel came also to distrust the Guardians' competence in the scholarly aspects of their own field. Even if they had finally agreed to share their findings with him, he thought their pick-axe methods unlikely to extract from a berserker's memory anything of value. They had refused of course to

tell him what their methods were, but he could not imagine them doing anything imaginatively.

Secure in his own space helmet, he whispered now to himself: "If I want useful data from my own computer, I don't tear it apart. I communicate with it instead."

Cold silence and darkness around him, and nothing more. He remounted his flyer and drove on. Shortly he came to where the great corridor was broken by a battle-damage crevice, barely wide enough for his small vehicle, and he turned slowly, maneuvering his way in. Now he must go slowly, despite the number of times that he had traveled this route before. After several hundred meters of jockeying his way along, his headlights picked up his semi-permanent base camp structure in a widening of the passageway ahead. It looked half bubble, half spider-web, a tentlike thing whose walls hung slackly now but were inflatable with atmosphere. Next to it he had dug out of the stone wall a niche just big enough to park his flyer in. The walls of the niche were lightly marked now from his previous parkings. He eased in now, set down gently, and cut power.

On this trip he was not going to bother to inflate his shelter; he was not going to be out here long enough to occupy it. Instead he began at once to unload from the flyer what he needed, securing things to his backpack as he took them down. The idea that he was being followed now seemed so improbable that he gave it no more thought. As soon as he had all he wanted on his back, he set off on foot down one of the branching crevices that radiated from the nexus where he had placed his camp.

He paused once, after several meters, listening intently. Not now for nonexistent spies who might after all be following. For something active ahead. Suppose it had, somehow, after all, got itself free . . . but there was no possibility. He was carrying most of its brain with him right now. Around him only the silence of ages, and the utter cold. The cold could not pierce his suit. The silence, though . . .

The berserker was exactly as he had left it, days ago. It was partially entombed, caught like some mechanical insect

in opaque amber. Elephant-sized metal shoulders and a ruined head protruded from a bank of centuries-old slag. Fierce weaponry must have melted the rock, doubtless at the time of the Templars' reconquest of the Fortress, more than a hundred years ago.

Sabel when he came upon it for the first time understood at once that the berserker's brain might well still be functional. He knew too that there might be destructor devices still working, built into the berserker to prevent just such an analysis of captured units as he was suddenly determined to attempt. Yet he had nerved himself to go to work on the partially shattered braincase that protruded from the passage wall almost like a mounted trophy head. Looking back now, Sabel was somewhat aghast at the risks he had taken. But he had gone ahead. If there were any destructors, they had not fired. And it appeared to him now that he had won.

He took the cesium slug out of his pocket and put it into a tool that stripped it of statglass film and held it ready for the correct moment in the reconstruction process. And the reconstruction went smoothly and quickly, the whole process taking no more than minutes. Aside from the insertion of the slug it was mainly a matter of reconnecting subsystems and of attaching a portable power supply that Sabel now unhooked from his belt; it would give the berserker no more power than might be needed for memory and communication.

Yet, as soon as power was supplied, one of the thin limb stumps that protruded from the rock surface began to vibrate, with a syncopated buzzing. It must be trying to move.

Sabel had involuntarily backed up a step; yet reason told him that his enemy was effectively powerless to harm him. He approached again, and plugged a communications cord into a jack he had installed. When he spoke to it, it was in continuation of the dialogue in the laboratory.

"Now you are constrained, as you put it, to answer whatever questions I may ask." Whether it was going to answer truthfully or not was something he could not yet tell.

It now answered him in its own voice, cracked, queer, inhuman. "Now I am constrained."

Relief and triumph compounded were so strong that Sabel had to chuckle. The thing sounded so immutably certain of what it said, even as it had sounded certain saying the exact opposite back in the lab.

Balancing buoyantly on his toes in the light gravity, he asked it: "How long ago were you damaged, and stuck here in the rock?"

"My timers have been out of operation."

That sounded reasonable. "At some time before you were damaged, though, some visual observations of the Radiant probably became stored somehow in your memory banks. You know what I am talking about from our conversation in the laboratory. Remember that I will be able to extract useful information from even the most casual, incidental video records, provided they were made in Radiant light when you were active."

"I remember." And as the berserker spoke there came faintly to Sabel's ears a grinding, straining sound, conducted through his boots from somewhere under the chaotic surface of once-molten rock.

"What are you doing?" he demanded sharply. God knew what weapons it had been equipped with, what potential powers it still had.

Blandly the berserker answered: "Trying to reestablish function in my internal power supply."

"You will cease that effort at once! The supply I have connected is sufficient."

"Order acknowledged." And at once the grinding stopped.

Sabel fumbled around, having a hard time trying to make a simple connection with another small device that he removed from his suit's belt. If only he did not tend to sweat so much. "Now. I have here a recorder. You will play into it all the video records you have that might be useful to me in my research on the Radiant's spectrum. Do not erase any records from your own banks. I may want to get at them again later."

"Order acknowledged." In exactly the same cracked tones as before.

Sabel got the connection made at last. Then he crouched there, waiting for what seemed endless times until his recorder signalled that the data flow had ceased.

And back in his lab, hours later, Sabel sat glaring destruction at the inoffensive stonework of the wall. His gaze was angled downward, in the direction of his unseen opponent, as if his anger could pierce and blast through the kilometers of rock.

The recorder had been filled with garbage. With nonsense. Virtually no better than noise. His own computer was still trying to unscramble the hopeless mess, but it seemed the enemy had succeeded in . . . still, perhaps it had not been a ploy of the berserker's at all. Only, perhaps, some kind of trouble with the coupling of the recorder input to . . .

He had, he remembered distinctly, told the berserker what the input requirements of the recorder were. But he had not explicitly ordered it to meet them. And he could not remember that it had ever said it would.

Bad, Sabel. A bad mistake to make in dealing with any kind of a machine. With a berserker . . .

A communicator made a melodious sound. A moment later, its screen brought Guardian Gunavarman's face and voice into the lab.

"Dr. Sabel, will your laboratory be in shape for a personal inspection by the Potentate three hours from now?"

"I—I—yes, it will. In fact, I will be most honored," he remembered to add, in afterthought.

"Good. Excellent. You may expect the security party a few minutes before that time."

As soon as the connection had been broken, Sabel looked around. He was in fact almost ready to be inspected. Some innocuous experiments were in place to be looked at and discussed. Almost everything that might possibly be incriminating had been got out of the way. Everything, in fact, except . . . he pulled the small recorder cartridge from his computer and juggled it briefly in his hand. The chance was doubtless small that any of his impending visitors would examine or play the cartridge, and smaller still that they

might recognize the source of information on it if they did. Yet in Sabel's heart of hearts he was not so sure that the Guardians could be depended upon to be incompetent. And there was no reason for him to take even a small chance. There were, there had to be, a thousand public places where one might secrete an object as small as this. Where no one would notice it until it was retrieved . . . there were of course the public storage facilities, on the far side of the Fortress, near the spaceport.

To get to any point in the Fortress served by the public transportation network took only a few minutes. He had to switch from moving Sidewalk to high-speed elevator in a plaza that fronted on the entertainment district, and as he crossed the plaza his eye was caught by a glowing red sign a hundred meters or so down the mall: CONTRAT ROUGE.

His phantom followers were at his back again, and to try to make them vanish he passed the elevator entrance as if that had not been his goal at all. He was not wearing his blue habit today, and as he entered the entertainment mall none of the few people who were about seemed to take notice of him.

A notice board outside the *Contrat Rouge* informed Sabel in glowing letters that the next scheduled dance performance was several hours away. It might be expected that he would know that, had he really started out with the goal of seeing her perform. Sabel turned and looked around, trying to decide what to do next. There were not many people in sight. But too many for him to decide if any of them might really have been following him.

Now the doorman was starting to take notice of him. So Sabel approached the man, clearing his throat. "I was looking for Greta Thamar?"

Tall and with a bitter face, the attendant looked as Sabel imagined a policeman ought to look. "Girls aren't in yet."

"She lives somewhere nearby, though?"

"Try public info."

And perhaps the man was somewhat surprised to see that that was what Sabel, going to a nearby booth, actually did



next. The automated information service unhesitatingly printed out Greta's address listing for him, and Sabel was momentarily surprised; he had pictured her as besieged by men who saw her on stage, having to struggle for even a minimum of privacy. But then he saw a stage name printed out in parentheses beside her own; those inquiring for her under the stage name would doubtless be given no information except perhaps the time of the next performance. And the doorman? He doubtless gave the same two answers to the same two questions a dozen times a day, and made no effort to keep track of names.

As Sabel had surmised, the apartment was not far away. It looked quite modest from the outside. A girl's voice, not Greta's, answered when he spoke into the intercom at the door. He felt irritated that they were probably not going to be able to be alone.

A moment later the door opened. Improbable blond hair framed a face of lovely ebony above a dancer's body. "I'm Greta's new roommate. She ought to be back in a few minutes." The girl gave Sabel an almost-amused appraisal. "I was just going out myself. But you can come in and wait for her if you like."

"I . . . yes, thank you." Whatever happened, he wouldn't be able to stay long. He had to leave himself plenty of time to get rid of the recorder cartridge somewhere and get back to the lab. But certainly there were at least a few minutes to spare.

He watched the blond dancer out of sight, sometime, perhaps . . . Then, left alone, he turned to a half-shaded window through which he could see a large part of the nearby plaza. Still there was no one in sight who looked to Sabel as if they might be following him. He moved from the window to stand in front of a cheap table. If he left before seeing Greta, should he leave her a note? And what ought he to say?

His personal communicator beeped at his belt. When he raised it to his face he found Chief Deputy Gunavarman looking out at him from the tiny screen.

"Doctor Sabel, I had expected you would be in your

laboratory now. Please get back to it as soon as possible; the Potentate's visit has been moved up by about two hours. Where are you now?"

"I . . . ah . . ." *What might be visible in Gunavarman's screen?* "The entertainment district."

The chronic appearance of good humor in the Guardian's face underwent a subtle shift; perhaps now there was something of genuine amusement in it. "It shouldn't take you long to get back, then. Please hurry. Shall I send an escort?"

"No. Not necessary. Yes. At once." Then they were waiting for him at the lab. It was even possible that they could meet him right outside this apartment's door. As Sabel reholstered his communicator, he looked around him with quick calculation. There. Low down on one wall was a small ventilation grill of plastic, not much broader than his open hand. It was a type in common use within the Fortress. Sabel crouched down. The plastic bent springily in his strong fingers, easing out of its socket. He slid the recorder into the dark space behind, remembering to wipe it free of fingerprints first.

The Potentate's visit to the lab went well. It took longer than Sabel had expected, and he was complimented on his work, at least some of which the great leader seemed to understand. It wasn't until next morning, when Sabel was wondering how soon he ought to call on Greta again, that he heard during a chance encounter with a colleague that some unnamed young woman in the entertainment district had been arrested.

Possession of a restricted device, that was the charge. The first such arrest in years, and though no official announcement had yet been made, the Fortress was buzzing with the event, probably in several versions. The wording of the charge meant that the accused was at least suspected of actual contact with a berserker; it was the same one, technically, that would have been placed against Sabel if his secret activities had been discovered. And it was the more serious form of goodlife activity, the less serious

consisting in forming clubs or cells of conspiracy, of sympathy to the enemy, perhaps having no real contact with berserkers.

Always in the past when he had heard of the recovery of any sort of berserker hardware, Sabel had called Gunavarman, to ask to be allowed to take part in the investigation. He dared not make an exception this time.

"Yes, Doctor," said the Guardian's voice from a small screen. "A restricted device is in our hands today. Why do you ask?"

"I think I have explained my interest often enough in the past. If there is any chance that this—device contains information pertinent to my studies, I should like to apply through whatever channels may be necessary—"

"Perhaps I can save you the trouble. This time the device is merely the storage cartridge of a video recorder of a common type. It was recovered last night during a routine search of some newcomers' quarters in the entertainment district. The information on the recorder is intricately coded and we haven't solved it yet. But I doubt it has any connection with cosmophysics. This is just for your private information of course."

"Of course. But—excuse me—if you haven't broken the code why do you think this device falls into the restricted category?"

"There is a certain signature, shall we say, in the coding process. Our experts have determined that the information was stored at some stage in a berserker's memory banks. One of the two young women who lived in the apartment committed suicide before she could be questioned—a typical goodlife easy-out, it appears. The other suspect so far denies everything. We're in the process of obtaining a court order for some M-E, and that'll take care of that."

"Memory extraction. I didn't know that you could still—?"

"Oh, yes. Though nowadays there's a formal legal procedure. The questioning must be done in the presence of official witnesses. And if innocence of the specific charge is established, questioning must be halted. But in this case I think we'll have no trouble."



Sabel privately ordered a printout of all court documents handled during the previous twenty-four hours. There it was: Greta Thamar, order for memory-extraction granted. At least she was not dead.

To try to do anything for her would of course have been completely pointless. If the memory-extraction worked to show her guilt, it should show also that he, Sabel, was only an innocent chance acquaintance. But in fact it must work to show her innocence, and then she would be released. She would regain her full mental faculties in time—enough of them, anyway, to be a dancer.

Why, though, had her roommate killed herself? Entertainers. Unstable people . . .

Even if the authorities should someday learn that he had known Greta Thamar, there was no reason for him to come forward today and say so. No; he wasn't supposed to know as yet that she was the one arrested. Gunavarman had mentioned no names to him.

No, indeed, the best he could hope for by getting involved would be entanglement in a tedious, time-wasting investigation. Actually of course he would be risking much worse than that.

Actually it was his work, the extraction of scientific truth, that really mattered, not he. And, certainly, not one little dancer more or less. But if he went, his work went too. Who else was going to extract from the Templar Radiant the truths that would open shining new vistas of cosmophysics? Only seven other Radiants were known to exist in the entire Galaxy. None of the others were as accessible to study as this one was, and no one knew this one nearly as well as Georgicus Sabel knew it.

Yes, it would be pointless indeed for him to try to do anything for the poor girl. But he was surprised to find himself going through moments in which he felt that he was going to have to try.

Meanwhile, if there were even the faintest suspicion of him, if the Guardians were watching his movements, then an abrupt cessation of his field trips would be more likely

to cause trouble than their continuation. And, once out in the lonely reaches of Dardania, he felt confident of being able to tell whether the Guardians were following him or not.

This time he took with him a small hologramstage, so he could look at the video records before he brought them back.

"This time," he said to the armored braincase projecting from the slag-bank, "you are ordered to give me the information in intelligible form."

Something in its tremendous shoulders buzzed, a syncopated vibration. "Order acknowledged."

And what he had been asking for was shown to him at last. Scene after scene, made in natural Radiant-light. Somewhere on the inner surface of the Fortress, surrounded by smashed Dardanian glass roofs, a row of berserkers stood as if for inspection by some commanding machine. Yes, he should definitely be able to get something out of that. And out of this one, a quite similar scene. And out of—

"Wait. Just a moment. Go back, let me see that one again. What was that?"

He was once more looking at the Fortress's inner surface, bathed by the Radiant's light. But this time no berserkers were visible. The scene was centered on a young woman, who wore space garb of a design unfamiliar to Sabel. It was a light-looking garment that did not much restrict her movements, and the two-second segment of recording showed her in the act of performing some gesture. She raised her arms to the light above as if in the midst of some rite or dance centered on the Radiant itself. Her dark hair, short and curly, bore a jeweled diadem. Her long-lashed eyes were closed, in a face of surpassing loveliness.

He watched it three more times. "Now wait again. Hold the rest of the records. Who was that?"

To a machine, a berserker, all human questions and answers were perhaps of equal unimportance. Its voice gave the same tones to them all. It said to Sabel: "The life-unit Helen Dardan."

"But—" Sabel had a feeling of unreality. "Show it once

more, and stop the motion right in the middle—yes, that's it. Now, how old is this record?"

"It is of the epoch of the 451st century, in your time-coordinate system."

"Before berserkers came to the Fortress? And why do you tell me it is she?"

"It is a record of Helen Dardan. No other existed. I was given it to use as a means of identification. I am a specialized assassin-machine and was sent on my last mission to destroy her."

"You—you claim to be the machine that actually—actually killed Helen Dardan?"

"No."

"Then explain."

"With other machines, I was programmed to kill her. But I was damaged and trapped here before the mission could be completed."

Sabel signed disagreement. By now he felt quite sure that the thing could see him somehow. "You were trapped during the Templars' reconquest. That's when this molten rock must have been formed. Well after the time when Helen lived."

"That is when I was trapped. But only within an hour of the Templars' attack did we learn where the life-unit Helen Dardan had been hidden, in suspended animation."

"The Dardanians hid her from you somehow, and you couldn't find her until then?"

"The Dardanians hid her. I do not know whether she was ever found or not."

Sabel tried to digest this. "You're saying that for all you know, she might be still entombed somewhere, in suspended animation—and still alive."

"Confirm."

He looked at his video recorder. For a moment he could not recall why he had brought it here. "Just where was this hiding place of hers supposed to be?"

As it turned out, after Sabel had struggled through a translation of the berserkers' coordinate system into his own, the supposed hiding place was not far away at all. Once he

had the location pinpointed it took him only minutes to get to the described intersection of Dardanian passageways. There, according to his informant, Helen's life-support coffin had been mortared up behind a certain obscure marking on a wall.

This region was free of the small blaze-marks that Sabel himself habitually put on the walls to remind himself of what ground he had already covered in his systematic program of exploration. And it was a region of some danger, perhaps, for here in relatively recent times there had been an extensive crumbling of stonework. What had been an intersection of passages had become a rough cave, piled high with pieces great and small of what had been wall and floor and overhead. The fragments were broken and rounded to some extent, sharp corners knocked away. Probably at intervals they did a stately mill-dance in the low gravity, under some perturbation of the Fortress's stately secular movement round the Radiant in space. Eventually the fallen fragments would probably grind themselves into gravel, and slide away to accumulate in low spots in the nearby passages.

But today they still formed a rough, high mound. Sabel with his suit lights could discern a dull egg-shape nine-tenths buried in this mound. It was rounder and smoother than the broken masonry, and the size of a piano or a little larger.

He clambered toward it, and without much trouble succeeded in getting it almost clear of rock. It was made of some tough, artificial substance, and in imagination he could fit into it any of the several types of suspended-animation equipment that he had seen.

What now? Suppose, just suppose, that any real chance existed . . . he dared not try to open up the thing here in the airless cold. Nor had he any tools with him at the moment that would let him try to probe the inside gently. He had to go back to base camp and get the flyer here somehow.

Maneuvering his vehicle to his find proved easier than he had feared. He found a roundabout way to reach the place, and in less than an hour had the ovoid secured to his flyer with adhesive straps. Hauling it slowly back to base camp, he reflected that whatever was inside was going to

have to remain secret, for a while at least. The announcement of any important find would bring investigators swarming out here. And that Sabel could not afford, until every trace of the berserker's existence had been erased.

Some expansion of the tent's fabric was necessary before he could get the ovoid in, and leave himself with space to work. Once he had it in a securely air-filled space, he put a gentle heater to work on its outer surface, to make it easier to handle. Then he went to work with an audio pickup to see what he could learn of the interior.

There was activity of some kind inside, that much was obvious at once. The sounds of gentle machinery, which he supposed might have been started by his disturbance of the thing, or by the presence of warm air around it now.

Subtle machinery at work. And then another sound, quite regular. It took Sabel's memory a little time to match it with the cadence of a living human heart.

He had forgotten about time, but in fact not much time had passed before he considered that he was ready for the next step. The outer casing opened for him easily. Inside, he confronted great complexity; yes, obviously sophisticated life-support. And within that an interior shell, eyed with glass windows. Sabel shone in a light.

As usual in suspended-animation treatment, the occupant's skin had been covered with a webbed film of half-living stuff to help in preservation. But the film had torn away now from around the face.

And the surpassing beauty of that face left Sabel no room for doubt. Helen Dardan was breathing, and alive.

Might not all, all, be forgiven one who brought the Queen of Love herself to life? All, even goodlife work, the possession of restricted devices?

There was also to be considered, though, the case of a man who at a berserker's direction unearthed the Queen and thereby brought about her final death.

Of course an indecisive man, one afraid to take risks, would not be out here now faced with his problem. Sabel had



already unslung his emergency medirobot, a thing the size of a suitcase, from its usual perch at the back of the flyer, and had it waiting inside the tent. Now, like a man plunging into deep, cold water, he fumbled open the fasteners of the interior shell, threw back its top, and quickly stretched probes from the medirobot to Helen's head and chest and wrist. He tore away handfuls of the half-living foam.

Even before he had the third probe connected, her dark eyes had opened and were looking at him. He thought he could see awareness and understanding in them. Her last hopes on being put to sleep must have been for an awakening no worse than this, at hands that might be strange but were not metal.

"Helen." Sabel could not help but feel that he was pretending, acting, when he spoke the name. "Can you hear me? Understand?" He spoke in Standard; the meager store of Dardanian that he had acquired from ancient recordings having completely deserted him for the moment. But he thought a Dardanian aristocrat should know enough Standard to grasp his meaning and the language had not changed enormously in the centuries since her entombment.

"You're safe now," he assured her, on his space-suited knees beside her bed. When a flicker in her eyes seemed to indicate relief, he went on: "The berserkers have been driven away."

Her lips parted slightly. They were full and perfect. But she did not speak. She raised herself a little, and moved to bare a shoulder and an arm from clinging foam.

Nervously Sabel turned to the robot. If he was interpreting its indicators correctly, the patient was basically in quite good condition. To his not-really-expert eye the machine signalled that there were high drug levels in her bloodstream; high, but falling. Hardly surprising, in one just being roused from suspended animation.

"There's nothing to fear, Helen. Do you hear me? The berserkers have been beaten." He didn't want to tell her, not right away at least, that glorious Dardania was no more.

She had attained almost a sitting position by now, leaning

on the rich cushions of her couch. There was some relief in her eyes, yes, but uneasiness as well. And still she had not uttered a word.

As Sabel understood it, people awakened from SA ought to have some light nourishment at once. He hastened to offer food and water both. Helen sampled what he gave her, first hesitantly, then with evident enjoyment.

"Never mind, you don't have to speak to me right away. The-war-is-over." This last was in his best Dardanian, a few words of which were now belatedly willing to be recalled.

"You-are-Helen." At this he thought he saw agreement in her heavenly face. Back to Standard now. "I am Georgicus Sabel. Doctor of Cosmophysics, Master of . . . but what does all that matter to me, now? I have saved you. And that is all that counts."

She was smiling at him. And maybe after all this was a dream, no more . . .

More foam was peeling, clotted, from her skin. Good God, what was she going to wear? He bumbled around, came up with a spare coverall. Behind his turned back he heard her climbing from the cushioned container, putting the garment on.

What was this, clipped to his belt? The newly-charged video recorder, yes. It took him a little while to remember what he was doing with it. He must take it back to the lab, and make sure that the information on it was readable this time. After that, the berserker could be destroyed.

He already had with him in camp tools that could break up metal, chemicals to dissolve it. But the berserker's armor would be resistant, to put it mildly. And it must be very thoroughly destroyed, along with the rock that held it, so that no one should ever guess it had existed. It would take time to do that. And special equipment and supplies, which Sabel would have to return to the city to obtain.

Three hours after she had wakened, Helen, dressed in a loose coverall, was sitting on cushions that Sabel had taken from her former couch and arranged on rock. she seemed content to simply sit and wait, watching her rescuer with

flattering eyes, demanding nothing from him except, as it soon turned out, his presence.

Painstakingly he kept trying to explain to her that he had important things to do, that he was going to have to go out, leave her here by herself for a time.

"I-must-go. I will come back. Soon." There was no question of taking her along, no matter what. At the moment there was only one spacesuit.

But, for whatever reason, she wouldn't let him go. With obvious alarm, and pleading gestures, she put herself in front of the airlock to bar his way.

"Helen. I really must. I—"

She signed disagreement, violently.

"But there is one berserker left, you see. We cannot be safe until it is—until—"

Helen was smiling at him, a smile of more than gratitude. And now Sabel could no longer persuade himself that this was not a dream. With a sinuous movement of unmistakable invitation, the Queen of Love was holding out her arms . . .

When he was thinking clearly and coolly once again, Sabel began again with patient explanations. "Helen. My darling. You see, I *must* go. To the city. To get some—"

A great light of understanding, acquiescence, dawned in her lovely face.

"There are some things I need, vitally. Then I swear I'll come right back. Right straight back here. You want me to bring someone with me, is that it? I—"

He was about to explain that he couldn't do that just yet, but her renewed alarm indicated that that was the last thing she would ask.

"All right, then. Fine. No one. I will bring a spare spacesuit . . . but that you are here will be my secret our secret, for a while. Does that please you? Ah, my Queen!"

At the joy he saw in Helen's face, Sabel threw himself down to kiss her foot. "Mine alone!"

He was putting on his helmet now. "I will return in less than a day. If possible. The chronometer is over here, you see? But if I should be longer than a day, don't worry. There's

everything you'll need, here in the shelter. I'll do my best to hurry."

Her eyes blessed him.

He had to turn back from the middle of the airlock, to pick up his video recording, almost forgotten.

How, when it came time at last to take the Queen into the city, was he going to explain his long concealment of her? She was bound to tell others how many days she had been in that far tent. Somehow there had to be a way around that problem. At the moment, though, he did not want to think about it. The Queen was his alone, and no one . . . but first, before anything else, the berserker had to be got rid of. No, before that even, he must see if its video data was good this time.

"Maybe Helen knew, Helen could tell him, where cached Dardanian treasure was waiting to be found . . .

And she had taken him as lover, as casual bed-partner rather. Was that the truth of the private life and character of the great Queen, the symbol of chastity and honor and dedication to her people? Then no one, in the long run, would thank him for bringing her back to them.

Trying to think ahead, Sabel could feel his life knotting into a singularity at no great distance in the future. Impossible to try to predict what lay beyond. It was worse than uncertain; it was opaque.

This time his laboratory computer made no fuss about accepting the video records. It began to process them at once.

At his private information station Sabel called for a printout of any official news announcements made by the Guardians or the city fathers during the time he had been gone. He learned that the entertainer Greta Thamar had been released under the guardianship of her court-appointed lawyer, after memory extraction. She was now in satisfactory condition in the civilian wing of the hospital.

There was nothing else in the news about goodlife, or berserkers. And there had been no black-robed Guardians at Sabel's door when he came in.



DATING ANOMALY PRESENT was on the screen of Sabel's laboratory computer the next time he looked at it.

"Give details," he commanded.

RECORD GIVEN AS EPOCH 451st CENTURY IDENTIFIES WITH SPECTRUM OF RADIANT EPOCH 456th CENTURY, YEAR 23, DAY 152.

"Let me see."

It was, as some part of Sabel's mind already seemed to know, the segment that showed Helen on the inner surface of the Fortress, raising her arms ecstatically as in some strange rite, or dance.

The singularity in his future was hurtling toward him quickly now. "You say—you say that the spectrum in this record is identical with the one we recorded—what did you say? How long ago?"

38 DAYS 11 HOURS, APPROXIMATELY 44 MINUTES.

As soon as he had the destructive materials he needed loaded aboard the flyer, he headed at top speed back to base camp. He did not wait to obtain a spare spacesuit.

Inside the tent, things were disarranged, as if Helen perhaps had been searching restlessly for something. Under the loose coverall her breast rose and fell rapidly, as if she had recently been working hard, or were in the grip of some intense emotion.

She held out her arms to him, and put on a glittering smile.

Sabel stopped just inside the airlock. He pulled his helmet off and faced her grimly. "Who are you?" he demanded.

She winced and tilted her head, but would not speak. She still held out her arms, and the glassy smile was still in place.

"*Who are you, I said?* That hologram was made just thirty-eight days ago."

Helen's face altered. The practiced expression was still fixed on it, but now a different light played on her features. The light came from outside the shelter and it was moving toward them.

There were four people out there, some with hand

weapons leveled in Sabel's direction. Through the plastic he could not tell at once if their suited figures were those of men or women. Two of them immediately came in through the airlock, while the other two remained outside, looking at the cargo Sabel had brought out on the flyer.

"God damn, it took you long enough." Helen's lovely lips had formed some words at last.

The man who entered first, gun drawn, ignored Sabel for the moment and inspected her with a sour grin. "I see you came through five days in the cooler in good shape."

"Easier than one day here with him—God damn." Helen's smile at Sabel had turned into an equally practiced snarl.

The second man to enter the shelter stopped just inside the airlock. He stood there with a hand on the gun holstered at his belt, watching Sabel alertly.

The first man now confidently holstered his weapon too, and concentrated his attention on Sabel. He was tall and bitter-faced, but he was no policeman. "I'm going to want to take a look inside your lab, and maybe get some things out, so hand over the key, or tell me the combination."

Sabel moistened his lips. "Who are you?" The words were not frightened, they were imperious with rage. "*And who is this woman here?*"

"I advise you to control yourself. She's been entertaining you, keeping you out of our way while we got a little surprise ready for the city. We each of us serve the Master in our own way . . . even you have already served. You provided the Master with enough power to call on us for help, some days ago . . . yes, what?" Inside this helmet he turned his head to look outside the shelter. "Out completely? Under its own power now? Excellent!"

He faced back toward Sabel. "And who am I? Someone who will get the key to your laboratory from you, one way or another, you may be sure. We've been working on you a long time already, many days. We saw to it that poor Greta got a new roommate, as soon as you took up with her. Poor Greta never knew . . . you see, we thought we might need your flyer and this final cargo of tools and chemicals to get the Master out. As it turned out, we didn't."

Helen, the woman Sabel had known as Helen, walked into his field of vision, turned her face to him as if to deliver a final taunt.

What it might have been, he never knew. Her dark eyes widened, in a parody of fainting fright. In the next moment she was slumping to the ground.

Sabel had a glimpse of the other, suited figures tumbling. Then a great soundless, invisible, cushioned club smote at his whole body. The impact had no direction, but there was no way to stand against it. His muscles quit on him, his nerves dissolved. The rocky ground beneath the shelter came up to catch his awkward fall with bruising force.

Once down, it was impossible to move a hand or foot. He had to concentrate on simply trying to breathe.

Presently he heard the airlock's cycling sigh. To lift his head and look was more than he could do; in his field of vision there were only suited bodies, and the ground.

Black boots, Guardian boots, trod to a halt close before his eyes. A hand gripped Sabel's shoulder and turned him part way up. Gunavarman's jovial eyes looked down at him for a triumphal moment before the Chief Deputy moved on.

Other black boots shuffled about. "Yes, this one's Helen Nadrad, all right—that's the name she used whoring at the Parisian Alley, anyway. I expect we can come up with another name or two for her if we look offworld. Ready to talk to us, Helen? Not yet? You'll be all right. Stunner wears off in an hour or so."

"Chief, I wonder what they expected to do with suspended animation gear? Well, we'll find out."

Gunavarman now began a radio conference with some distant personage. Sabel, in his agony of trying to breathe, to move, to speak, could hear only snatches of the talk:

"Holding meetings out here for some time, evidently . . . mining for berserker parts, probably . . . equipment . . . yes, Sire, the berserker recording was found in his laboratory this time . . . a publicity hologram of Helen Nadrad included in it, for some reason . . . yes, very shocking. But no doubt . . . we followed him out here just now. Joro, that's the goodlife

organizer we've been watching, is here . . . yes, Sire. Thank you very much. I will pass on your remarks to my people here."

In a moment more the radio conversation had been concluded. Gunavarman, in glowing triumph, was bending over Sabel once again. "Prize catch," the Guardian murmured. "Something you'd like to say to me?"

Sabel was staring at the collapsed figure of Joro. Inside an imperfectly closed pocket of the man's spacesuit he could see a small, blood-red cylinder, a stub of cut wire protruding from one end."

"Anything important, Doctor?"

He tried, as never before. Only a few words. "Dr-aw . . . your . . . wea-pons . . ."

Gunavarman glanced round at his people swarming outside the tent. He looked confidently amused. "Why?"

Now through the rock beneath the groundsheet of his shelter Sabel could hear a subtly syncopated, buzzing vibration, drawing near.

"Draw . . . your . . ."

Not that he really thought the little handguns were likely to do them any good.



*The instruments of science do not in themselves discover truth. And there are searchings that are not concluded by the coincidence of a pointer and a mark.*

## STARSONG

Forcing the passage through the dark nebula Taynarus cost them 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 *gotterdammerung* of destructor charges. But he could hope that the damped-field projectors his men took with him 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 beliefs about prisoners were 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 non-human and the non-alive. The organs were most of them 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 regrowth, raw material on which the

old personality can reimpress 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 development 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-analogue of awe as they regarded the memory-capacity and the decision-making power that nature in a few billion years of evolution 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 center 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 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 some day again look human—from collection 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 question was the best utterance that he could find—unless, of course, he was 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 misbehaved oddly, the hydrogen power lamp flaring so that the smoke of burnt 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 speaker system from woofer to tweet, plus a good bit of electronics and audionics; on the box's plain surface there 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 highbrowed 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, the 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 little ships imaged the face of Arty, the young man whose racer had just braked to a halt beside 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 clear. 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 ten thousand miles or so.

She never made it. As her little racer sped close to an outlying 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 dustclouds 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 further and began to sing to the berserker over the radio, taking his hands from his 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 miles 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 did not as a rule 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 re-educated captured brains as well. These were all examples of the berserker's highest achievements in its attempts at reverse cybernation.

Before Ordell had taken a dozen steps away from his ship, he was stopped and questioned by one of these monsters. Half steel 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 at all 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-fleshly 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 deeper 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 unreliable, were totally ruined. The overseers, half flesh themselves, failed and ambled 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 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 breath 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 he could hear behind him the sobbing of his wife, and the dragging stepping of her wounded foot.

"Ordell? Ordell, honey, is it 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 other 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 re-establish 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. "Goodbye . . . love . . ."

He cried out and ran after her, beating uselessly on 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 out 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. 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. How all the girls who were before him now would become easier to look at in Hell, with their repulsive bodies stripped away.

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, which a thoroughly broken neck and other damage had all but isolated from the rest of his body.

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. They wanted to tell him now that they were doing all they could, and they would have to tell him sometime that he could probably never be restored to anything like physical normality.

Ercul the psychologist sank probes directly into Ordell's brain, so that this information could be given him. Next he 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 was not limited now by any need to pause for breath. 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 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; if Ordell was still capable of singing, he would never again be able to communicate a song.

"Dols only two point five above normal bias level," chanted the psychologist's assistant, taking routine readings, not

guessing whose pain it was he was attempting to judge. "Neither one 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.

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*Not science nor music nor any other art encompasses the full measure of life's refusal to succumb. The pattern is as deep as the blind grouts of cells, as high as the loftiest intellect—and broader than we can see as yet.*

## SMASHER

Claus Slovensko was coming to the conclusion that the battle in nearby space was going to be invisible to anyone on the planet Waterfall—assuming that there was really going to be a battle at all.

Claus stood alone atop a forty-meter dune, studying a night sky that flamed with the stars of the alien Busog cluster, mostly blue-white giants which were ordinarily a sight worth watching in themselves. Against that background, the greatest energies released by interstellar warships could, he supposed, be missed as a barely visible twinkling. Unless, of course, the fighting should come very close indeed.

In the direction he was facing, an ocean made invisible by night stretched from near the foot of the barren dune to a horizon marked only by the cessation of the stars. Claus turned now to scan once more the sky in the other direction. That way, toward planetary north, the starry profusion went on and on. In the northeast a silvery half-moon, some antique stage designer's concept of what Earth's own moon should be, hung low behind thin clouds. Below those clouds extended an entire continent of lifeless sand and rock. The land masses of Waterfall were bound in a silence that Earth ears found uncanny, stillness marred only by the wind, by murmurings of sterile streams, and by occasional deep rumblings in the rock itself.

Claus continued turning slowly till he faced south again. Below him the night sea lapped with lulling false familiarity. He sniffed the air, and shrugged, and gave up squinting at the stars, and began to feel his way, one cautious foot after

another, down the shifting slope of the dune's flank. A small complex of buildings, labs and living quarters bunched as if for companionship, the only human habitation on the world of Waterfall, lay a hundred meters before him and below. Tonight as usual the windows were all cheerfully alight. Ino Vacroux had decided, and none of the other three people on the planet had seen any reason to dispute him, that any attempt at blackout would be pointless. If a berserker force was going to descend on Waterfall, the chance of four defenseless humans avoiding discovery by the unliving killers would be nil.

Just beyond the foot of the dune, Claus passed through a gate in the high fence of fused rock designed to keep out drifting sand—with no land vegetation of any kind to hold the dunes in place, they tended sometimes to get pushy.

A few steps past the fence, he opened the lockless door of the main entrance to the comfortable living quarters. The large common room just inside was cluttered with casual furniture, books, amateur art, and small and middle-sized aquariums. The three other people who completed the population of the planet were all in this room at the moment, and all looked up to see if Claus brought news.

Jenny Surya, his wife, was seated at the small computer terminal in the far corner, wearing shorts and sweater, dark hair tied up somewhat carelessly, long elegant legs crossed. She was frowning as she looked up, but abstractedly, as if the worst news Claus might be bringing them would be of some potential distraction from their work.

Closer to Claus, in a big chair pulled up to the big communicator cabinet, slouched Ino Vacroux, senior scientist of the base. Claus surmised that Ino had been a magnificent physical specimen a few decades ago, before being nearly killed in a berserker attack upon another planet. The medics had restored function but not fineness to his body. The gnarled, hairy thighs below his shorts were not much thicker than a child's; his ravaged torso was draped now in a flamboyant shirt. In a chair near him sat Glenna Reyes, his wife, in her usual work garb of clean white coveralls. She



was just a little younger than Vacroux, but wore the years with considerably more ease.

"Nothing to see," Claus informed them all, with a loose wave meant to describe the lack of visible action in the sky.

"Or to hear, either," Vacroux grated. His face was grim as he nodded toward the communicator. The screens of the device sparkled, and its speakers hissed a little, with noise that wandered in from the stars and stranger things than stars nature had set in this corner of the Galaxy.

Only a few hours earlier, in the middle of Waterfall's short autumn afternoon, there had been plenty to hear indeed. Driven by a priority code coming in advance of a vitally important message, the communicator had boomed itself to life, then roared the message through the house and across the entire base, in a voice that the four people heard plainly even four hundred meters distant where they were gathered to watch dolphins.

"Sea Mother, this is Brass Trumpet. Predators here, and we're going to try to turn them. Hold your place. Repeating. . . ."

One repetition of the substance came through, as the four were already hurrying back to the house. As soon as they got in they had played back the automatically recorded signal; and then when Glenna had at last located the code book somewhere, and they could verify the worst, they had played it back once more.

Sea Mother was the code name for any humans who might happen to be on Waterfall. It had been assigned by the military years ago, as part of their precautionary routine, and had probably never been used before today. Brass Trumpet, according to the book was a name conveying a warning of deadly peril—it was to be used only by a human battle force when there were thought to be berserkers already in the Waterfall system or on their way to it. And "predators here" could hardly mean anything but berserkers—unliving and unmanned war machines, programmed to destroy whatever life they found. The first of them had been built in ages past, during the madness of some interstellar war between races now long-since vanished. Between berserkers

and starfaring Earthhumans, war had now been chronic for a thousand standard years.

That Brass Trumpet's warning should be so brief and vague was understandable. The enemy would doubtless pick it up as soon as its intended hearers, and might well be able to decode it. But for all the message content revealed, Sea Mother might be another powerful human force, toward which Brass Trumpet sought to turn them. Or it would have been conceivable for such a message to be sent to no one, a planned deception to make the enemy waste computer capacity and detection instruments. And even if the berserkers' deadly electronic brains should somehow compute correctly that Sea Mother was a small and helpless target, it was still possible to hope that the berserkers would be too intent on fatter targets elsewhere, too hard-pressed by human forces, or both, to turn aside and snap up such a minor morsel.

During the hours since that first warning, there had come nothing but noise from the communicator. Glenna sighed, and reached out to pat her man on the arm below the sleeve of his loud shirt. "Busy day with the crustaceans tomorrow," she reminded him.

"So we'd better get some rest. I know." Ino looked and sounded worn. He was the only one of the four who had ever seen berserkers before, at anything like close range; and it was not exactly reassuring to see how grimly and intensely he reacted to the warning of their possible approach.

"You can connect the small alarm," Glenna went on, "so it'll be sure to wake us if another priority message comes in."

That, thought Claus, would be easier on the nerves than being blasted out of sleep by that God-voice shouting again, this time only a few meters from the head of their bed.

"Yes, I'll do that." Ino thought, then slapped his chair-arms. He made his voice a little brighter. "You're right about tomorrow. And over in Twenty-three we're going to have to start feeding the mantis shrimp." He glanced round at the wall near his chair, where a long chart showed ponds,

bays, lagoons and tidal pools, all strung out in a kilometer-long array, most of it natural, along this part of the coast. This array was a chief reason why the Sea Mother base had been located where it was.

From its sun and moon to its gravity and atmosphere, Waterfall was remarkably Earthlike in almost every measurable attribute save one—this world was congenitally lifeless. About forty standard years past, during a lull in the seemingly interminable berserker-war, it had appeared that the peaceful advancement of interstellar humanization might get in an inning or two, and work had begun toward altering this lifelessness. Great ships had settled upon Waterfall with massive inoculations of Earthly life, in a program very carefully orchestrated to produce eventually a twin-Earth circling one of the few Sol-type suns in this part of the Galaxy.

The enormously complex task had been interrupted when war flared again. The first recrudescence of fighting was far away, but it drew off people and resources. A man-wife team of scientists were selected to stay alone on Waterfall for the duration of the emergency. They were to keep the program going along planned lines, even though at a slow pace. Ino and Glenna had been here for two years now. A supply ship from Atlantis called at intervals of a few standard months; and the last to call, eight local days ago, had brought along another husband-and-wife team for a visit. Claus and Jenny were both psychologists, interested in the study of couples living in isolation; and they were to stay at least until the next supply ship came.

So far the young guests had been welcome. Glenna, her own children long grown and independent on other worlds, approached motherliness sometimes in her attitude. Ino, more of a born competitor, swam races with Claus and gambled—lightly—with him. With Jenny he alternated between half-serious gallantry and teasing.

"I almost forgot," he said now, getting up from his chair before the communicator, and racking his arms and shoulders with an intense stretch. "I've got a little present for you, Jen."

"Oh?" She was bright, interested, imperturbable. It was her usual working attitude, which he persisted in trying to break through.

Ino went out briefly, and came back to join the others in the kitchen. A small snack before retiring had become a daily ritual for the group.

"For you," he said, presenting Jen with a small bag of clear plastic. There was water inside, and something else.

"Oh, my goodness." It was still her usual nurselike business tone, which evidently struck Ino as a challenge. "What do I do with it?"

"Keep him in that last aquarium in the parlor," Ino advised. "It's untenanted right now."

Claus, looking at the bag from halfway across the kitchen, made out in it one of those non-human, non-mammalian shapes that are apt to give Earth people the impression of the intensely alien, even when the organism sighted comes from their own planet. It was no bigger than an adult human finger, but replete with waving appendages. There came to mind something written by Lafcadio Hearn about a centipede: *the blur of its moving legs . . . toward which one would no more advance one's hand . . . than toward the spinning blade of a power saw . . .*

Or some words close to those. Men, Claus knew, cared for the shapes of non-mammalian life even less than he did. But she would grit her teeth and struggle not to let the teasing old man see it.

"Just slit the bag and let it drain into the tank," Ino was advising, for once sounding pretty serious. "They don't like handling . . . okay? He's a bit groggy right now, but tomorrow, if he's not satisfied with you as his new owner, he may try to get away."

Glenna, in the background, was rolling her eyes in the general direction of Brass Trumpet, miming: What is the old fool up to now? When is he going to grow up?

"Get away?" Jen inquired sweetly. "You told me the other day that even a snail couldn't climb that glass—"

The house was filled with the insistent droning of the alarm that Ino had just connected. He's running some kind

of test, Claus thought at once. Then he saw the other man's face and knew that Ino wasn't.

Already the new priority message was coming in: "*Sea Mother, the fight's over here. Predators departing Waterfall System. Repeating . . .*"

Claus started to obey an impulse to run out and look at the sky again, then realized that there would certainly be nothing to be seen of the battle now. Radio waves, no faster than light, had just announced that it was over. Instead he joined the others in voicing their mutual relief. They had a minute or so of totally unselfconscious cheering.

Ino, his face much relieved, broke out a bottle of something and four glasses. In a little while, all of them drifted noisily outside, unable to keep from looking up, though knowing they would find nothing but the stars to see.

"What," asked Claus, "were berserkers doing here in the first place? We're hardly a big enough target to be interesting to a fleet of them. Are we?"

"Not when they have bigger game in sight." Ino gestured upward with his drink. "Oh, any living target interests them, once they get it in their sights. But I'd guess that if a sizable force was here they were on the way to attack Atlantis. See, sometimes in space you can use a planet or a whole system as a kind of cover. Sneak up behind its solar wind, as it were, its gravitational vortex, as someone fighting a land war might take advantage of a mountain or a hill." Atlantis was a long-colonized system less than a dozen parsecs distant, heavily populated and heavily defended. The three habitable Atlantean planets were surfaced mostly with water, and the populace lived almost as much below the waves as on the shaky continents.

It was hours later when Glenna roused and stirred in darkness, pulling away for a moment from Ino's familiar angularity nested beside her.

She blinked. "What was that?" she asked her husband, in a low voice barely cleared of sleep.

Ino scarcely moved. "What was what?"

"A flash, I thought. Some kind of bright flash, outside. Maybe in the distance."

There came no sound of thunder, or of rain. And no more flashes, either, in the short time Glenna remained awake.

Shortly after sunrise next morning, Claus and Jen went out for an early swim. Their beach, pointed out by their hosts as the place where swimmers would be safest and least likely to damage the new ecology, lay a few hundred meters along the shoreline to the west, with several tall dunes between it and the building complex.

As they rounded the first of these dunes, following the pebbly shoreline, Claus stopped. "Look at that." A continuous track, suggesting the passage of some small, belly-dragging creature, had been drawn in the sand. Its lower extremity lay somewhere under water, its upper was concealed amid the humps of sterile sand somewhere inland.

"Something," said Jenny, "crawled up out of the water. I haven't seen that before on Waterfall."

"Or came down into it." Claus squatted beside the tiny trail. He was anything but a skilled tracker, and could see no way of determining which way it led. "I haven't seen anything like this before either. Glenna said certain species—I forget which—were starting to try the land. I expect this will interest them when we get back."

When Claus and Jenny had rounded the next dune, there came into view on its flank two more sets of tracks, looking very much like the first, and like the first either going up from the water or coming down.

"Maybe," Claus offered, "it's the same one little animal going back and forth. Do crabs make tracks like that?"

Jen couldn't tell him. "Anyway, let's hope they don't pinch swimmers." She slipped off her short robe and took a running dive into the cool water, whose salt content made it a good match for the seas of Earth. Half a minute later, she and her husband came to the surface together, ten meters or so out from shore. From here they could see west past the next dune. There, a hundred meters distant, underscored by the slanting shadows of the early sun, a whole tangled skein of narrow fresh-looking tracks connected someplace inland with the sea.

A toss of Jen's head shook water from her long, dark hair. "I wonder if it's some kind of seasonal migration?"

"They certainly weren't there yesterday. I think I've had enough. This water's colder than a bureaucrat's heart."

Walking briskly, they had just re-entered the compound when Jenny touched Claus on the arm. "There's Glenna, at the tractor shed. I'm going to trot over and tell her what we saw."

"All right. I'll fix some coffee."

Glenna, coming out of the shed a little distance inland from the main house, forestalled Jenny's announcement about the tracks with a vaguely worried question of her own.

"Did you or Claus see or hear anything strange last night, Jenny?"

"Strange? No, I don't think so."

Glenna looked toward a small cluster of more distant outbuildings. "We've just been out there taking a scheduled seismograph reading. It had recorded something rather violent and unusual, at about oh-two-hundred this morning. The thing is, you see, it must have been just about that time that something woke me up. I had the distinct impression that there had been a brilliant flash, somewhere outside."

Ino, also dressed in coveralls this morning, appeared among the distant sheds, trudging toward them. When he arrived, he provided more detail on the seismic event. "Quite sharp and apparently quite localized, not more than ten kilometers from here. Our system triangulated it well. I don't know when we've registered another event quite like it."

"What do you suppose it was?" Jen asked.

Ino hesitated minimally. "It could have been a very small spaceship crashing or maybe a fairly large aircraft. But the only aircraft on Waterfall are the two little ones we have out in that far shed."

"A meteor, maybe?"

"I rather hope so. Otherwise a spacecraft just might be our most likely answer. And if it were a spacecraft from Brass Trumpet's force coming down here—crippled in the fighting, perhaps—we'd have heard from him on the subject, I should think."

The remaining alternative hung in the air unvoiced. Jenny bit her lip. By now, Brass Trumpet must be long gone from the system, and impossible of recall, his ships outpacing light and radio waves alike in pursuit of the enemy force.

In a voice more worried than before, Glenna was saying: "Of course if it was some enemy unit, damaged in the battle, then I suppose the crash is likely to have completed its destruction."

"I'd better tell you," Jenny blurted in. And in a couple of sentences she described the peculiar tracks.

Ino stared at her with frank dismay. "I was going to roll out an aircraft . . . but let me take a look at those tracks first."

The quickest way to reach them was undoubtedly on foot, and the gnarled man trotted off along the beach path at such a pace that Jenny had difficulty keeping up. Glenna remained behind, saying she would let Claus know what was going on.

Moving with flashes of former athletic grace, Ino reached the nearest of the tracks and dropped to one knee beside it, just as Claus had done. "Do the others look just like this?"

"As nearly as I could tell. We didn't get close to all of them,"

"That's no animal I ever saw." He was up again already, trotting back toward the base. "I don't like it. Let's get airborne, all of us."

"I always pictured berserkers as huge things."

"Most of 'em are. Some are small machines, for specialized purposes."

"I'll run into the house and tell the others to get ready to take off," Jenny volunteered as they sped into the compound.

"Do that. Glenna will know what to bring, I expect. I'll get a flyer rolled out of the shed."

Running, Jen thought as she hurried into the house, gave substance to a danger that might otherwise have existed only in the mind. Could it be that Ino, with the horrors in his memory, was somewhat too easily alarmed where berserkers were concerned?



Glenna and Claus, who had just changed into coveralls, met her in the common room. she was telling them of Ino's decision to take to the air, and thinking to herself that she had better change out of her beach garb also, when the first outcry sounded from somewhere outside. It was less a scream than a baffled-sounded, hysterical laugh.

Glenna pushed past her at once, and in a moment was out the door and running. Exchanging a glance with her husband, Jenny turned and followed, Claus right at her heels.

The strange cry came again. Far ahead, past Glenna's running figure, the door of the aircraft shed had been slid back, and in its opening a white figure appeared outlined. A figure that reeled drunkenly and waved its arms.

Glenna turned aside at the tractor shed, where one of the small ground vehicles stood ready. They were used for riding, hauling, pushing sand, to sculpt a pond into a better shape or slice away part of a too-obtrusive dune. It'll be faster than running, Jenny thought, as she saw the older woman spring into the driver's seat, and heard the motor *whoosh* quietly to life. she leaped aboard too. Claus shoved strongly at her back to make sure she was safely on, before he used both hands for his own grip. A grip was necessary because they were already rolling, and accelerating quickly.

Ino's figure, now just outside the shed, came hurtling closer with their own speed. He shook his arms at them again and staggered. Upon his chest he wore a brownish thing the size of a small plate, like some great medallion that was so heavy it almost pulled him down. He clawed at the brown plate with both hands, and suddenly his coveralls in front were splashed with scarlet. He bellowed words which Jenny could not make out.

Claus gripped Glenna's shoulders and pointed. A dozen or more brown plates were scuttling on the brown, packed sand, between the aircraft shed and the onrushing tractor. The tracks they drew were faint replicas of those that had lined the softer sand along the beach. Beneath each saucerlike body, small legs blurred, reminding Claus of something recently seen, something he could not stop to think of now.

The things had nothing like the tractor's speed but still they were in position to cut it off. Glenna swerved no more than slightly, if at all, and one limbed plate disappeared beneath a wheel. It came up at once with the wheel's rapid turning, a brown blur seemingly embedded in the soft, fat tire, resisting somehow the centrifugal force that might have thrown it off.

Ino had gone down with, as Claus now saw, three of the things fastened on his body, but he somehow fought back to his feet just as the tractor jerked to a halt beside him. If Claus could have stopped to analyze his own mental state, he might have said he lacked the time to be afraid. With a blow of his fist he knocked one of the attacking things away from Ino, and felt the surprising weight and hardness of it as a sharp pang up through his wrist.

All three dragging together, they pulled Ino aboard; Glenna was back in the driver's seat at once. Claus kicked another attacker off, then threw open the lid of the tractor's toolbox. He grabbed the longest, heaviest metal tool displayed inside.

A swarm of attackers were between them and the aircraft shed; and the shadowed shape of a flyer, just inside, was spotted with them too. As Glenna gunned the engine, she turned the tractor at the same time, heading back toward the main building and the sea beyond. In the rear seat, Jenny held Ino. He bled on everything, and his eyes were fixed on the sky while his mouth worked in terror. In the front, Claus fought to protect the driver and himself.

A brown plate scuttled onto the cowl, moving for Glenna's hands on the controls. Claus swung, a baseball batter, bright metal blurring at the end of his extended arms. There was a hard, satisfying crunch, as of hard plastic or ceramic cracking through. The brown thing fell to the floor, and he caught a glimpse of dull limbs still in motion before he caught it with a foot and kicked it out onto the flying ground.

Another of the enemy popped out from somewhere onto the dash. He pounded at it, missed when it seemed to dodge his blows. He cracked its body finally; but still it clung on

under the steering column, hard to get at, inching toward Glenna's fingers, Claus grabbed it with his left hand, felt a lance. Not until he had thrown the thing clear of the tractor did he look at his hand and see two fingers nearly severed.

At the same moment, the tractor engine died, and they were rolling to a silent stop, with the sea and the small dock Glenna had been steering for only a few meters ahead. Under the edge of the engine cowling another of the enemy appeared, thrusting forward a limb that looked like a pair of ceramic pliers, shredded electrical connectors dangling in its grip.

The humans abandoned the tractor in a wordless rush. Claus, one hand helpless and dripping blood, aided the women with Ino as best he could. Together they half-dragged, half-carried him across the dock and rolled him into a small, open boat, the only craft at once available. In moments Glenna had freed them from the dock and started the motor, and they were headed out away from shore.

Away from shore, but not into the sea. They were separated from deep-blue and choppy ocean by a barrier reef or causeway, one of the features that had made this coast desirable for a life-seeding base. The reef, a basically natural structure of sand and rock deposited by waves and currents, was about a hundred meters from the shore, and stretched in either direction as far as vision carried. Running from beach to reef, artificial walls or low causeways of fused rock separated ponds of various sizes.

"We're in a kind of square lagoon here," Glenna told Jenny, motioning for her to take over the job of steering. "Head for that far corner. If we can get there ahead of them, we may be able to lift the boat over the reef and get out."

Jen nodded, taking the controls. Glenna slid back to a place beside her husband, snapped open the boat's small first-aid kit, and began applying pressure bandages.

Claus started to try to help, saw the world beginning to turn gray around him, and slumped back against the gunwale; no use to anyone if he passed out. Ino looked as if he had been attacked, not by teeth or claws or knives, but by several sets of nail-pullers and wire-cutters. His chest still rose and

fell, but his eyes were closed now and he was gray with shock. Glenna draped a thermal blanket over him.

Jen was steering around the rounded structure, not much bigger than a phone booth, protruding above the water in the middle of the pond. Most of the ponds and bays had similar observation stations. Claus had looked into one or two and he thought now that there was nothing in them likely to be of any help. More first-aid kits, perhaps—but what Ino needed was the big medirobot back at the house.

And he was not going to get it. By now the building complex must be overrun by the attackers. Berserkers . . .

"Where can we find weapons?" Claus croaked at Glenna.

"Let's see that hand. I can't do any more for Ino now . . . I'll bandage this. If you mean guns, there are a couple at the house, somewhere in storage. We can't go back there now."

"I know."

Glenna had just let go his hand when from the front seat there came a scream. Claws and a brown saucer-shape were climbing in over the gunwale at Jenny's side. Had the damned thing come aboard somehow with them, from the tractor? Or was this pond infested with them too?

In his effort to help drag Ino to the boat, Claus had abandoned his trusty wrench beside the tractor. He grabbed now for the best substitute at hand, a small anchor at the end of a chain. His overhand swing missed Jenny's head by less than he had planned, but struck the monster like a mace. It fell into the bottom of the boat, vibrating its limbs, as Claus thought, uselessly; then he realized that it was making a neat hole.

His second desperation-swing came down upon it squarely. One sharp prong of the anchor broke a segment of the brown casing clean away, and something sparked and sizzled when the sea came rushing in—

—seawater rushing—

—into the bottom of the boat—

The striking anchor had enlarged the hole that the enemy had begun. The bottom was split, the boat was taking water fast.

Someone grabbed up the sparking berserker, inert now save for internal fireworks, and hurled it over the side. Glenna threw herself forward, taking back the wheel, and Jenny scrambled aft, to help one-handed Claus with bailing.

The boat limped, staggered, gulped water and wallowed on toward the landbar. It might get them that far, but forget the tantalizing freedom of blue surf beyond . . .

Jenny started to say something to her husband, then almost shrieked again, as Ino's hand, resurgently alive, came up to catch her wrist. The old man's eyes were fixed on hers with a tremendous purpose. He gasped out words, and then fell back unable to do more.

The words first registered with Jenny as: ". . . need them . . . do the splashers . . ." It made no sense.

Glenna looked back briefly, then had to concentrate on boathandling. In another moment the fractured bottom was grating over rock. Claus scrambled out and held the prow against the above-water portion of the reef. The women followed, got their footing established outside the boat, then turned to lift at Ino's inert form.

Jenny paused. "Glenna, I'm afraid he's gone."

"No!" Denial was fierce and absolute. "Help me!"

Jen almost started to argue, then gave in. They got Ino up into a fireman's-carry position on Claus's shoulders; even with a bad hand he was considerably stronger than either of the women. Then the three began to walk east along the reef. At high tide, as now, it was a strip of land no more than three or four meters wide, its low crest half a meter above the water. Waves of any size broke over it. Fortunately today the surf was almost calm.

Claus could feel the back of his coverall and neck wetting with Ino's blood. He shipped the dead weight on his shoulders. All right, so far. But his free hand, mutilated, throbbed.

He asked: "How far are we going, Glenna?"

I don't know." The woman paced ahead—afraid to look at her husband now?—staring into the distance. There isn't any place. Keep going."

Jenny and Claus exchanged looks. For want of any better

plan at the moment, they kept going. Jen took a look back. "They're on the reef, and on the shore too, following us. A good distance back."

Claus looked, and looked again a minute later. Brown speckles by the dozen followed, but were not catching up. Not yet.

Now they were passing the barrier of fused rock separating the pond in which they had abandoned the boat from its neighbor. The enemy moving along the shore would intercept them, or very nearly, if they tried to walk the barrier back to land.

Ahead, the reef still stretched interminably into a sun-dazzled nothingness.

"What's in this next pond, Glenna?" Claus asked, and knew a measure of relief when the gray-haired woman gave a little shake of her head and answered sensibly.

"Grouper. Some other fish as food stock for them. Why?"

"Just wondering. What'll we run into if we keep on going in this direction?"

"This just goes on. Kilometer after kilometer. Ponds, and bays, and observation stations—I say keep going because otherwise they'll catch us. What do you think we ought to do?"

Claus abruptly stopped walking, startling the women. He let the dead man slide down gently from his shoulders. Jen looked at her husband, examined Ino, shook her head.

Claus said: "I think we've got to leave him."

Glenna looked down at Ino's body once, could not keep looking at him. She nodded fiercely, and once more led the way.

A time of silent walking passed before Jenny at Claus's side began: "If they're berserkers . . ."

"What else?"

"Well, why aren't we all dead already? They don't seem very . . . efficiently designed for killing."

"They must be specialists," Claus mused. "Only a small part of a large force, a part Brass Trumpet missed when the rest moved on or was destroyed. Remember, we were wondering if Atlantis was their real target? These are special

machines, built for . . . underwater work, maybe. Their ship must have been wrecked in the fighting and had to come down. When they found themselves on this planet they must have come down to the sea for a reconnaissance, and then decided to attack first by land. Probably they saw the lights of the base before they crash-landed. They know which life-form they have to deal with first, on any planet. Not very efficient, as you say. But they'll keep coming at us till they're all smashed or we're all dead."

Glenna had slowed her pace a little and was looking toward the small observation post rising in the midst of the pond that they were passing. "I don't think there's anything in any of these stations that can help us. But I can't think of anywhere else to turn."

Claus asked: "What's in the next pond after this?"

"Sharks . . . ah. That might be worth a try. Sometimes they'll snap at anything that moves. They're small ones, so I think our risk will be relatively small if we wade out to the middle."

Claus thought to himself that he would rather end in the belly of a live shark than be torn to pieces by an impersonal device. Jen was willing also to take the chance.

They did not pause again till they were on the brink of the shark pond. Then Glenna said: "The water will be no more than three or four feet deep the way we're going. Stay together and keep splashing as we go. Claus, hold that bad hand up; mustn't drip a taste of blood into the water."

And in they went. Only when they were already splashing waist-deep did Claus recall Ino's blood wetting the back of his coverall. But he was not going to stop just now to take it off.

The pond was not very large; a minute of industrious wading, and they were climbing unmolested over the low, solid railing of the observation post rising near its middle. Here was space for two people to sit comfortably, sheltered from weather by a transparent dome and movable side panels. In the central console were instruments that continually monitored the life in the surrounding pond.

Usually, of course, the readings from all ponds would be monitored in the more convenient central station attached to the house.

The three of them squeezed in, and Glenna promptly opened a small storage locker. It contained a writing instrument that looked broken, a cap perhaps left behind by some construction worker, and a small spider—another immigrant from Earth, of course—who might have been blown out here by the wind. That was all.

She slammed the locker shut again. "No help. So now it's a matter of waiting. They'll obviously come after us through the water. The sharks may snap up some of them before they reach us. Then we must be ready to move on before we are surrounded. It's doubtful, and risky, but I can't think of anything else to try."

Claus frowned. "Eventually we'll have to circle around, get back to the buildings."

Jen frowned at him. "The berserkers are there, too."

"I don't think they will be, now. You see—"

Glenna broke in "Here they come."

The sun had climbed, and was starting to get noticeably hot. It came to Claus's mind, not for the first time since their flight had started, that there was no water for them to drink. He held his left arm up with his right, trying to ease the throbbing.

Along the reef where they had walked, along the parallel shore and coming now over the barrier from the grouper pond—plate-sized specks of brown death were flowing. There were several dozen of them, moving more slowly than hurried humans could move, almost invisible in the shimmer of sun and sea. Some plopped into the water of the shark pond as Claus watched.

"I can't pick them up underwater," Glenna announced. She was twiddling the controls of the station's instruments, trying to catch the enemy on one of the screens meant for observing marine life. "Sonar . . . motion detectors . . . water's too murky for simple video."

Understanding dawned for Claus. "That's why they're not metal. Why they're comparatively fragile. They're designed



for avoiding detection by underwater defenses, on Atlantis I suppose, for infiltrating and disabling them."

Jen was standing. "We'd better get moving before we're cut off."

"In another minute." Glenna was still switching from one video pickup to another around the pond. "I'm sure we have at least that much to spare . . . ah."

One of the enemy had appeared on screen, sculling toward the camera at a modest pace. It looked less lifelike than it had in earlier moments of arm's-length combat.

Now, entering the picture from the rear, a shark.

Claus was not especially good on distinguishing marine species. But this portentous and somehow familiar shape was identifiable at once, not to be confused even by the non-expert, it seemed, with that of any other kind of fish.

Claus started to say, He's going right past. But the shark was not. Giving the impression of afterthought, the torpedo-shape swerved back. Its mouth opened and the berserker device was gone.

The people watching made wordless sounds. But Jen took the others by an arm apiece. "We can't bet all of them will be eaten—let's get moving."

Claus already had one leg over the station's low railing when the still surface of the pond west of the observation post exploded. Leaping clear of the water, the premiere killer of Earth's oceans twisted in mid-air, as if trying to snap at its own belly. It fell back, vanishing in a hill of lashed-up foam. A moment later it jumped again, still thrashing.

In the fraction of a second when the animal was clearly visible, Claus watched the dark line come into being across its white belly as if traced there by an invisible pen. It was a short line that a moment later broadened and evolved in blood. As the fish rolled on its back something dark and pointed came into sight, spreading the edges of the hole. Then the convulsing body of the shark had vanished in an eruption of water turned opaque with its blood.

The women were wading quickly away from the platform in the opposite direction, calling him to follow, hoping aloud that the remaining sharks would be drawn to the dying one.

But for one moment longer Claus lingered, staring at the screen. It showed the roiling bloody turmoil of killer fish converging, and out of this cloud the little berserker emerged, unfazed by shark's teeth or digestion, resuming its methodical progress toward the humans, the life-units that could be really dangerous to the cause of death.

Jen tugged at her husband, got him moving with them. In her exhausted brain a nonsense-rhyme was being generated: *Bloody water hides the slasher, seed them, heed them, sue the splashers . . .*

No!

As the three completed their water-plowing dash to the east edge of the pond, and climbed out, Jenny took Glenna by the arm. "Something just came to me. When I was tending Ino—he said something before he died."

They were walking east along the barrier reef again. "He said smashers," Jen continued. "That was it. Lead them or feed them, to the smashers. But I still don't understand—"

Glenna stared at her for a moment, an almost brightening gaze. Then she stepped between the young couple and pulled them forward.

Two ponds down she turned aside, wading through water that splashed no higher than their calves, directly toward another observation post that looked just like the last.

"We won't be bothered in here," she assured them. "We're too big. Of course, of course, oh, Ino. I should have thought of this myself. Unless we should happen to step right on one, but there's very little chance of that. They wait in ambush most of the time, in holes or under rocks."

"They?" Injury and effort were taking toll on Claus. He leaned on Jenny's shoulder now.

Glenna glanced back impatiently. "Mantis shrimp is the common name. They're stomatopods, actually."

"Shrimp?" The dazed query was so soft that she may not have heard it.

A minute later they were squeezed aboard the station and could rest again. Above, clean morning clouds were building to enormous height, clouds that might have formed

in the unbreathed air of Earth five hundred million years before.

"Claus," Jen asked, when both of them had caught their breath a little, "what were you saying a while ago, about circling back to the house?"

"It's this way," he said, and paused to organize his thoughts. "We've been running to nowhere, because there's nowhere on this world we can get help. *But the berserkers can't know that.* I'm assuming they haven't scouted the whole planet, but just crash-landed on it. For all they know, there's another colony of humans just down the coast. Maybe a town, with lots of people, aircraft, weapons . . . so for them it's an absolute priority to cut us off before we can give a warning. Therefore every one of their units must be committed to the chase. And if we can once get through them or around them, we can outrun them home, to vehicles and guns and food and water. How we get through them or around them I haven't figured out yet. But I don't see any other way."

"We'll see," said Glenna. Jen held his hand, and looked at him as if his idea might be reasonable. A distracting raindrop hit him on the face, and suddenly a shower was spattering the pond. With open mouths the three survivors caught what drops they could. They tried spreading Jenny's robe out to catch more, but the rain stopped before the cloth was wet.

"Here they come," Glenna informed them, shading her eyes from re-emergent sun. she started tuning up the observing gear aboard the station.

Claus counted brown saucer-shapes dropping into the pond. Only nineteen, after all.

"Again, I can't find them with the sonar," Glenna muttered. "We'll try the television—there."

A berserker unit—for all the watching humans could tell, it was the same one that the shark had swallowed—was centimetering its tireless way toward them, walking the bottom in shallow, sunlit water. Death was walking. A living thing might run more quickly, for a time, but life would tire. Or let life oppose it, if life would. Already it had walked through a shark, as easily as traversing a mass of seaweed.

"There," Glenna breathed again. The advancing enemy had detoured slightly around a rock, and a moment later a dancing ripple of movement had emerged from hiding somewhere to follow in its path. The pursuer's score or so of tiny legs supported in flowing motion a soft-looking, roughly segmented tubular body. Its sinuous length was about the same as the enemy machine's diameter, but in contrast the follower was aglow with life, gold marked in detail with red and green and brown, like banners carried forward above an advancing column. Long antennae waved as if for balance above bulbous, short-stalked eyes. And underneath the eyes a coil of heavy fore-limbs rested, not used for locomotion.

"*Odonodactylus syllarus*," Glenna murmured. "Not the biggest species—but maybe big enough."

"What are they?" Jen's voice was a prayerful whisper.

"Well, predators . . ."

The berserker, intent on its own prey, ignored the animate ripple that was overtaking it, until the smasher had closed almost to contact range. The machine paused then, and started to turn.

Before it had rotated itself more than halfway its brown body was visibly jerked forward, under some striking impetus from the smasher too fast for human eyes to follow. The *krak!* of it came clearly through the audio pickup. Even before the berserker had regained its balance, it put forth a tearing-claw like that which had opened the shark's gut from inside.

Again the invisible impact flicked from a finger-length away. At each spot where one of the berserker's feet touched bottom, a tiny spurt of sand jumped up with the transmitted shock. Its tearing claw now dangled uselessly, hard ceramic cracked clean across.

"I've never measured a faster movement by anything that lives. They strike with special dactyls—well, with their elbows, you might say. They feed primarily on hard-shelled crabs and clams and snails. That was just a little one, that Ino gave you as a joke. One as long as my hand can hit something like a four-millimeter bullet—and some of these are longer."

Another hungry smasher was now coming swift upon the track of the brown, shelled thing that looked so like a crab. The second smasher's eyes moved on their stalks, calculating distance. It was evidently of a different species than the first, being somewhat larger and of a variant coloration. Even as the berserker, which had just put out another tool, sharp and wiry, and cut its first assailant neatly in half, turned back, Claus saw—or almost saw or imagined that he saw—the newcomer's longest pair of forelimbs unfold and return. Again grains of sand beneath the two bodies, living and unliving, jumped from the bottom. With the concussion white radii of fracture sprang out across a hard, brown surface . . .

Four minutes later the three humans were still watching, in near-perfect silence. A steady barrage of *kraks*, from every region of the pond, were echoing through the audio pickups. The video screen still showed the progress of the first individual combat.

"People sometimes talk about sharks as being aggressive, as terrible killing machines. Gram for gram, I don't think they're at all in the same class."

The smashing stomatopod, incongruously shrimplike, gripping with its six barb-studded smaller fore-limbs the ruined casing of its victim—from which a single ceramic walking-limb still thrashed—began to drag it back to the rock from which its ambush had been launched. Once there, it propped the interstellar terror in place, a Lilliputian monster blacksmith arranging metal against anvil. At the next strike, imaginable if not visible as a double backhand snap from the fists of a karate master, fragments of tough casing literally flew through the water, mixed now with a spill of delicate components. What, no soft, delicious meat in sight as yet? Then *smash* again . . .

An hour after the audio pickups had reported their last *krak*, the three humans walked toward home, unmolested through the shallows and along a shore where no brown saucers moved.

When Ino had been brought home, and Claus's hand seen to, the house was searched for enemy survivors. Guns were got out, and the great gates in the sand-walls closed to be

on the safe side. Then the two young people sent Glenna to a sedated rest.

Her voice was dazed, and softly, infinitely tired. "Tomorrow we'll feed them, something real."

"This afternoon," said Claus. "When you wake up. Show me what to do."

"Look at this," called Jen a minute later, from the common room.

One wall of the smallest aquarium had been shattered outward. Its tough glass lay sharded on the carpet, along with a large stain of water and the soft body of a small creature, escaped and dead.

Jen picked it up. It was much smaller than its cousins out in the pond, but now she could not mistake the shape, even curled loosely in her palm.

Her husband came in and looked over her shoulder. "Glenna's still muttering. She just told me they can stab, too, if they sense soft meat in contact. Spear-tips on their smashers when they unfold them all the way. So you couldn't hold him like that if he was still alive." Claus's voice broke suddenly, in a delayed reaction.

"Oh, yes I could." Jen's voice too. "Oh, yes I could indeed."

*As I said before, most intelligent creatures avoid war, shun violence. Yet eternal must our gratitude be, to those whose very games are bitter conflict. Grateful, even as we wonder at their hardness—and at the tenderness that may dwell at the same time in the same heart.*

## THE GAME

Khees rarely looked at the overseers' towers without seeing in them a fanciful resemblance to chess rooks. Instead of four, there were six great rooks here, each one standing on its own corner of a vast patchwork territory of lifeless land; and the patched land, busy with friendly machines, still obscured here and there by blotches of poison mist borne in the thinned and ruined air, was not divided into regular squares; some kind of fairy chess instead of the regular variety. His imaginative thoughts about the towers had not, in the six months he had been on planet Maximus, ever got much farther than this point. Chess was not Khees' great game, and he knew little of its history.

Today he was conducting an informal tour of the rehabilitation project for Adrienne, who had just arrived on-world, and whom he had not seen in over two standard years. At the moment they were outside, wearing dust-repellent jackets and special breathing masks.

"Actually the capital stood more than a thousand kilometers from here, before the attack. But this will be a finer site in several ways for the new city, so we decided to put the monument here as well."

"That was a good idea. Yours?" It was marvelously flattering, and more than that, the attention that Adrienne was giving him today.

He chuckled. "I'm not sure. We talk things over a great deal." Khees and twenty other people had been here for half a year, overseeing an army of machines employed in

starting to undo the devastation wrought by the raiding berserker fleet in an hour or so, a little more than a standard year ago, "Let's go inside again. In here we have the first of our new atmosphere."

They passed through an airlock into a great, inflated, transparent structure, where they could remove the masks that had protected them against the poison residues of the attack, which still maintained an uncanny lifelessness across the open atmosphere. It was not only human life against which the berserkers fought; the commands built into those unliving killers by their ancient and unknown programmers decreed that all life must be destroyed. For many thousands of years the berserkers had ranged the galaxy, replicating themselves, designing new machines as needed, always methodically killing. And now, for a thousand years and more, Earth-descended humanity, dispersed on more than a hundred worlds, had fought against them. Inside, Adrienne tossed her mask into a rack and looked about, shaking out long hair of fiery red with a brisk twisting of her slender neck. "Enormous," she remarked. The inflated dome of clear plastic, that from outside had seemed so tall, looked flat when seen from inside, so long and broad was it in relation to its height. Almost a kilometer away, beyond a pleasant view of green-fringed paths and ponds, the half-finished monument rose, remaining truncated at the top until the atmosphere had been restored and the confining plastic dome could be removed. SACRED TO THE MEMORY OF, words said across the monument's front, and then a blankness. Khees, whose job mostly involved other matters, didn't know just how it was going to look when finished. Half a million dead, all the citizens of Maximus who had stayed behind to fight, would provide an impressive number of names to fit in, even if not all of them were known.

"And beautiful," Adrienne concluded, completing her first look round the place. "You're doing a fine job here, Khees."

"This will be the central park of the new capital someday. It isn't my project, though. The machines I oversee are working thirty and forty kilometers away."

"I meant all of you who work here," said Adrienne quickly.



Was there just a little regret in her voice, as if she wished she could credit him with the park?

She took his arm and they walked along a path. A few Earthbirds, singing, flew overhead. In the distance a pair of Space Marine officers were approaching from the direction of the monument, uniforms immaculate, weapons slung on shoulders as required for full-dress ceremonies.

Adrienne said: "So, down there at the other end is obviously where the Chief is going to lay the wreath. Where will he enter the dome, though? From here it would be too long a walk. We want to control the time factor as much as possible." She was thinking aloud, asking herself the question it was one of the problems that she, as a member of the advance landing party charged with seeing that the planned ceremony ran smoothly, was going to have to answer.

Khees ran a nervous hand through his own curly black hair. "So, how is it working for the great man?"

"The Chief? He really is, you know."

"I don't suppose you can be elected to lead the Ten Planets without some ability. The war has certainly gone better since he's been in office."

"Oh, he has leadership ability of course. But I meant humanly great. I suppose the two often go together. He really does care about people. These wreath-laying trips of his to all the battle sites are not just for show. He had tears in his eyes at the last ceremony; I saw them. But how is it with your job, Khees?"

"All right." He shrugged. "A lot of people are a lot worse off. I'm not out in the front line fighting berserkers."

"Still, I don't suppose you get much chance to do what you like best."

Now he looked at her carefully. "No. Actually, no chance at all."

"One of the Marine officers who came in the advance party with me has a minor master's rating. When he found out that I knew you—he already knew you were here he begged me to see if I could get you to play a game."

"A minor master? Who?"

Adrienne sighed faintly. "I thought that'd catch your

interest. His name's Barkro. I didn't ask his numerical rating—I suppose I should have realized you'd want to take that into consideration."

He had—as so often in the past—the feeling that the more he talked with Adrienne, the farther apart the two of them got. "Oh, I'll give him a game. That is, if we can come up with six players—I doubt he'd be interested in any lesser variations. Are you going to play, too?"

She smiled and took his hand. "Why not? I won't have much work to do. And an old boyfriend of mine once taught me how. He even claimed that I had the potential to be pretty good at it someday."

"If you practiced enough, I said. And if you could eliminate a little psychological block or two." Now he was holding both her hands and smiling back at her. On first seeing her an hour ago it had hit him, how much he'd really missed her. And now minute by minute the feeling was growing stronger.

"Well sir, I didn't think my psychological block was all that terrible."

"There *was* something about it rather nice, from my own point of view."

And shortly they were walking on again. She said: "I haven't had the time for any practice at The Game . . . speaking of time, though, are we even going to have enough of it to play? I mean, all of us in the Chiefs party are going to be lifting off again just about twelve hours from now."

He calculated. "Let's see—LeBon and Narret will play, I'm sure. One more—Jon Via, probably. Trouble is, most of us who will want to play are going to be at least nominally on duty much of the time. We do six hour shifts alone in the towers, as a rule . . . what time will the Chief's shuttle land?"

"About ten hours from now."

"Once he lands we'll all be busy—no way out of that."

"Can't you trade shifts with non-players?"

Khees grimaced mildly. "I don't think so. We're short-handed right now, with a bunch of people out on the frontier with our boss, and they won't be back until just about the

time the Chief comes down. No real reason we can't play while we're on duty in the towers, though. It's not that demanding a job most of the time. Only reason the towers have to be manned at all is that early on here we had a couple of accidents, and now the Boss insists on having permanent observation posts where human eyes can get a direct overall view of the project, at least a good part of the time."

"What do you do on the night shift?"

He grinned. "The best we can."

"Your machines are not as self-sufficient as they could be, I gather"

"It's the old problem." With the example of the berserkers constantly in mind, human beings on all worlds were afraid to give their own machines, however benignly programmed, nearly as much in the way of general intelligence and self-sufficiency as technology allowed.

"In the Game, will we use the honor system as regards computer help?"

"Of course." Khees felt a little disappointed, almost injured, by the question. If you were serious enough about the Game to play it well, you weren't going to cheat, certainly not in that crude a sense. Would an athlete tie servolifters to his wrists, and then take pride in winning a weight contest?

"Silly of me to ask . . ."

"It's all right. Look, Ade, I've got to get back up in my tower. The Boss just might call in checking up; he takes his overseers' duties rather seriously."

"Then he won't approve of a Game during duty hours."

"What he doesn't know won't hurt him."

"What if he tunes in his radio later and hears us playing?"

"We'll use light-beam communication, tower to tower. I'll start getting things set up for play. Want to come along? That'll be against regulations also, but . . ."

"Love to, but I have a thing or two I must get done myself before we start frittering our time. Where am I going to be when we play?"

"Best thing will be to put you in an unused tower . . . we can manage that. Be talking to you soon."



The Game had different names in different human languages. To Khees, in his innermost thoughts, it often had no name at all. Do fish have names for water? Anyway, very few people on his home world had been game-minded, and there it had a name that translated into English bluntly as War-Without-Blood. Since he had come to know The Game, Khees had always preferred it to the "real" world, in which the elder members of his family (he had grown up in that kind of reality) assigned jobs to the younger, himself included.

"Oh, I'm not afraid of work, Uncle. And I can see it's my duty as a citizen and all that to help out. But I really don't want ten million people looking to me for answers every day."

"You could have even more people than that looking up to you." (Which perhaps Khees had already, counting all the Game fans across the Earth-colonized corner of the Galaxy. But on his homeworld, none of that was ever completely real.) "You have a brilliant mind, my boy, and it beats me how you can be content to use it for nothing more than . . . than . . ."

"Well sir, how can you be content to use your own intelligence at nothing more than shuffling matter around? Who cares if the population of Toxx can build their houses fifteen meters tall next year or only ten?"

That earned Khees a stern avuncular glare. "Well, the population of Toxx might care! In fact, most of them do. Housing construction is something . . . something very worthwhile. Rewarding."

"For you. Not me. I just don't care. I couldn't."

And this was after they had sent him to a fine engineering school. The old man glared harder. Then he found a stronger move to make. "Maybe you can find it in you to care how deep people are able to dig their shelters, against the day when the berserkers come again. Now there's a *real* problem for you. Hey?"

"Other people are just as smart as I am about that kind of problem, and a lot more anxious to tackle it. Putting

someone like me in charge of any military matters would not be a wise move."

"If only it were part of some game, Khees, you'd solve it brilliantly." His uncle coughed morosely. As long as, his unstated theory ran, real people's lives were not involved.

"Are you saying then, that every brilliant person must be a fortifications expert? Why not a strategist?"

"Now, there's another—"

"Why not a doctor? Then we could always be ready to treat each other's wounds, in case of sudden attack or accident."

Why not a lawyer? He could certainly play the game of argument, varying tactics to suit opponents, sending most of them retreating in confusion. Opponent must totter two spaces backward, according to the Argument Results Calculator. Even if Opponent had started out with what looked like a real advantage in his logic. Logic was only one part of even the most logical of human games.

But eventually Khees wearied of the arguing, and so did they. A compromise was reached; and here he was now, doing a real-world job, and even a job that carried a fair amount of status in society. The family politicians had, among them, seen to that.

The elevator opened silently. Ahead, the door to the overseer's room atop Khees' own chess rook stood ajar as usual, and he walked in. Great sealed windows viewed the patchwork land two hundred meters down, the thin-aired, purple sky, the five other towers that stood no more than a kilometer or two away, heads just level with the misty flatness of horizon.

"Anything going on, Kara?"

"Booby traps again." The woman he was relieving looked up from her panels with a brief smile. "Double one, this time." In one sense, Maximus had not yet been completely reconquered from the berserkers. "The second went off and did some damage to the engineer machines while they were clearing out the first."

Khees stood beside her, scanning the printouts and the

panels. "Haven't had booby traps for a while. Doesn't look too bad, though, hey? Anything else?"

"No." Like everyone else in the permanent party, Kara was anxious to have her chance to socialize with the visitors in the brief time they were on-world.

"Well, this doesn't look too hard to handle. Go on, take off."

Kara was hardly out the door before a communicator chimed. Radio brought in the voice of the robot foreman on Khees' sector of the distant frontier of work. The robot was evidently speaking from the scene of the latest accident.

"Overseer, I request that an aircar be sent out here immediately from Central." Its mechanical voice was deep and pleasant, as unlike as it could be made from the voices that berserkers usually took to themselves when they put on the habit of human speech.

"An aircar. What for?"

"Part JS-828 in the forward limb assembly of a workrobot Type Six is broken. The workrobot is otherwise essentially undamaged, and can be speedily returned to duty if a replacement part is sent out."

Khees was already punching at his computer console to get a look at the inventory of spare parts. He thought he knew what he would find, and he was right. A similar part had been broken in a freak accident ten days agog and the stock of replacements was now down to zero. He so informed his foreman. "We'll bring in the damaged pieces then, and the shop can decide whether to try to fix its or produce a new one, or wait and hope we get another on the next shipment in."

"Is then the aircar to be sent?"

Khees, on the verge of turning his mind to something else, paused. The video screen was blank, since the Boss believed that screens were distracting when not absolutely necessary, but he stared at it anyway. "No, a groundcar will come as usual for repairs. Perhaps the mobile repair machine can fix the workrobot on the spot."

"It appears to me that it will not." The robot foreman's permanently jovial tones made the announcement of bad

news sound impertinent. Maybe it was only that, but Khees thought the damned thing sounded odd today.

"You're not qualified to judge," he told it. "The groundcar's coming." Good roads had been laid as far as that work area; the difference in time between ground transport and air would be minimal. "Meanwhile proceed with the programmed job as best you can."

"Orders understood. Proceeding."

Khees switched off that communicator, and turned to another, the tight light-beam that could be used for private talk among the towers.

And now, he thought. The Game.

It was certainly not chess, though its inventor had been one of the great chess masters of the very late twentieth century. Like any other board game, it could be played by a computer, and its inventor had in fact used one of the most advanced computer systems of his day to help design it. He had sought to create a game that could be played by a computer but not analyzed by one; not for The Game were the endless labyrinths of opening theory that now made learning chess more of a burden than a joy.

Having six players helped make The Game resistant to analysis, and was no longer much of a drawback to practical play. By the close of the twentieth century there were on old Earth a lot of bright people with a lot of spare time and a taste for games. But what really foiled computer analysis, outside of actual play, was the sophisticated addition of chance to the Game; whatever moves a computer came up with for a particular contest would probably be useless in any other. Openings tended to be wild; it was proverbial that you had to be either good or lucky to survive the opening at all, and it was much better to be both. Khees had not failed to survive an opening in serious play since his first tournament, a startling (to him) number of years ago.

The players were in place in their several towers, and the preliminaries were over; play began. Adrienne and Barkro had been installed in towers otherwise unused at the

moment. Jon Via, LeBon, and Narret all signalled ready, their light-beams winking dully from the horizon.

Play was shown on the large video screen normally reserved for emergencies; the pictured board was a simulation of a space war, stylized to the point of complete unrealism, the six fleets showing as points or bars of different colors. In the opening moves, Khees played conservatively, content to survive the buffetings of chance. He parried deadly threats when they appeared, and otherwise tried nothing more ambitious than a small improvement of position here, the mobilization of a new squadron there, saving his efforts for the middle game, when chance would be less important. Barkro justified Adrienne's estimate of his skill by adopting the same general course. Adrienne herself, a basically good player but not of master strength, was given advantage by luck in the early moves, and seemed daringly determined to make the most of it. She was off at once on a flashy, aggressive campaign, threatening Khees, threatening Via. If her good luck held for another half-dozen moves she might have a won game before the opening was fairly over. She was a brilliant woman in most fields of mental endeavor; and if it were not for a certain little quirk or two, she could learn to be brilliant in this as well . . .

The other players performed generally like the strong amateurs they were. LeBon launched a well-planned though premature attack on Adrienne, thinking evidently that if he waited she was only going to get stronger, and no doubt expecting he would get support from Khees. Open diplomacy was not part of The Game, but tacit agreements and understandings were.

Khees moved in turn, without having to take much thought. He had plenty of time between moves to go through the undemanding routine of an overseer's watch, observing what he could of his distant machinery with binoculars, eyeing the panels and printers that brought more precise information in from the frontier. He would not have cared to enter a championship tournament in his present rusty and unpracticed state; years had now passed since he had played against serious opposition. But in this game he thought



himself in more danger of boredom than of losing—except for Barkro, of course. They didn't give out master's ratings, even low ones, lightly. Barkro was the one to watch, and to really play against.

A good thing, too, that he could manage without perfect concentration, for this was turning out to be a day of oddities on the job. Here, for example, came the groundcar back from the frontier, presumably carrying the damaged part—and it stopped and hesitated and made false starts after entering the Central complex, as if its directing computer could have somehow become confused about which tunnel-mouth of the underground works would lead it to the proper repair shop.

Could someone have set up a ploy involving robots and groundcars to distract him from the Game by making him think that something regarding the work in his sector was really going wrong? He began to watch his panels very carefully.

On the game board, through the next few turns, Adrienne's power was still augmented by moderately good luck. Luck would mean less and less, though, as the Game progressed. LeBon, pounced on from behind, was all but out. Could LeBon be the one to gimmick groundcars? No. And Adrienne and Barkro were visitors, lacking the expertise. Jon Via was serious enough about winning, and knowledgeable enough. But . . .

Another round of moves, another, and now an expert stranger would have been convinced that Adrienne was going to win. Barkro's forces were still mainly intact, but he was beaten. Khees had suddenly struck at him instead of at Adrienne. The visiting master was doubtless a bit stunned, unable to believe that Khees was going to throw the game so blatantly to his old girl friend—which of course was not what Khees had in mind at all. On a Game board, Khees would have smashed his own mother into a corner just as soon as the best chance came to do it. If you want to be nice, and sociable, play something else . . .

Now they were all waiting for Adrienne's next move, which was quite slow in coming. Khees smiled a little to himself.

"Adrienne? We're waiting for your move." That voice on the light-beam net among the towers was Barkro's, sounding half impatient half sulky with the way he thought the Game was going.

Shortly her move came on the board. Coldly logical, completely crushing.

Khees' smile vanished. Wrong . . . impulsively he opened the microphone before him. "Adrienne . . ."

"What?" Her answering voice was cold, too, and he thought it had a distracted sound. A day for unusual voices, among its other oddities.

And on the panel to his right, three indicators showed minor troubles out on his section of the frontier. Things that the foreman should be taking care of. Maybe the foreman would get to them soon, he told himself.

Khees and the other players moved through the round, and Adrienne moved again. With sudden clarity Khees understood. He felt a weakness in the knees, not unlike that he had known in some tournaments, but more intense. He faced certain and utter defeat.

Or almost. Logic said loss, but there were still intangibles. There might be one, just one, more chance for the right move . . .

The sound of the opening of the door of her tower room, soft though it was, startled Adrienne. Why would anyone come up here now—?

She turned. Before there was time for fear the silent speed-blurred rush of something vaguely manlike in size and shape, but embodying a flow of metal and power that could not possibly be human, culminated in cold grippers touching her throat and then each of her limbs in turn.

By the time she would have screamed it was too late. She could not talk, could barely breathe; something small but weighty clung to her throat after the machine had set her down in a corner, propped in an angle of wall. She could move her head, enough to look down at herself. To each of her paralyzed arms and legs a thing that looked like a small metal leech was now attached.

Berserker . . .

When screaming failed, she willed herself to faint. That failed also.

The man-sized thing, ignoring her now, began a quick scanning of the tower's instruments, of which only the Game board screen and the lightbeam communicator were functioning. In seconds it had completed this inspection. With a snapping sound it now opened its own torso, and brought out a small stand which unfolded to support a tube filled with a weighty something. This assembly the berserker erected on a ledge below one of the great windows, adjusting the tube to point downwards at an angle, in the direction of . . .

The monument was down there, at that end of the great plastic dome.

The Chief was on his way . . .

"Adrienne?" The voice coming through the communicator startled her so her half-deadened body almost jumped against the supporting walls. "We're waiting for your move."

If the berserker had been startled too (if in its own electronic way it could be startled), it did not jump, but went at once to the Game-screen. Adrienne had a wild hope that it would not know what The Game was, but her hope was doomed. After five seconds' study it reached out a metal arm to the controls, and moved for her.

Another man's voice, Khees' voice, said into the small room: "Adrienne . . ."

To her absolute horror, what seemed to be her own voice now issued from the metal creature's throat. "What?"

There was a small pause. "Oh, nothing," Khees replied, dejectedly. And that, it seemed, was that . . .

. . . she looked up from a blur of faintness to find the thing crouched down beside her. Glassy scanners that were not shaped or spaced like human eyes were studying her face.

"Now," it said when she looked up. (And this was surely its preferred voice, this screech that somehow formed itself in distinct words.) "Now you are to provide me with complete details on the itinerary of the visit here of the life-unit which

you call the Chief, which serves as Premier of the Ten Planets. If you cooperate you will be spared. If you do not—”

Another click, and in one metal hand it showed a small container. “This is nerve acid. One drop instantly penetrates the surface of human skin. It has affinity for living tissues of the sensory system, and it produces in them pain beyond any—”

So silent were the towers’ elevators that even the berserker had evidently not heard this one’s functioning outside the room’s closed door. But now someone was gently, with seeming casualness, trying that door and finding that it was locked.

“Who is it?” It was Adrienne’s voice again. And with a swiftness almost unbelievable the machine had crossed the room, was standing just to one side of that closed door. Small projections like gun-muzzles had appeared upon its chest and shoulders, and it poised like a praying mantis, ready to strike with arms of steel.

“Who is it?”

“Message for Adrienne Britton.” Some male voice she did not recognize.

“I’m busy.”

“Look, lady, do you want this note or do I have to hike all the way back there and tell him you won’t take it? It’s something about some damn game you’re supposed to be playing; he’s all upset. Didn’t want anyone else to see this or hear it.”

“All right. Just hand it in.”

Pounding her head against the metal wall, about the only movement she could make, was not going to create enough sound to serve as warning—

The berserker unlocked and opened the door part way. And in the same motion, faster than any human could possibly act or react, it reached forward and outward in a swift grabbing blur—

—and was hurled back, lifted from its feet and flung across the room, held skewered upon a lance of pounding flame. The small room roared with a continuous concussion. The

metal body was smashed into the window, where tough plastic cracked and broke but would not yield entirely, and now the chamber filled with outward-rushing fog. Air pressure dropped. Three human figures, masked, in partial armor, tensely crouching, cleared the door. Two of them seemed to be pulled forward by the flaring, jerking weapons in their arms. The third one came for her. The last thing Adrienne saw before the thinning air blanked out her brain was Khees' eyes above a breathing mask . . .

"So some of the Marines' small arms have kinetic sensors now," Khees was saying, walking with her in the park, helping her work out some of the stiffness left in her legs after the metal leeches had been removed. "One of my escort had his weapon set to trigger at anything moving extraordinarily fast—like a berserker's grabbing arm. Whammo, locks on target and keeps firing until the operator turns it off."

Adrienne shuddered, and squeezed his arm. "You knew it was a berserker," she said, regarding him. "And yet you came for me."

"Walking between two Space Marines. Even so my knees were shaking."

"It might have fired through the door at you, not grabbed."

"We figured that it wanted to be quiet, until the Chief came down and it could get a shot at him. It was a special assassin-machine, of course. They must have thought it a good bet that sooner or later the Chief would show up on Maximus to do his wreath-laying as he has so many other places. So before their raiders left they planted one extra-special booby trap; it must have been monitoring our local radio chatter and it knew when he was coming."

"You knew it was a berserker and yet you came for me. But—how'd you know?"

"Well. There were some strange things going on, with the work machines. Too much of a coincidence, just when the Chief was due. It hit me that an assassin-machine could have taken the place of my foreman, and then come back here to Central in a goundcar I sent out. And where else would it go, to get a good shot at the Chief, but up in one

of the towers overlooking the monument? So I hooked up my own computer to play a few moves of the Game for me, and . . .”

“But how did you know that it was in *my* tower?”

“How do you think?” Smiling at her.

Adrienne was smiling too, and at the same time trying not to cry. “My little psychological block. You knew I could never in all my life have brought myself to beat you in The Game.”

*As life may transmit evil, so machines of great power may hand on good.*

## WINGS OUT OF SHADOW

In Malori's first and only combat mission the berserker came to him in the image of a priest of the sect into which Malori had been born on the planet Yaty. In a dreamlike vision that was the analogue of a very real combat he saw the robed figure standing tall in a deformed pulpit, eyes flaming with malevolence, lowering arms winglike with the robes they stretched. With their lowering, the lights of the universe were dimming outside the windows of stained glass and Malori was being damned.

Even with his heart pounding under damnation's terror Malori retained sufficient consciousness to remember the real nature of himself and of his adversary and that he was not powerless against him. His dream-feet walked him timelessly toward the pulpit and its demon-priest while all around him the stained glass windows burst, showering him with fragments of sick fear. He walked a crooked path, avoiding the places in the smooth floor where, with quick gestures, the priest created snarling, snapping stone mouths full of teeth. Malori seemed to have unlimited time to decide where to put his feet. *Weapon*, he thought, a surgeon instructing some invisible aide. *Here—in my right hand.*

From those who had survived similar battles he had heard how the inhuman enemy appeared to each in different form, how each human must live the combat through in terms of a unique nightmare. To some a berserker came as a ravaging beast, to others as devil or god or man. To still others it was some essence of terror that could never be faced or even seen. The combat was a nightmare experienced while the subconscious ruled, while the waking mind was suppressed by careful electrical pressures on

the brain. Eyes and ears were padded shut so that the conscious mind might be more easily suppressed, the mouth plugged to save the tongue from being bitten, the nude body held immobile by the defensive fields that kept it whole against the thousands of gravities that came with each movement of the one-man ship while in combat mode. It was a nightmare from which mere terror could never wake one; waking came only when the fight was over, came only with death or victory or disengagement.

Into Malori's dream-hand there now came a meat cleaver keen as a razor, massive as a guillotine-blade. So huge it was that had it been what it seemed it would have been far too cumbersome to even lift. His uncle's butcher shop on Yaty was gone, with all other human works of that planet. But the cleaver came back to him now, magnified, perfected to suit his need.

He gripped it hard in both hands and advanced. As he drew near the pulpit towered higher. The carved dragon on its front, which should have been an angel, came alive, blasting him with rosy fire. With a shield that came from nowhere, he parried the splashing flames.

Outside the remnants of the stained glass windows the lights of the universe were almost dead now. Standing at the base of the pulpit, Malori drew back his cleaver as if to strike overhand at the priest who towered above his reach. Then, without any forethought at all, he switched his aim at the top of his backswing and laid the blow crashing against the pulpit's stem. It shook, but resisted stoutly. Damnation came.

Before the devils reached him, though, the energy was draining from the dream. In less than a second of real time it was no more than a fading visual imagery a few seconds after that a dying memory. Malori, coming back to consciousness with eyes and ears still sealed, floated in a soothing limbo. Before post-combat fatigue and sensory deprivation could combine to send him into psychosis, attachments on his scalp began to feed his brain with bursts of pins-and-needles noise. It was the safest signal to administer to a brain that might be on the verge of any of



a dozen different kinds of madness. The noises made a whitish roaring scattering of light and sound that seemed to fill his head and at the same time somehow outlined for him the positions of his limbs.

His first fully conscious thought: he had just fought a berserker and survived. He had won—or had at least achieved a stand-off—or he would not be here.

It was no mean achievement.

Berserkers were like no other foe that Earth-descended human beings had ever faced. They had cunning and intelligence and yet were not alive. Relics of some interstellar war over long ages since, automated machines, warships for the most part, they carried as their basic programming the command to destroy all life wherever it could be found. Yaty was only the latest of many Earth-colonized planets to suffer a berserker attack, and it was among the luckiest; nearly all its people had been successfully evacuated. Malori and others now fought in deep space to protect the *Hope*, one of the enormous evacuation ships. The *Hope* was a sphere several kilometers in diameter, large enough to contain a good proportion of the planet's population stored tier on tier in defense-field stasis. A trickle-relaxation of the fields allowed them to breathe and live with slowed metabolism.

The voyage to a safe sector of the galaxy was going to take several months because most of it, in terms of time spent, was going to be occupied in traversing an outlying arm of the great Taynarus nebula. Here gas and dust were much too thick to let a ship duck out of normal space and travel faster than light. Here even the speeds attainable in normal space were greatly restricted. At thousands of kilometers per second, manned ship or berserker machine could alike be smashed flat against a wisp of gas far more tenuous than human breath.

Taynarus was a wilderness of uncharted plumes and tendrils of dispersed matter, laced through by corridors of relatively empty space. Much of the wilderness was completely shaded by interstellar dust from the light of

all the suns outside. Through dark shoals and swamps and tides of nebula the *Hope* and her escort *Judith* fled, and a berserker pack pursued. Some berserkers were even larger than the *Hope*, but those that had taken up this chase were much smaller. In regions of space so thick with matter, a race went to the small as well as to the swift; as the impact cross-section of a ship increased, its maximum practical speed went inexorably down.

The *Hope*, ill-adapted for this chase (in the rush to evacuate, there had been no better choice available) could not expect to outrun the smaller and more maneuverable enemy. Hence the escort carrier *Judith*, trying always to keep herself between *Hope* and the pursuing pack. *Judith* mothered the little fighting ships, spawning them out whenever the enemy came too near, welcoming survivors back when the threat had once again been beaten off. There had been fifteen of the one-man ships when the chase began. Now there were nine.

The noise injections from Malori's life support equipment slowed down, then stopped. His conscious mind once more sat steady on its throne. The gradual relaxation of his defense fields he knew to be a certain sign that he would soon rejoin the world of waking men.

As soon as his fighter, Number Four, had docked itself inside the *Judith* Malori hastened to disconnect himself from the tiny ship's systems. He pulled on a loose coverall and let himself out of the cramped space. A thin man with knobby joints and an awkward step, he hurried along a catwalk through the echoing hangarlike chamber, noting that three or four fighters besides his had already returned and were resting in their cradles. The artificial gravity was quite steady but Malori stumbled and almost fell in his haste to get down the short ladder to the operations deck.

Petrovich, commander of the *Judith*, a bulky, iron-faced man of middle height, was on the deck apparently waiting for him.

"Did—did I make my kill?" Malori stuttered eagerly as he came hurrying up. The forms of military address were little observed aboard the *Judith*, as a rule, and Malori was

really a civilian anyway. That he had been allowed to take out a fighter at all was a mark of the commander's desperation.

Scowling, Petrovich answered bluntly. "Malori, you're a disaster in one of these ships. Haven't the mind for it at all."

The world turned a little gray in front of Malori. He hadn't understood until this moment just how important to him certain dreams of glory were. He could find only weak and awkward words. "But . . . I thought I did all right." He tried to recall his combat-nightmare. Something about a church.

"Two people had to divert their ships from their original combat objectives to rescue you. I've already seen their gun-camera tapes. You had Number Four just sparring around with that berserker as if you had no intention of doing it any damage at all." Petrovich looked at him more closely, shrugged, and softened his voice somewhat. "I'm not trying to chew you out, you weren't even aware of what was happening, of course. I'm just stating facts. Thank probability the *Hope* is twenty AU deep in a formaldehyde cloud up ahead. If she'd been in an exposed position just now they would have got her."

"But—" Malori tried to begin an argument but the commander simply walked away. More fighters were coming in. Locks sighed and cradles clanged, and Petrovich had plenty of more important things to do than stand here arguing with him. Malori stood there alone for a few moments, feeling deflated and defeated and diminished. Involuntarily he cast a yearning glance back at Number Four. It was a short, windowless cylinder, not much more than a man's height in diameter, resting in its metal cradle while technicians worked about it. The stubby main laser nozzle, still hot from firing, was sending up a wisp of smoke now that it was back in atmosphere. There was his two-handed cleaver.

No man could direct a ship or a weapon with anything like the competence of a good machine. The creeping slowness of human nerve impulses and of conscious thought disqualified humans from maintaining direct control of their ships in any space fight against berserkers. But the human

subconscious was not so limited. Certain of its processes could not be correlated with any specific synaptic activity within the brain, and some theorists held that these processes took place outside of time. Most physicists stood aghast at this view—but for space combat it made a useful working hypothesis.

In combat, the berserker computers were coupled with sophisticated randoming devices, to provide the flair, the unpredictability that gained an advantage over an opponent who simply and consistently chose the maneuver statistically most likely to bring success. Men also used computers to drive their ships, but had now gained an edge over the best randomizers by relying once more on their own brains, parts of which were evidently freed of hurry and dwelt outside of time, where even speeding light must be as motionless as carved ice.

There were drawbacks. Some people (including Malori, it now appeared) were simply not suitable for the job, their subconscious minds seemingly uninterested in such temporal matters as life or death. And even in suitable minds the subconscious was subject to great stress. Connection to external computers loaded the mind in some way not yet understood.

One after another, human pilots returning from combat were removed from their ships in states of catatonia or hysterical excitement. Sanity might be restored, but the man or woman was worthless thereafter as a combat-computer's teammate. The system was so new that the importance of these drawbacks was just coming to light aboard the *Judith* now. The trained operators of the fighting ships had been used up, and so had their replacements. Thus it was that Ian Malori, historian, and others were sent out, untrained, to fight. But using their minds had bought a little extra time.

From the operations deck Malori went to his small single cabin. He had not eaten for some time, but he was not hungry. He changed clothes and sat in a chair looking at his bunk, looking at his books and tapes and violin, but he did not try to rest or to occupy himself. He expected that

he would promptly get a call from Petrovich. Because Petrovich now had nowhere else to turn.

He almost smiled when the communicator chimed bringing a summons to meet with the commander and other officers at once. Malori acknowledged and set out, taking with him a brown leatherlike case about the size of a briefcase but differently shaped, which he selected from several hundred similar cases in a small room adjacent to his cabin. The case he carried was labeled: CRAZY HORSE.

Petrovich looked up as Malori entered the small planning room in which the handful of ship's officers were already gathered around a table. The commander glanced at the case Malori was carrying and nodded. "It seems we have no choice, historian. We are running out of people, and we are going to have to use your pseudopersonalities. Fortunately we now have the necessary adapters installed in all the fighting ships."

"I think the chances of success are excellent." Malori spoke mildly as he took the seat left vacant for him and set his case out in the middle of the table. "These of course have no real subconscious minds, but as we agreed in our earlier discussions they will provide more sophisticated randoming devices than are available otherwise. Each has a unique, if artificial, personality."

One of the other officers leaned forward. "Most of us missed these earlier discussions you speak of. Could you fill us in a little?"

"Certainly." Malori cleared his throat. "These personae, as we usually call them, are used in the computer simulation of historical problems. I was able to bring several hundred of them with me from Yaty. Many are models of military men." He put his hand on the case before him. "This is a reconstruction of the personality of one of the most able cavalry leaders on ancient Earth. It's not one of the group we have selected to try first in combat, I just brought it along to demonstrate the interior structure and design for any of you who are interested. Each persona contains about four million sheets of two-dimensional matter."

Another officer raised a hand. "How can you accurately

reconstruct the personality of someone who must have died long before any kind of direct recording techniques were available?"

"We can't be positive of accuracy, of course. We have only historical records to go by, and what we deduce from computer simulations of the era. These are only models. But they should perform in combat as in the historical studies for which they were made. Their choices should reflect basic aggressiveness, determination—"

The totally unexpected sound of an explosion brought the assembled officers as one body to their feet. Petrovich, reacting very fast, still had time only to get clear of his chair before a second and much louder blast resounded through the ship. Malori himself was almost at the door, heading for his battle station, when the third explosion came. It sounded like the end of the galaxy, and he was aware that furniture was flying, that the bulkheads around the meeting room were caving in. Malori had one clear, calm thought about the unfairness of his coming death, and then for a time he ceased to think at all.

Coming back was a slow unpleasant process. He knew *Judith* was not totally wrecked for he still breathed, and the artificial gravity still held him sprawled out against the deck. It might have been pleasing to find the gravity gone, for his body was one vast, throbbing ache, a pattern of radiated pain from a center somewhere inside his skull. He did not want to pin down the source any more closely than that. To even imagine touching his own head was painful.

At last the urgency of finding out what was going on overcame the fear of pain and he raised his head and probed it. There was a large lump just above his forehead, and smaller injuries about his face where blood had dried. He must have been out for some time.

The meeting room was ruined, shattered, littered with debris. There was a crumpled body that must be dead, and there another, and another, mixed in with the furniture. Was he the only survivor? One bulkhead had been torn wide open, and the planning table was demolished. And what

was that large, unfamiliar piece of machinery standing at the other end of the room? Big as a tall filing cabinet, but far more intricate. There was something peculiar about its legs, as if they might be movable . . .

Malori froze in abject terror, because the thing did move, swiveling a complex of turrets and lenses at him, and he understood that he was seeing and being seen by a functional berserker machine. It was one of the small ones, used for boarding and operating captured human ships.

"Come here," the machine said. It had a squeaky, ludicrous parody of a human voice, recorded syllables of captives' voices stuck together electronically and played back. "The badlife has awakened."

Malori in his great fear thought that the words were directed at him but he could not move. Then, stepping through the hole in the bulkhead, came a man Malori had never seen before a shaggy and filthy man wearing a grimy coverall that might once have been part of some military uniform.

"I see he has, sir," the man said to the machine. He spoke the standard interstellar language in a ragged voice that bore traces of a cultivated accent. He took a step closer to Malori. "Can you understand me, there?"

Malori grunted something, tried to nod, pulled himself up slowly into an awkward sitting position.

"The question is," the man continued, coming a little closer still, "how d'you want it later, easy or hard? When it comes to your finishing up, I mean. I decided a long time ago that I want mine quick and easy, and not too soon. Also that I still want to have some fun here and there along the way."

Despite the fierce pain in his head, Malori was thinking now, and beginning to understand. There was a name for humans like the man before him, who went along more or less willingly with the berserker machines. A word coined by the machines themselves. But at the moment Malori was not going to speak that name.

"I want it easy," was all he said, and blinked his eyes and tried to rub his neck against the pain.

The man looked him over in silence a little longer. "All

right," he said then. Turning back to the machine he added in a different, humble voice: "I can easily dominate this injured badlife. There will be no problems if you leave us here alone."

The machine turned one metal-cased lens toward its servant. "Remember," it vocalized, "the auxiliaries must be made ready. Time grows short. Failure will bring unpleasant stimuli."

"I will remember, sir." The man was humble and sincere. The machine looked at both of them a few moments longer and then departed, metal legs flowing suddenly into a precise and almost graceful walk. Shortly after, Malori heard the familiar sound of an airlock cycling.

"We're alone now," the man said, looking down at him. "If you want a name for me you can call me Greenleaf. want to try to fight me? If so, let's get it over with." He was not much bigger than Malori but his hands were huge and he looked hard and very capable despite his ragged filthiness. "All right, that's a smart choice. You know, you're actually a lucky man, though you don't realize it yet. Berserkers aren't like the other masters that men have—not like the governments and parties and corporations and causes that use you up and then just let you drop and drag away. No, when the machines run out of uses for you they'll finish you off quickly and cleanly—if you've served well. I know, I've seen 'em do it that way with other humans. No reason why they shouldn't. All they want is for us to die, not suffer."

Malori said nothing. He thought perhaps he would be able to stand up soon.

Greenleaf (the name seemed so inappropriate that Malori thought it probably real) made some adjustment on a small device that he had taken from a pocket and was holding almost concealed in one large hand. He asked: "How many escort carriers besides this one are trying to protect the *Hope*?"

"I don't know," Malori lied. There had been only the *Judith*.



"What is your name?" The bigger man was still looking at the device in his hand.

"Ian Malori."

Greenleaf nodded, and without showing any particular emotion in his face took two steps forward and kicked Malori in the belly, precisely and with brutal power.

"That was for trying to lie to me, Ian Malori," said his captor's voice, heard dimly from somewhere above as Malori groveled on the deck, trying to breathe again. "Understand that I am infallibly able to tell when you are lying. Now, how many escort carriers are there?"

In time Malori could sit up again, and choke out words. "Only this one." Whether Greenleaf had a real lie detector, or was only trying to make it appear so by asking questions whose answers he already knew, Malori decided that from now on he would speak the literal truth as scrupulously as possible. A few more kicks like that and he would be helpless and useless and the machines would kill him. He discovered that he was by no means ready to abandon his life.

"What was your position on the crew, Malori?"

"I'm a civilian."

"What sort?"

"An historian."

"And why are you here?"

Malori started to try to get to his feet, then decided there was nothing to be gained by the struggle and stayed sitting on the deck. If he ever let himself dwell on his situation for a moment he would be too hideously afraid to think coherently. "There was a project . . . you see, I brought with me from Yaty a number of what we call historical models—blocks of programmed responses we use in historical research."

"I remember hearing about some such things. What was the project you mentioned?"

"Trying to use the personae of military men as randomizers for the combat computers on the one-man ships."

"Aha." Greenleaf squatted, supple and poised for all his raunchy look. "How do they work in combat? Better than a live pilot's subconscious mind? The machines know all about *that*."

"We never had a chance to try. Are the rest of the crew here all dead?"

Greenleaf nodded casually. "It wasn't a hard boarding. There must have been a failure in your automatic defenses. I'm glad to find one man alive and smart enough to cooperate. It'll help me in my career." He glanced at an expensive chronometer strapped to his dirty wrist. "Stand up, Ian Malori. There's work to do."

Malori got up and followed the other toward the operations deck.

"The machines and I have been looking around, Malori. These nine little fighting ships you still have on board are just too good to be wasted. The machines are sure of catching the *Hope* now, but she'll have automatic defenses, probably a lot tougher than this tub's were. The machines have taken a lot of casualties on this chase so they mean to use these nine little ships as auxiliary troops—no doubt you have some knowledge of military history?"

"Some." The answer was perhaps an understatement, but it seemed to pass as truth. The lie detector, if it was one, had been put away. But Malori would still take no more chances than he must.

"Then you probably know how some of the generals of old Earth used their auxiliaries. Drove them on ahead of the main force of trusted troops, where they could be killed if they tried to retreat, and were also the first to be used up against the enemy."

Arriving on the operations deck, Malori saw few signs of damage. Nine tough little ships waited in their launching cradles, re-armed and refueled for combat. All that would have been taken care of within minutes of their return from their last mission.

"Malori, from looking at these ships' controls while you were unconscious, I gather that there's no fully automatic mode in which they can be operated."

"Right. There has to be some controlling mind, or randomizer, connected on board."

"You and I are going to get them out as berserker auxiliaries, Ian Malori." Greenleaf glanced at his time-piece

again. "We have less than an hour to think of a good way and only a few hours more to complete the job. The faster the better. If we delay we are going to be made to suffer for it." He seemed almost to relish the thought. "What do you suggest we do?"

Malori opened his mouth as if to speak, and then did not.

Greenleaf said: "Installing any of your military personae is of course out of the question, as they might not submit well to being driven forward like mere cannon fodder. I assume they are leaders of some kind. But have you perhaps any of these personae from different fields, of a more docile nature?"

Malori, sagging against the operations officer's empty combat chair, forced himself to think very carefully before he spoke. "As it happens, there are some personae aboard in which I have a special personal interest. Come."

With the other following closely, Malori led the way to his small bachelor cabin. Somehow it was astonishing that nothing had been changed inside. There on the bunk was his violin, and on the table were his music tapes and a few books. And here stacked neatly in their leatherlike curved cases, were some of the personae that he liked best to study.

Malori lifted the top case from the stack. "This man was a violinist, as I like to think I am. His name would probably mean nothing to you."

"Musicology was never my field. But tell me more."

"He was an Earthman, who lived in the twentieth century CE—quite a religious man, too, as I understand. We can plug the persona in and ask it what it thinks of fighting, if you are suspicious."

"We had better do that." When Malori had shown him the proper receptacle beside the cabin's small computer console, Greenleaf snapped the connections together himself. "How does one communicate with it?"

"Just talk."

Greenleaf spoke sharply toward the leatherlike case. "Your name?"

"Albert Ball." The voice that answered from the console

speaker sounded more human by far than the berserker's had.

"How does the thought of getting into a fight strike you, Albert?"

"A detestable idea."

"Will you play the violin for us?"

"Gladly." But no music followed.

Malori put in: "More connections are necessary if you want actual music."

"I don't think we'll need that." Greenleaf unplugged the Albert Ball unit and began to look through the stack of others, frowning at unfamiliar names. There were twelve or fifteen cases in all. "Who are these?"

"Albert Ball's contemporaries. Performers who shared his profession." Malori let himself sink down on the bunk for a few moments' rest. He was not far from fainting. Then he went to stand with Greenleaf beside the stack of personae. "This is a model of Edward Mannock, who was blind in one eye and could never have passed the physical examination necessary to serve in any military force of his time."

He pointed to another. "This man served briefly in the cavalry, as I recall, but he kept getting thrown from his horse and was soon relegated to gathering supplies. And this one was a frail, tubercular youth who died at twenty-three standard years of age."

Greenleaf gave up looking at the cases and turned to size up Malori once again. Malori could feel his battered stomach muscles trying to contract, anticipating another violent impact. It would be too much, it was going to kill him if it came like that again . . .

"All right." Greenleaf was frowning, checking his chronometer yet again. Then he looked up with a little smile. Oddly, the smile made him look like the hell of a good fellow. "All right! Musicians, I suppose, are the antithesis of the military. If the machines approve, we'll install them and get the ships sent out. Ian Malori, I may just raise your pay." His pleasant smile broadened. "We

may just have bought ourselves another standard year of life if this works out as well as I think it might."

When the machine came aboard again a few minutes later, Greenleaf bowing before it explained the essence of the plan, while Malori in the background, in an agony of terror, found himself bowing, too.

"Proceed, then," the machine approved. "If you are not swift, the ship infected with life may find concealment in the storms that rise ahead of us." Then it went away again quickly. Probably it had repairs and refitting to accomplish on its own robotic ship.

With two men working, installation went very fast. It was only a matter of opening a fighting ship's cabin, inserting an uncased persona in the installed adapter, snapping together standard connectors and clamps, and closing the cabin hatch again. Since haste was vital to the berserkers' plans, testing was restricted to listening for a live response from each persona as it was activated inside a ship. Most of the responses were utter banalities about nonexistent weather or ancient food or drink, or curious phrases that Malori knew were only phatic social remarks.

All seemed to be going well, but Greenleaf was having some last minute misgivings. "I hope these sensitive gentlemen will stand up under the strain of finding out their true situation. They will be able to grasp that, won't they? The machines won't expect them to fight well, but we don't want them going catatonic, either."

Malori, close to exhaustion, was tugging at the hatch of Number Eight, and nearly fell off the curved hull when it came open suddenly. "They will apprehend their situation within a minute after launching, I should say. At least in a general way. I don't suppose they'll understand it's interstellar space around them. You have been a military man, I suppose. If they should be reluctant to fight—I leave to you the question of how to deal with recalcitrant auxiliaries."

When they plugged the persona into ship Number Eight, its test response was: "I wish my craft to be painted red."

"At once, sir," said Malori quickly, and slammed down the ship's hatch and started to move on to Number Nine.

"What was that all about?" Greenleaf frowned, but looked at his timepiece and moved along.

"I suppose the maestro is already aware that he is about to embark in some kind of a vehicle. As to why he might like it painted red . . ." Malori grunted, trying to open up Number Nine, and let his answer trail away.

At last all the ships were ready. With his finger on the launching switch, Greenleaf paused. For one last time his eyes probed Malori's. "We've done very well, timewise. We're in for a reward, as long as this idea works at least moderately well." He was speaking now in a solemn near-whisper. "It had better work. Have you ever watched a man being skinned alive?"

Malori was gripping a stanchion to keep erect. "I have done all I can."

Greenleaf operated the launching switch. There was a polyphonic whisper of airlocks. The nine ships were gone, and simultaneously a holographic display came alive above the operations officer's console. In the center of the display the *Judith* showed as a fat green symbol, with nine smaller green dots moving slowly and uncertainly nearby. Farther off, a steady formation of red dots represented what was left of the berserker pack that had so long and so relentlessly pursued the *Hope* and her escort. There were at least fifteen red berserker dots, Malori noted gloomily.

"This trick," Greenleaf said as if to himself, "is to make them more afraid of their own leaders than they are of the enemy." He keyed the panel switches that would send his voice out to the ships. "Attention, units One through Nine!" he barked. "You are under the guns of a vastly superior force, and any attempt at disobedience or escape will be severely punished . . ."

He went on browbeating them for a minute, while Malori observed in the screen that the dirty weather the berserker had mentioned was coming on. A sleet of atomic particles was driving through this section of the nebula, across the path of the *Judith* and the odd hybrid fleet that moved with her. The *Hope*, not in view on this range scale, might be

able to take advantage of the storm to get away entirely unless the berserker pursuit was swift.

Visibility on the operations display was failing fast and Greenleaf cut off his speech as it became apparent that contact was being lost. Orders in the berserkers' unnatural voices, directed at auxiliary ships One through Nine, came in fragmentarily before the curtain of noise became an opaque white-out. The pursuit of the *Hope* had not yet been resumed.

For a while all was silent on the operations deck, except for an occasional crackle of noise from the display. All around them the empty launching cradles waited.

"That's that," Greenleaf said at length. "Nothing to do now but worry." He gave his little transforming smile again, and seemed to be almost enjoying the situation.

Malori was looking at him curiously. "How do you—manage to cope so well?"

"Why not?" Greenleaf stretched and got up from the now-useless console. "You know, once a man gives up his old ways, badlife ways, admits he's really dead to them, the new ways aren't so bad. There are even women available from time to time, when the machines take prisoners."

"Goodlife," said Malori. Now he had spoken the obscene, provoking epithet. But at the moment he was not afraid.

"Goodlife yourself, little man." Greenleaf was still smiling. "You know, I think you still look down on me. You're in as deep as I am now, remember?"

"I think I pity you."

Greenleaf let out a little snort of laughter, and shook his own head pityingly. "You know, I may have ahead of me a longer and more pain-free life than most of humanity has ever enjoyed—you said one of the models for the personae died at twenty-three. Was that a common age of death in those days?"

Malori, still clinging to his stanchion, began to wear a strange, grim little smile. "Well, in his generation, in the continent of Europe, it was. The First World War was raging at the time."

"But he died of some disease, you said."

"No. I said he *had* a disease, tuberculosis. Doubtless it would have killed him eventually. But he died in battle, in 1917 CE, in a place called Belgium. His body was never found, as I recall, an artillery barrage having destroyed it and his aircraft entirely."

Greenleaf was standing very still. "Aircraft! What are you saying?"

Malori pulled himself erect, somewhat painfully, and let go of his support. "I tell you now that Georges Guynemer—that was his name—shot down fifty-three enemy aircraft before he was killed. Wait!" Malori's voice was suddenly loud and firm, and Greenleaf halted his menacing advance in sheer surprise. "Before you begin to do anything violent to me, you should perhaps consider whether your side or mine is likely to win the fight outside."

"The fight . . ."

"It will be nine ships against fifteen or more machines, but I don't feel too pessimistic. The personae we have sent out are not going to be meekly slaughtered."

Greenleaf stared at him a moment longer, then spun around and lunged for the operations console. The display was still blank white with noise and there was nothing to be done. He slowly sank into the padded chair. "What have you done to me?" he whispered. "That collection of invalid musicians—you couldn't have been lying about them all."

"Oh, every word I spoke was true. Not all World War One fighter pilots were invalids, of course. Some were in perfect health, indeed fanatical about staying that way. And I did not say they were all musicians, though I certainly meant you to think so. Ball had the most musical ability among the aces, but was still only an amateur. He always said he loathed his real profession."

Greenleaf, slumped in the chair now, seemed to be aging visibly. "But one was blind . . . it isn't possible."

"So his enemies thought, when they released him from an internment camp early in the war. Edward Mannock, blind in one eye. He had to trick an examiner to get into



the army. Of course the tragedy of these superb men is that they spent themselves killing one another. In those days they had no berserkers to fight, at least none that could be attacked dashing, with an aircraft and a machine gun. I suppose men have always faced berserkers of some kind."

"Let me make sure I understand." Greenleaf's voice was almost pleading. "We have sent out the personae of nine fighter pilots?"

"Nine of the best. I suppose their total of claimed aerial victories is more than five hundred. Such claims were usually exaggerated, but still . . ."

There was silence again. Greenleaf slowly turned his chair back to face the operations display. After a time the storm of atomic noise began to abate. Malori, who had sat down on the deck to rest, got up again, this time more quickly. In the hologram a single glowing symbol was emerging from the noise, fast approaching the position of the *Judith*.

The approaching symbol was bright red.

"So there we are," said Greenleaf, getting to his feet. From a pocket he produced a stubby little handgun. At first he pointed it toward the shrinking Malori, but then he smiled his nice smile and shook his head. "No, let the machines have you. That will be much worse."

When they heard the airlock begin to cycle, Greenleaf raised the weapon to point at his own skull. Malori could not tear his eyes away. The inner door clicked and Greenleaf fired.

Malori bounded across the intervening space and pulled the gun from Greenleaf's dead hand almost before the body had completed its fall. He turned to aim the weapon at the airlock as its inner door sighed open. The berserker standing there was the one he had seen earlier, or the same type at least. But it had just been through violent alterations. One metal arm was cut short in a bright bubbly sear, from which the ends of truncated cables flapped. The whole metal body was riddled with small holes, and around its top there played a halo of electrical discharge.

Malori fired, but the machine ignored the impact of the forcepacket. They would not have let Greenleaf keep a gun with which they could be hurt. The battered machine ignored Malori too, for the moment, and lurched forward to bend over Greenleaf's nearly decapitated body.

"Tra-tra-tra-treason," the berserker squeaked. "Ultimate unpleasant ultimate unpleasant stum-stum-stimuli. Badlife badlife bad—"

By then Malori had moved up close behind it and thrust the muzzle of the gun into one of the still-hot holes where Albert Ball or perhaps Frank Luke or Werner Voss or one of the others had already used a laser to good effect. Two forcepackets beneath its armor and the berserker went down, as still as the men who lay beneath it. The halo of electricity died.

Malori backed off, looking at them both, then spun around to scan the operations display again. The red dot was drifting away from the *Judith*, the vessel it represented now evidently no more than inert machinery.

Out of the receding atomic storm a single green dot was approaching. A minute later, Number Eight came in along, bumping to a gentle stop against its cradle pads. The laser nozzle at once began smoking heavily in atmosphere. The craft was scarred in several places by enemy fire.

"I claim four more victories," the persona said as soon as Malori opened the hatch. "Today I was given fine support by my wingmen, who made great sacrifices for the Fatherland. Although the enemy outnumbered us by two to one, I think that not a single one of them escaped. But I must protest bitterly that my aircraft still has not been painted red."

"I will see to it at once, *mein herr*," murmured Malori, as he began to disconnect the persona from the fighting ship. He felt a little foolish for trying to reassure a piece of hardware. Still, he handled the persona gently as he carried it to where the little formation of empty cases were waiting on the operations deck, their labels showing plainly:

ALBERT BALL

WILLIAM AVERY BISHOP

HENE PAUL FONCK

GEORGES MARIE GUYNEMER

FRANK LUKE

EDWARD MANNOCK

CHARLES NUNGESSER

MANFRED VON RICHTHOFEN

WERNER VOSS.

They were English, American, German, French. They were Jew, violinist, invalid, Prussian, rebel, hater, bon vivant, Christian. Among the nine of them they were many other things besides. Maybe there was only the one word—man—which could include them all.

Right now the nearest living humans were many millions of kilometers away, but still Malori did not feel quite alone. He put the persona back into its case gently, even knowing that it would be undamaged by ten thousand more gravities than his hands could exert. Maybe it would fit into the cabin of Number Eight with him, when he made his try to reach the *Hope*.

"Looks like it's just you and me now, Red Baron." The human being from which it had been modeled had been not quite twenty-six when he was killed over France, after less than eighteen months of success and fame. Before that, in the cavalry, his horse had thrown him again and again.

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