



SCIENCE FICTION

a complete new novel by GORDON R. DICKSON

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FEGHOOT RETURNS!





Hour Of The Horde—a complete new novel Gordon R. Dickson

Intergalactic war can be hell, especially when the alien invaders are willing to lose 1,000 ships for every one of yours, and you—being Earth—do not even have a ship of your own, do not even have an individual capable of doing battle—with one strange exception . . .

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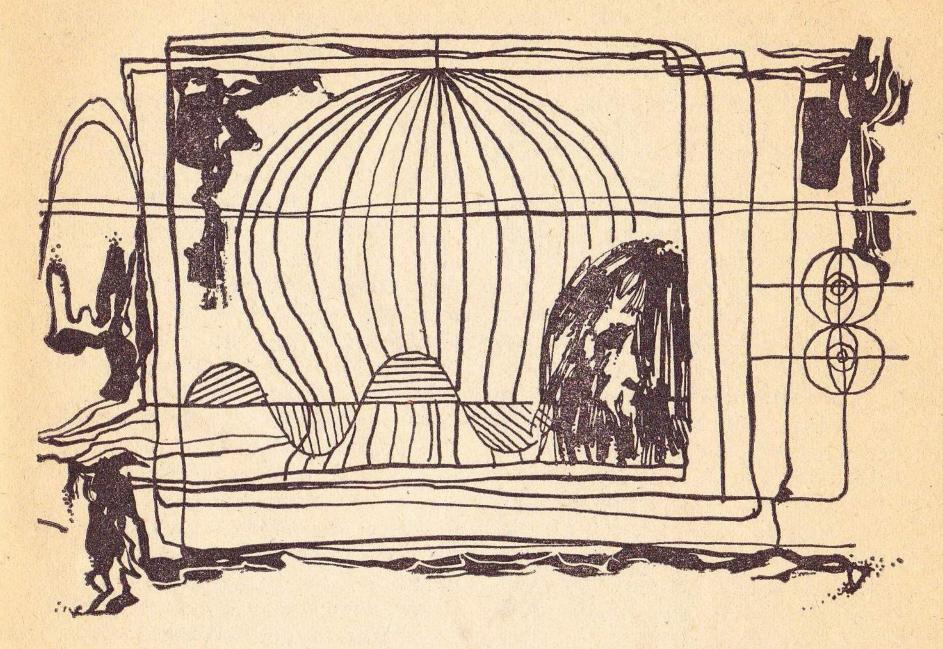
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HOUR OF THE HORDE

by Gordon R. Dickson

T HAD HAPPENED AGAIN. THAT PRIMITIVE, UNCONQUERABLE POWer in him that he could not seem to deny, had reached out once more, savagely down the muscles of his good arm and hand, to take over his painting.

Exhausted, Miles Vander threw the number four brush he held, now bloodily tipped with alarazin crimson, back into the pint fruit jar of muddy turpentine holding the other long, yellow-handled brushes. A feeling of dull exhaustion and frustration dropped on him like the doubled folds of some heavy blanket.

All at once he was aware again of his own starved-looking body, his bent shoulders, his uselessly hanging left arm that polio had crippled six years ago. The paralyzed hand was now tucked into his left pants' pocket, out of sight; and the loose sleeve of his white shirt, billowing about the wasted arm in the late sunlight of the warm spring afternoon, disguised for the moment its unnatural thinness. —But he was suddenly, grimly, once more aware of it, just the same.

For a few hours, caught up in his painting, he had forgotten both his crippling and the stubborn artistic search he had never stopped, these last five years. Now emptied and worn out, he stood with the aftertaste of one more failure, staring at his canvas, as the freshening breeze of the late afternoon blew the white shirt coldly about him.

The painting showed the scene before him—only, it did not. He stood on the parkway grass above the west bluff over the Mississippi River. Between high rock walls narrowly footed with green park lawn, the three hundred yard width of the upper river flowed darkly blue, with picture-card calmness, beneath the white concrete of a freeway bridge bearing a glassed-in, overhead walkway for students moving between the east and west campuses of the University.

These things made up the landscape he had been painting for three and a half hours. And he had set them all down on canvas—the tall gray-brown river bluffs, the grasscovered flats at the feet of the bluffs, even the white paddle-wheeled steamboat that was the University's theater-on-the-river. He gazed at them now, and at the heavily leaved, large old elm trees, the reddish-brown brick of the Student Union and the University Hospitals on top of the far bluff, and the blue, near-cloudless sky above them all.

These things lay, as they had lain all through the hours of his painting, bathed in the gentle sunlight of late May—making a warm, even comforting, scene. But this was not the way his brushes had reproduced them on canvas.

On the now wetly gleaming three-by-four foot square of cloth, he had painted not what he faced, but that old savage animal instinct of man, to which he could not seem to close his eyes—ever. Into the soft, living greens and blues and browns of the scene across the river had crept the icy bleakness of oil-based ultramarine blue, hardened with grey. Into the soft yellow sunlight had come the smouldering fire of alarazin crimson, raising a sullen reddishness like the color of spilled blood.

The resulting painting showed the works of man, by which man was himself to be judged, greyed and brooding, stripped down, and hardened and stained with the bloody marks of savage guilts and primitive failures.

Miles felt exhausted, weak—even a little dizzy. He had emptied himself, once more, of his inner creative energy. But once more he had made—not the image of the world he wished to show—but only that image's other face; like the other side of a coin, its devil-face. Wearily he

began cleaning his brushes and packing his paints for the return to his room.

Midway across the glassed-in walkway above the freeway bridge, he stopped to rest for a minute and stared down once more at the scene

of his painting.

Back the way he had come was the top of the bluff on which he had set up his easel; and facing him now was the bluff's rugged, near-vertical face of grey limestone rock, roughened, cracked and gullied by weather, standing above the lower strip of parkway greensward at its foot. As always, the sight of that bluff-face pumped new strength and purpose into him. What he had done once, he could do again—

His painting, even as it was, had won him the unusual attention of his instructors at the University School of Art. It had also won him, now that he was graduating, a grant which would let him spend the next two years in Europe, moving about and painting as he liked. Then free at last from academic distractions; painting, painting, and continually painting, he would finally win out over that savage, primitive bleakness of viewpoint which seemed determined to express itself in everything he did.

The slight dizziness from the long afternoon's effort made him giddy again for a moment. He leaned against the railing. But then, he stiffened.

The day had darkened. He looked

up swiftly at the sun.

—It was as if a heavy orange filter had been drawn across its surface. Rolling, enormous and sul-

len, it burned with a flaming redness just above the western horizon, so dimmed that he could stare directly into it without squinting. Moreover, as he looked down again, unbelieving, he saw the landscape also changed. It was coated and darkened and shadowed, now, by the all-pervading redness of the sunlight. The color of alarazin crimson, that was the shade of his own inner, primitive fury, seemed to have escaped from his painting to stain the real landscape now-all earth and sky and water-with the angry color of spilled blood.

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MILES STOOD MOTIONLESS.

A giant's hand seemed to close powerfully about his chest, squeezing the breath out of him. Not breathing, he stared at the changed sun and the red-washed landscape; and an old, old fear dating back to the polio attack—fear of his own traitorous body finding some way to fail him a second time, before his work could be accomplished—woke inside him.

His doctor at the University Hospitals had told him last month that he was working too hard. His landlady—and even Marie Bourtel who loved him and understood him better than anyone else—had pleaded with him to slow down. So, to be sensible, he had forced himself to get at least six hours sleep a night these last two weeks—and still this false and untrustworthy body had failed him, after all.

With brutal fingers, he rubbed his eyes. But the color of light and sun would not change. Furiously, helplessly, he looked around the walkway.

Because it was Sunday, the walkway was all but deserted. But, looking now, Miles saw three other figures near its far end. Miles started toward them, lugging his paints and canvas.

—But then, suddenly, hope leaped faintly within him. For the other three, were also staring around themselves with a dazed air. As he watched, they moved toward each other like people under a huddling instinct in a time of danger. By the time he reached them they were close together and already talking.

". . . But it has to be something!" a girl was saying, shakily, hugging her books to her as if they were a lifebelt and she, afloat on a

storm-tossed sea.

"I tell you it's the end!" said an older man. He was stiff and gray in the face and he spoke with barely moving grey lips, holding himself unnaturally erect. The reddened sunlight painted rough highlights on his bloodless face. "The sun's dying."

"Dying? Are you crazy?" shouted a sweatered young man with a sliderule. "It's dust in the atmosphere. A dust storm, south and west of us, maybe. Didn't you ever see a sun-

set-"

"If it's dust, why aren't things darker?" asked the girl. "Everything's clear as before, even the shadows. Only it's red, all red—"

"Dust! Dust, I tell you!" shouted the young man. "It's going to clear up any minute. Wait and see . . ."

Miles said nothing. But the first leap of hope was expanding into a sense of relief that left him weak at the knees. It was not he, then. The suddenly bloody color of the world was not just a subjective illusion, caused by his own failing eyesight, or exhausted mind, but the result of some natural accident of atmosphere or weather. With the sense of relief, his now-habitual distaste for wasting precious time in social talk woke in him once more. Quietly, he turned away and left the other three still talking.

The subject of the sun-change was waiting for him at his rooming house. As he walked in the front door, he heard his landlady's television set sounding loudly from her

ground floor apartment.

"... No explanation yet from our local Weather Bureau or the U.S. Meteorological Service ..." Miles heard, as he passed the open living room door. Through it, he had a glimpse of Mrs. Arndahl, the landlady, sitting there with several of the other roomers, silently listening. "... No unusual disturbances in the sun or in our own atmosphere have been identified so far, and expert opinion believes such disturbances could not have taken place without ..."

There was a stiffness, an aura of alarm about those watching and listening to the set, that woke annoyance in Miles. Everyone around him, it seemed, was determined to get worked up about this purely natural event. He stepped quickly, but quietly, by on the brown carpet before the open door and mounted the equally worn carpet of the stairs to the silence and peace of his own, large, second-floor room.

There, he gratefully laid down at last his canvas and painting tools, in their proper places. Then he flopped heavily, still dressed, back-down on his narrow bed. The white glass curtain fluttered in the breeze from his half-open window. Weariness flooded through him.

It was a satisfying weariness, in spite of the failure of the afternoon's work; a deep exhaustion, not merely of body and mind but of imagination and will as well—reflecting the effort he had put into the painting. But still . . . frustration stirred in him once more . . . that effort had still been nothing more than what was possible to any normal man. It had not been the creative explosion for which he searched.

For the possibility of that explosion was part of his own grim theory of art, the theory he had built up and lived with ever since that day when he had been painting at the foot of the west bluff, four years ago. According to the theory, there should be possible to an artist something much more than any painter had ever achieved up to now. —Painting that would be the result of the heretofore normal creative outburst many times multiplied—into an over-passion.

To himself, more prosaically, he called this over-passion "going into overdrive", and it should be no more impossible than the reliably recorded displays of purely physical ability shown by humans under extreme emotional stress—in that phenomenon known as "hysterical strength".

Hysterical strength, Miles knew, existed. Not merely because he had evidence of it but in the thick

manila envelope of newspaper clippings he had collected over the last four years. Clippings like the one about the distraught mother who had lifted the thousands of pounds of her overturned car in order to pull her trapped baby with the other hand from underneath the vehicle. -Or the instance of the bedridden old man in his eighties who had literally run to safety, as cleverly as any slack-wire performer, across a hundred feet of telephone wire to a telephone pole, to escape from the third floor of a burning apartment building.

He did not need these things to believe in hysterical strength because he had experienced it. Himself.

—And what the body could do, he told himself again, now, wrapped in exhaustion on his bed, the creative spirit should be able to do, as well. Some day, yet, he would tap it artistically—that creative overdrive. And when that moment came, he thought, dully and pleasantly now, sinking into a drowsiness, a scene like the one he had painted today would show the future, the promise of man-instead of a human past of bloody instinct and stone-age violence underlying all that civilization had built. His thoughts flickered gradually into extinction . . .

When he woke, Miles could not at first remember what time of day it was, or why he had wakened. And then it came again—a pounding on his door and the voice of his landlady was calling through it to him.

"Miles! Miles!" Mrs. Arndahl's voice came thinly past the door, as if she was pushing it through the

crack underneath it. "Phone call for

you. Miles, do you hear me?"

"It's all right. I'm awake," he called back. "I'll be there in a minute." He stumbled across the room, stepped out of the door and walked numbly down the hall to the upstairs extension phone, which was lying out of its cradle. He picked it up.

"Miles!" It was the soft voice of Marie Bourtel. "Have you been there

all this time?"

"Yes," he muttered, still too numb from sleep to wonder why she asked.

"I called a couple of times for you earlier, but Mrs. Arndahl said you hadn't come in yet. I finally had her check your room, anyway," the usually calm, gentle voice he was used to hearing on the phone had an unusual edge to it. —An edge of something like fear. "Didn't you remember you were going to meet me for dinner at the Lounge?"

"Lounge?" he echoed stupidly. He scrubbed his face with the back of his hand that held the phone, as if to rub memory back into his head. Then contrition flooded him. He remembered the plan to have dinner with Marie, at six thirty, at the Lounge. "Sorry, Marie—I guess I did it again. I was painting this afternoon, and I came back and lay down. I must've fallen asleep."

"Then you're all right." There was relief in Marie's voice for a second, then tension returned. "You don't know what's been happening?"

"Happening?"

"The sun's changed color! About

five o'clock this afternoon—"

"Oh, that?" Miles rubbed the back of his hand again over his sleepnumbed face. "Yes, I saw it change. I'd just finished painting— What about it?"

"What about it?" Marie's voice held a sort of wonder. "Miles, the

sun's changed color!"

"I know," said Miles, a little impatiently. But then, rousing him from that first impatience to sudden near-anger, came recognition of the relief in Marie's voice a few seconds before, when she had said—
". . . Then you're all right . . ."

Those remembered words jarred unpleasantly back to mind his own first few moments of alarm, when he had seen the sun's changed color. He heard the edge in his own voice as he answered her.

"—I know the sun's changed color! I said, I saw it happen! What of it?"

"Miles—" Marie's voice broke off, oddly, as if she was uncertain of what to say to him. "Miles, I want to see you. If you've been asleep all this time, you haven't had dinner yet, have you?"

"Well . . . no. I haven't."

"I'll meet you at the Lounge in ten minutes, then," said Marie, swiftly. "You can have some dinner, and we can talk. Ten minutes?"

"All right," he said, still somewhat numb with sleep.

"Goodby, Miles."

"Goodby."

When he pushed open the door of the Lounge, he found the place crowded; only the crowd was all clustered at one end around the television set at the front of the bar. Forty or fifty people, many of them students, were seated and standing

there, packed closely together, listening in absolute silence to the same sort of news broadcast he had over-

heard at his rooming house.

Miles took a corner booth in the back of the room. It was the booth he and Marie always took if it was available, and after a few moments their usual waitress, a girl named Joan, a part-time English undergraduate came through the doors from the kitchen, saw him, and came over to ask him what he wanted.

She had scarcely brought two cups of coffee back and left again in search of a hot beef sandwich for Miles, when the sound of footsteps from the front of the Lounge made him look up. He saw Marie coming quickly down the aisle between the booths, toward him.

She looked at him with the brown eyes, that were now so dark and luminous they seemed to have doubled their size in her white face.

"Miles . . ." she reached across the table to lay her hand on his

arm. "Do you feel all right?"

"All right? Me?" He smiled at her, for clearly she needed reassurance. "I'm still a little dopey from sleep and I could stand some food. Outside of that, I'm fine. What's the matter with you?"

She looked at him strangely.

"Miles, you can't be that much out of touch with the rest of the world,"

she said. "You just can't!"

"Oh—" the word came out more harshly than he had meant it to. "You mean this business about the sun changing color? Don't worry, it hasn't done any damage, yet. And if it did, that's not my line of work. So why worry about it?"

The waitress came up with Miles' hot beef sandwich and said hello to Marie.

"—Isn't it terrible? It's still going on," she said to Marie. "We're all following the news, back in the kitchen. They're just beginning to see it from planes in the south Pacific now—and it's still red."

She went back to the kitchen.

"I'll tell you why you ought to worry," said Marie, quietly and tensely, taking her hand from his arm and sitting back almost huddled in her corner of the booth, "because it's something that affects the whole world, all the people in the world, and you're one of them."

Automatically he had picked up his fork and begun to eat. Now, at these words, he laid his fork down again. The wave of exhaustion inside him, the wave of anger first pricked to life by the alarm and concern of the people on campus he had passed on his way back to the rooming house, returned with force to wash his appetite away.

"The other two billion won't miss me if I stick to my own work," he said. "I've got more important things to worry about. I spent all day today painting the river bluffs and the freeway bridge. Do you want to know

how it came out?"

"I can guess how it came out," answered Marie. She was a student in the School of Art at the University, herself. Like Miles, she was graduating this spring. Unlike Miles, she had neither a grant for European study waiting for her, nor the supporting belief of her instructors that she had the makings of a truly unusual artist in her. It did not help

that Miles himself could see promise in her work. For even he could not bring himself to class that promise with what he himself was after in

painting.

Yet, in spite of this, there were elements in Marie's work which were the equivalent of those very elements for which Miles searched in his own. Where he was stark, she was beautiful; where he was violent, she was gentle. Only, he wanted his equivalents of these things on a different level than that on which she had found hers.

"Well, it was the same thing all over again," said Miles. He picked up the fork once more and mechanically tried to force himself to eat. "The painting turned savage on me—"

"Yes," answered Marie in a low voice, "—and I know why."

He looked up sharply from his plate at her, and found her eyes more brilliant upon him than ever.

"-And this business about the sun proves it," she went on, more strongly. "I don't mean the change in color, itself; I mean the way you're reacting to it-" she hesitated, then burst out with a rush. "I've never said this to you, Miles. But I always knew I'd have to say it, someday, and now this thing's happened and the time's come. You aren't ever going to find the answer to what's bothering you about the way you paint. You never will. Because you won't look in the right direction. You'll look everywhere but there!"

"What do you mean? And what's this business of the sun got to do with it?"

"It's got everything to do with it," she said tightly, taking hold of her edge of the table with both hands, as if her grip on it was a grip on him, forcing him to stand still and listen to her. "Maybe this change in the color of the sun hasn't hurt anything, yet—that's true. But it's frightened a world full of people! And that doesn't mean anything to you. Don't you understand me, Miles? The trouble with you is you've got to the point where something like this can happen, and a world full of people be frightened to death by it—and you don't react at all!"

He looked narrowly at her.

"You're telling me I'm too wound up in my painting?" he asked. "Is that it?"

"No!" Marie answered fiercely. "You're just not interested enough in the rest of life!"

"The rest of life?" he echoed. "Why of course not! All the rest of life does for me is get between me and the painting—and I need every ounce of energy I can get for work. What's wrong with that?"

"You know what's wrong!" Marie started out of her corner and leaned across the table toward him. "You're too strong, Miles. You've got to the point where nothing frightens you any more—and that's not natural. You're all one-sided, like that over-developed arm of yours and nothing on the other side—" Abruptly, she began to cry, but silently, the tears streaming down her face, even while her voice went on, low and tight and controlled as before.

"—Oh, I know that's a terrible thing to say!" she said. "I didn't want to say it to you, Miles. I didn't! —But it's true. You're all one huge muscle in the part of you that's a painter and there's nothing left in you on the human side at all. And still you're not satisfied. You keep on trying to make yourself even more one-sided, so that you can be a bloodless, camera-eyed observer! Only, it can't be done—and it shouldn't be done! You'll turn yourself into a painting machine and still never get what you want, because it really isn't pictures on canvas you're after, Miles. It's people! It really is! Miles—"

Her words broke off and echoed away into the silence of the empty dining area at the back of the Lounge. Miles sat without moving, staring at her. Finally, he found the words for which he was reaching.

"Is this what you called me up, and asked me to meet you here, to say?" he asked, at last.

"Yes!" answered Marie.

He still sat, staring at her. There was a hard, heavy feeling of loneliness and pain, just above his breastbone, inside him. He had thought that at least there was one person in the universe who understood what he was trying to do. One person, anyway, who had some vision of that long road, and that misty goal toward which he was reaching with every ounce of strength he had, and every waking hour of his days. He had thought that Marie understood. Now, it was plain she did not. She was, in the end, as blind as all of them-no different from the rest.

If only she had understood, she would have realized that it was people he had been striving to get free of, right from the start. He had been

trying to pull himself out of the quicksand of their bloody history and narrow lives, so that he would be able to see clearly, hear clearly, and work without their weight clinging to his mind and hampering the freedom of his mind's eye.

But Marie had evidently never seen this fact, any more than the rest.

He got to his feet, picked up his check and hers, and walked away from her, to the cashier and out of the Lounge without another word.

66 THE SHIP . . ."

It seemed that those were almost the first words Miles encountered on going downstairs after waking the next morning. They were on the lips of his landlady as he left for breakfast and his first class; and they echoed around him from everybody who was abroad in the red light of this early day, as he crossed the campus. When he reached the room in which the seminar on Renaissance Art was held, it seemed to be the only topic of conversation among the graduate students there, as well.

". . . Too big to land, anyway," Mike Jarosh, a short, bearded man who was one of the graduate history majors, was saying as Miles came in. "As big as the state of Rhode Island."

"They'll probably send down a smaller ship," somebody else put in.

"Maybe. Maybe not," Mike said. sun saw it coming, and it appeared there, in orbit a thousand miles out. None of the telescopes watching the sun saw it coming; and it appeared right in front of the sun, right in

front of their telescopes. If whoever's in the ship can do that, they may be able to send down people to the surface of the Earth here just by some way of transferring them, suddenly, from the ship to here—"

The professor in charge of the seminar, Wallace Hankins, a thin, stooped man, half bald but with his remaining hair still as black as his eyebrows, came in the door just then, cutting off Mike in mid-sentence.

"Any news? Any broadcasts from the ship—" Mike was beginning to ask him, when Hankins cut him short.

"Yes, there's been some kind of message," Hankins said. "The United Nations Secretary General just received it; the broadcasts don't say how or why. But that's all beside the point. It's plain there's no use trying to hold any kind of a seminar under these conditions. So, we won't try it, today. The rest of you go about your business—and, with luck, we'll meet again here next week at the same time under conditions more conducive to a discussion of Renaissance Art."

The babble of excitement that broke out at this announcement, Miles thought, would have suited a group of grade school children better than to a dozen hard-working graduate students. The others hurried off, as, more slowly, he put his own books back into the briefcase from which he had just taken them out while Mike Jarosh was talking.

He headed back down the worn marble steps of the staircase inside the history building, and out of the building back toward his rooming house. He was not quite sure what he should do with this unexpected gap in his daily schedule. Automatically, he thought of setting up his easel somewhere outside and trying to work, and then he remembered that outdoor painting would be all but impossible as long as the sun continued to be this color. Color values would be bound to be all off.

No sooner had he thought of this, than he was intrigued by the notion of doing a painting under the red light, just so that he could see in what way the colors were off, once the sun returned to normal. He hurried on to the rooming house and went up the stairs to his room with enthusiasm beginning to burn inside him. But, as he entered his room, his spirits took a sudden drop. The sight of the canvas he had painted yesterday afternoon, now drying in the corner, reminded him abruptly of Marie.

He was suddenly face-to-face with a strong sense of guilt and loss. He had been wrong in walking out like that. It had not been fair to expect her to understand what moved him in his wholehearted search without ever a word of explanation of that search. At least he could find her and make that explanation now. He owed her that much.

He went over to open the top drawer of his dresser to take out a brown manila envelope. He put it into the inside pocket of his corduroy jacket and headed back out of the rooming house.

The girls' dormitory, in which Marie was a counselor, was on the other side of the campus, a tall, red brick building with a row of glass doors across the front of it. He went through one of the doors into the lobby and asked for Marie. The clerk at the desk, a small, brown-haired girl with large black glasses, buzzed Marie's room, and less than a minute later, Marie called down on the house phone. Miles heard her voice with a sense of relief.

"It's me," he said. "Can you come down?"

"I'll be right there," her voice answered. His heart moved in him. It was the same, soft calm voice as ever. He had expected any reaction but this, after he had walked out on her the way he had the night before.

He walked into the lounge, which was occupied by a small crowd of girls. They were listening to the omnipresent television announcer in such uniform silence that Miles had no difficulty overhearing what he was

saying.

from reliable sources here at the U.N.," the announcer was saying, "that the message was not sent by any mechanical means from the ship now in orbit about our world, but that it was delivered in person by two of the passengers or crew from the ship. The same source also provides the information that the two beings in question appear to be two men with somewhat swarthy features, in every respect, including the suits they wear, as human as we are. Further word is expected shortly.

"Now, as to some details about the ship, as the details have been gleaned by telescope from the surface of our world. The ship itself appears to be at least as large as was originally estimated. There seems to be no evi-

dence of windows or entrances in its outer surface. Moreover, no sign has been seen of a small ship leaving it, or of any means by which the two from the ship could have made the trip down to the U.N. building here in New York. No landings of any type of any small alien craft have been reported, and no unusual visitors escorted to the building...

His voice droned on. Miles went to the opposite end of the room and sat down on a heavy, green sofa pushed back against the wall. It was only a few moments before Marie appeared in the entrance to the lounge. He got up swiftly and went to meet her.

"Miles—" she said, as he came up to her.

"Can we get out of here?" he said. "Somewhere away from television sets and radios?"

"I'm on duty here at the dorm, starting at one o'clock," she answered. "But we could go someplace and have an early lunch, until then."

"Good," he said. "Let's go someplace downtown that isn't overrun by people from the U."

They took the bus toward downtown Minneapolis. As the bus rolled across the freeway bridge, Miles pointed out the window next to which Marie was sitting.

"Look," he said. His finger indicated the rock wall below where he had stood painting the afternoon before. "You see the bluff, there? Do you think you could climb it?"

Marie stared at the steep rise of rock.

"I guess so—if I had to," she said. She turned, puzzledly frown-

ing at him. "I don't think I'd like to. Why?"

"I'll tell you later, while we're having lunch," said Miles. "But look at it, now, will you, and just imagine

yourself climbing it."

Marie looked back out of the window and kept her eyes on the bluff until the bus passed the point at which that side of the river could be seen any longer. Then, she looked questioningly at Miles.

When he said nothing, however, she looked away; and neither of them spoke until they left the bus,

downtown.

Miles, in fact, waited until they were actually inside the restaurant they had picked—a small, mid-expensive eating place with white paper placemats on the tables with the silver, and no television set.

"About last night—" he began, after the waitress had left them.

Marie laid down her menu. She reached out across the table to put her hand on his.

"Never mind," she said. "It doesn't

matter."

"But it does matter," he answered. He withdrew his hand, took the manila envelope out from the inside pocket of his jacket and handed it to her. "There's something I want you to understand. That's why I had you look at that bluff on the way here. I should have told you about it a long time ago; but when I first met you-well, I just wasn't used to telling anyone about it; and later I liked to think you understood without being told. Then, when I found you didn't last night—that's why I blew up. Take a look in that envelope."

Looking strangely at him, Marie opened the envelope and poured out the sheaf of yellowing newspaper clippings on the white placemat. She looked through them while he waited. Then, she looked back up at him, frowning.

"I guess I don't understand . . ."

she said.

"They're all instances of hysterical strength," Miles said. "Have you ever heard of that?"

"I think so . . ." she said, still frowning. "But what's it all got to do

with you?"

"It ties in with what I believe," he said. "A theory of mine about painting. —About anything creative, actually . . ." And he told her about it. But when he was done, she still shook her head.

"I didn't know," she said. She shuffled the clippings with her fingers. "But, Miles, isn't it a pretty big guess on your part? These—" she shuffled the clippings again looking down at them, "are hard enough to believe—"

"Will you believe me if I tell you something?" he interrupted.

"Of course!" her head came up.

"All right, then. Listen," he said, "before I met you, when I first had polio, I took up painting mainly as something to give me an excuse to hide from people." He took a deep breath. "I couldn't get over the fact I was crippled, you see. I had a knack for art, but the painting and drawing was just an excuse that first year, after I'd been sick."

"Miles," she said, gently, reaching out to put her hand on his again.

"But then, one day, something happened," he said. "I was outside

painting, that day—at the foot of the bluff I pointed out to you. And something clicked. Suddenly, I was in it—inside the painting—I can't describe it. And I forgot everything around me."

He stopped and drew a deep breath.

"I shouldn't have done that," he said. "Because it just happened I was attracting a gallery. Some kids had come up to watch me painting. Kids not much younger than I was—and I guess after a while they must have started asking me questions. But I didn't even hear them. I was all wrapped up in what I was painting, for the first time—and it was like a miracle, like coming alive for the first time since I'd been sick."

In spite of himself, remembering, his hand curled into a fist under her fingers. She held tightly to the fist.

"When I didn't answer," he went on after a second, "they evidently began to think that I was embarrassed by being caught painting, and they began to jostle me, and move my brushes. But I was still just barely conscious of them, and I was scared stiff at the thought of quitting working on that painting, even for a second. I had a feeling that if I quit, even for that long, I'd lose it—this in-ness I'd discovered. But finally, one of them grabbed up my paintbox and ran off with it, and I had to come out of it."

"Oh, Miles!" said Marie, softly. Her fingertips soothed his hardclenched fist.

"So I chased him—the one who'd taken it. And when I was just about to grab him, he dropped it. So I brought it back—and then I found

out something. My canvas was gone.

"I looked around," he went on, seeing the much-remembered scene in his mind's eye, "and finally I spotted the one who'd taken it. He'd run off the other way from the one who took my paints, and up around a road leading to the top of the bluff; and now he was running along the bluff overhead."

Miles stopped speaking. With an effort, he pulled his inner gaze from the memory and looked again at Marie, seated across the table from him, now, four years later.

"Marie," he said. "I wasn't thinking—of anything but that painting. It seemed like life itself to me, just then, life I'd found again, after thinking I'd lost it for good with polio. It seemed to me that I had to have that painting, no matter what happened. And I went and got it."

He hesitated.

"Marie," he said, "I climbed up that bluff, and got in front of the kid who'd taken it. When he saw me coming, he threw it face-down on the grass and ran. When I picked it up, it was nothing but smears and streaks of paint with grass sticking all over it."

"Miles!" said Marie, her fingers tightening on his fist. "How terrible."

"No," said Miles, "not terrible." He looked deeply into her brown eyes. "Wonderful. —Marie, don't you understand? I climbed up that cliff!"

She stared back at him, baffled.

"Listen! I climbed up that cliff and I had only one arm. Only one arm and one hand to climb with!"

She still stared, without understanding. "Of course," she said. "That's right, you only had one arm— she broke off suddenly, on a quick intake of breath.

"Yes. You see?" Miles heard his own voice, sounding almost triumphant. "Marie, a cliff like that can't be climbed by a one-handed man. You need to hold with one hand while you move the other to a fresh hand-hold, and so on. I came back there the next day and tried to see if I could climb it again. And I couldn't. I couldn't even get started. The only way I possibly could have done it would have been to balance on my feet alone while I changed handholds."

He nodded at the clippings on the

placemat before her.

"To climb like that," he said, "I'd have needed strength and speed like you find written up in those news clippings."

She gazed at him, her face a little

pale.

"You understand now, don't you?"

he asked. "You do, don't you?"

To his surprise she shivered suddenly, and her face grew even more pale.

"Marie!" he said. "Don't you un-

derstand-"

"Oh, I do. I understand. Of course, Miles." Her hand turned so that her fingers grasped his. "It's not that. It's just that knowing this, now, somehow makes it all that much worse."

"Worse?" He stared at her.

"I mean . . ." her voice trembled. "All this business about the sun and the ship and the two men, or whatever they arc. —I've had a feeling from the beginning that it all meant something terrible for us for you and me. And now, somehow, your telling me this makes me even more afraid."

"What of?" he asked.

"I don't know." He could feel her shiver again, just barely feel it, but the shiver was there.

From across the room, a sudden, measured voice interrupted her. Looking in that direction Miles saw that two men had just entered the restaurant and sat down at a table against the further wall. One of them had a portable radio; and, even with the volume turned down, its voice carried across to the table where he sat with Marie. Anger exploded in him.

"I'll make them turn that thing down!" he said, starting to get to his feet. But Marie caught hold of

his arm.

"No," she said. "Sit down. Please, sit down, Miles. Listen—"

". . . By television and radio," the radio was saying. "We now bring you the President of the United States, speaking to you directly from the East Room of the White House . . ." The musical strains of "Hail To The Chief" followed closely upon the announcer's words. Marie got quickly to her feet.

"Miles, quickly," she said. "Let's

find a television set."

'All right," he said, getting to his feet in turn, "if you want to."

She hurried out of the restaurant, and he had to stretch his legs to keep up with her. They went quickly down a half block, and into a nearby bar. Within, no one was moving—bartenders and customers alike. They were all sitting, or standing, still as

carvings, staring at the large television set, set up high on a dark, wooden shelf at the inner end of the bar. From that ledge, the lined and rectangular face under grey hair of the President of the United States looked out. Miles heard the tail end of his sentence as they entered.

"... For simultaneous announcement to all countries of the world," said the slow, pausing voice in the same heavy tones they had heard a dozen times before, speaking on smaller issues of the country and the world. "These two visitors also supplied us with a film strip to be used in conjunction with the announcement. First, here is a picture of our two friends from the civilization of worlds at the center of our galaxy."

—The rectangular face disappeared, to be replaced by the still image of two men in what seemed to be gray business suits, standing before a window in some sort of lounge or reception room—probably a room in one of the U.N. buildings, Miles thought.

There was nothing about the two to distinguish them from any other human. Their noses were a little long, their faces seemed to be a little dark of skin, and there was a suspicion of a Mongoloid fold above the eyes. Outside of this, they might have been encountered on the streets of any large city in the world, east or west, without the slightest suspicion that they had come from anywhere off the planet.

". . . These gentlemen," went on the presidential voice slowly, "have explained to the representatives of the nations of our world that our galaxy, that galaxy of millions upon millions of stars, of which our sun is a minor star, out near the edge—"
The figures of the two men disappeared and were replaced by what looked like a glowing spiral of dust floating against a black background, "will shortly be facing attack by a roving, intergalactic race which periodically preys upon those island universes like our galaxy which dot that intergalactic space.

intergalactic space.

"Their civilization, which represents many worlds in many solar systems in toward the center of the galaxy, has taken the lead in forming a defensive military force which will attempt to meet these predators at the edge of our galaxy, and turn them aside from their purpose. They inform us, that if the predators are not turned aside, over ninety percent of the life on the inhabited worlds of our galaxy will be captured and literally processed for food to feed this nomadic and rapacious civilization. Indeed, it is the constant need to search for sustenance for their overwhelming numbers, that keeps them always on the move between and through the galaxies, generations succeeding generation in rapacious conquest."

Suddenly the image of something like a white-furred weasel, with hands on its two upper limbs, and standing erect on its two hind limbs, filled the television screen. Beside it was the grey outline of a man, and it could be seen that the creature came about shoulder high on the outline.

"This," said the disembodied voice of the Chief Executive, "is a picture of what the predator looks like, according to our two visitors. The

predator is born, lives and dies within his ship or ships, in space. His only concern is to survive—first as a race, then as an individual. His numbers are countless. Even the ships in which he lives will probably be numbered in the millions. He and his fellows will be prepared to sustain staggering losses if they can win their way into the feeding grounds that is our galaxy. Here, by courtesy of our two visitors, is a picture of what the predator fleet will look like. Collectively, they're referred to, in the records of our galaxy, as the Silver Horde."

Once more, the image in the television screen changed.

"This is one of their ships—" said the President's voice.

A spindle-shaped craft of some highly polished metal, appeared on the television screen. Beside it, the silhouette of a man had shrunk, until it was approximately the size of a human being standing next to a double trailer truck.

"This is a scout ship, the smallest of their craft—holding a single family, usually consisting of three or four adults and perhaps as many young ones."

The image on the television set shrank almost to a dot and beside it appeared a large, circular craft, nearly filling the screen.

". . . And this, is the largest of their ships," said the President. "Inside, it should have much of the appearance and population of a small city—up to several thousand individuals, adult and young, and at least one large manufacturing or toolmaking unit required by the Horde for maintenance and warfare, as well

as food-processing and storage units."

The voice of the Chief Executive lifted on a note that signaled he was approaching the end of what he had to say.

"Our visitors have told us," he said, "that defense of the galaxy is a common responsibility. For world to join in that defense, is therefore a duty. What they require from us, however, is a contribution of a highly specialized nature." His voice hesitated, and then went on, more strongly. "They tell us that the weapons with which our galaxy's defensive force will meet the Horde are beyond the understanding of our science, here on Earth. They tell us, however, that they are part physical, part non-physical in nature. The number of fighting individuals we can contribute to our galaxy's defense is therefore limited by our relatively primitive state of awareness as far as these non-physical forces are concerned. We can send one man, only. This one individual—this one man, who is best suited to be our representative by natural talent and abilities—has already been selected by our visitors. He will be shortly taken over by them, adjusted so as to make the best possible use of these talents, and then turned loose for a brief period to move about our world and absorb an identification with the rest of us. This process of absorbing an identification has been compared by our visitors to the process of charging a car battery, to exposing its plates to a steady input of electrical current. Once he has been so 'charged', all of us on this world who have managed to contribute to the 'charging' will continue

to have some sort of awareness in the back of our minds of what he is going through up on a battle line to which he will be transported. And from this linkage, he will draw the personal non-physical strength with which he will operate his particular weapon when the encounter with the Horde occurs."

The President's face once more appeared on the television screen. He paused, and standing in the bar, Miles felt the impact of the older man's eyes upon him—as, evidently, did everyone else in the room.

"That is all for now," said the President, slowly. "As soon as we have more information to release to you, the people of America and the people of our world, it will be released. Meanwhile, in this trying and strange time into which we have suddenly been plunged by events, let me ask you all to go on with your lives in their ordinary fashion, and show patience. As we approach what lies in store for us, it will become more plain to us all. God bless you, and good afternoon."

His face vanished from the screen. After a moment of grayness, the face of an announcer flicked on.

"The voice you have just heard," the announcer said smoothly, "has been the voice of the President of the United States . . ."

"Come on," said Miles. "Let's get out of here."

He had to take her by the arm, before he could break the sort of trance that held her. But when he touched her, she started and seemed to come awake. She turned obediently and followed him out once more into the red-lighted street.

In the street, she leaned against him, as if the strength had gone out of her. He put his arm around her to steady her, and looked anxiously about him. Two blocks down the street, a lone cab was coming toward them. Miles whistled and the cab came on, angling in to the curb to stop before them.

Miles bent down to open the rear door. As he did, he became conscious of the fact that besides the driver, there was a man in a blue suit in the front seat, and another suited man sitting in the back seat. He checked, with the door half open.

"It's all right," said the man in the back seat. "You're Miles Vander, aren't you? And this will be Miss Bourtel."

He reached into his inside suitcoat pocket, and brought out a leather case which he flipped open. Miles saw a card in a plastic case, with the man's picture and some lines of fine type underneath.

"Treasury Department," said the man. "You're to come with us, Mr. Vander. We'll drop Miss Bourtel off on the way."

Miles stared at him.

"Please get in," said the man in the front seat beside the driver, and the evenness of his tone made the words more a command than an invitation. "We were told we'd find you here. And there's no time to lose."

Within the circle of Miles' arm, Marie leaned even more heavily against him. Worry for her tightened Miles' chest.

"All right," he said, abruptly. He helped Marie into the back seat of

the taxi next to the man sitting there, and then got in himself, closing the door behind him.

"We'd better go—" he was beginning, when the man in the front

seat cut him short.

"That's all right. We've got our instructions on that, too," he said. He sat half turned in the front seat with one elbow over the back of the seat so that he looked directly into Miles' face. "Look at her."

Alarmed, Miles looked sharply around again, at Marie. She sat, with her head against him, her eyes closed, unmoving, breathing deeply

and slowly.

"Don't worry," said the man in the front seat. "She's only asleep. The Aliens arranged it—the two from the ship—to get her through the business of seeing you picked up by us. We're to deliver her to the University Hospitals, where they'll take care of her for an hour or two, until she wakes. When she does wake up, she won't be alarmed about what's happened to you, any more."

Miles stared at him.

"What is all this?" Miles shouted.

The taxi was already pulling away from the curb and heading off down the street in the direction of the distant University. The man in the front seat answered. "We'll be taking you immediately to the airport, where a military airplane will fly you to Washington. You're the man, Mr. Vander, the man that our two visitors from the center of the galaxy want."

4

THE PROCESS BY WHICH MILES was whirled away after that, to the

University Hospitals where they left Marie sleeping, to the airport, by jet to Washington, by blue civilian sedan there to a large building which he dimly recognized as the Pentagon, and within the Pentagon to a suite of rooms more resembling a hotel suite than anything else—all this passed like the succeeding shapes of some bad dream. And after all the rushing was over, after he had at last been settled down in the suite of rooms, he discovered that he had nothing to do but wait.

The two men who had picked him up in Minneapolis and brought him here, stayed with him through the dinner hour. After the dinner cart with its load of clinking empty plates and dirty silverware had been wheeled out again, the two men watched television, with its endless parade of announcers, throughout the evening—the sound turned low at Miles' request. While Miles himself, after prowling restlessly around the room and asking a number of questions to which his guardians gave noncommital answers, finally settled down with a pencil and some note paper to kill time making sketches of the other two.

He had become lost in this, to the point where he no longer noticed the murmur of the television or the passage of time, when there was a knock at his door and one of the guards got up to answer. A moment later Miles was conscious that the man had returned and was standing over him, waiting for him to look up from his sketching. Miles looked up.

"The President's here," said the

guard.

Miles stared, then got hastily to his feet, putting his sketches aside. Beyond the guard, he saw the door to his suite standing open, and a moment later heard the approach of feet down the polished surface of the corridor outside. These came closer, and closer. A second later, the man Miles had been watching on television earlier that day walked into the room.

In person, the Chief Executive was not as tall as he often appeared in pictures—no taller than Miles himself. Close up, however, he looked more youthful than he appeared in news photos, and on television. He shook hands with Miles, with a great deal of warmth; but it was something of the warmth of a tired and worried man, who can only snatch a few moments from his day in which to be human and personal.

He put a hand on Miles' shoulder and walked him over to a window that looked out on a narrow strip of grass in what appeared to be a small, artificial courtyard under some kind of skylight. The two men who had been with Miles, and the others who had come with the Chief Executive, quietly slipped out the door of the suite, and left the two of them alone.

"It's an honor . . ." said the President. He still stood with his hand on Miles' shoulder, and his voice was deep with the throatiness of aging years. "It's an honor to have an American be the one who was chosen. I wanted to tell you that, myself."

"Thank you . . . Mr. President," Miles answered, stumbling a little over the unfamiliar words of

the title. He burst out then in spite of the urging of courtesy. "But I don't know why they'd want to pick me! Why me?"

The older man's hand patted his shoulder a little awkwardly, even a

little bewilderedly.

"I don't know, either," murmured the President. "None of us knows."

"But—" Miles hesitated, then plunged ahead, "we've only got their word for everything. How do we know it's true, what they say?"

"We don't know," the older man said, looking out at the grass of the artificial courtyard. "That's the truth of the matter. We don't know. But that ship of theirs is something—incredible. It backs up their story. And after all, they only want—"

He broke off, looked at Miles, and

smiled a little apologetically.

Miles felt a sudden coldness inside him.

"You mean," he said slowly, "you're ready to believe them because they only want one man? Be-

cause they only want me?"

"That's right," said the Chief Executive. He did not pat Miles on the shoulder now. He looked directly into Miles' eyes. "They've asked for nothing but one man. And they've shown us some evidence—shown us heads of state, that is, some physical evidence from the last time the Horde went through the galaxy, a million years ago. We've seen the dead body, of one of the Hordepreserved, of course. We've seen samples of the weapons and tools of the Horde. Of course, these could have been fakes-made up just to show us. But Miles-" He paused, still keeping Miles' eyes locked with

his own. "The best guess we can make is that they're telling the truth."

A chilling loneliness descended upon Miles. It seemed as if the President's words had lifted him up and transported him off, far off, from all humanity into an isolated watchtower, to a solitary sentry post far removed from all the rest of humanity. He, too, turned and looked out at the little strip of grass. Suddenly, it looked greener and more beautiful than any such length of lawn he had ever gazed upon in his life. It seemed infinitely precious.

"Miles . . ." he heard the older

man say.

He lifted his head and turned to see the President facing him once more, with his hand outstretched.

"Good luck, Miles," said the Pres-

ident.

"Thank you." Miles took the hand automatically. They shook hands, the Chief Executive turned and walked away across the room, and out the door, leaving it open. The two treasury agents who had picked up Miles originally, came back in, shutting the door firmly behind them. They sat down again without a word, near the TV set and turned it on. Miles heard its low murmur, again in his ear.

Almost blindly, he himself turned and walked into one of the two bedrooms of the suite, closing the door behind him. He lay down on the bed, on his back staring at the white ceiling.

He woke suddenly—and only by his waking was he made aware of the fact that his drifting thoughts had dwindled into sleep. Standing over him, alongside the bed, were two figures that were vaguely familiar, although he could not remember ever having seen them before in his life. Slowly, he remembered. They were the two, still business-suited figures that had been shown on the television screen as he and Marie had watched the President's broadcast in the bar. Suddenly he understood. These were the two aliens from the monster ship that overhung Earth; under a sun that they had colored red to attract the attention of all the people on the world to the coming of that ship.

Reflex, the reflex that brings an animal out of sound sleep to its feet, brought Miles to his. He found himself standing almost between the two aliens. At close range their faces looked directly into his, no less human of feature or color or general appearance than they had looked before. But this close, it seemed to Miles that he felt—like an emanation from them—something too-still, too-composed, to be human. —And, yet, the eyes they fixed upon him

were not unkind.

—Only remote, as remote as the eyes of men on some high plateau looking down into a jungle of beasts.

"Miles—" said the one on his left, who was slightly the shorter of the two. His voice was a steady baritone—calm, passionless, distant. "Are you ready to come with us?"

Still fogged by sleep, still with his nerves wound wire-tight by the animal reflex that had jerked him up out of slumber, Miles snapped out what he might not have said otherwise.

"Do I have a choice?"

The two looked steadily at him.

"Of course you have a choice," said the shorter of the two, calmly. "You'd be no good, to your world or to us, unless you want to help us."

Miles began to laugh. It was harsh reflexive laughter that burst from him almost without intention. It took him a few seconds to get it under

control, but finally he did.

"Want to?" he said—his real feelings bursting out, in spite of himself. "Of course I don't want to. Yesterday I had my own life with its future all planned out. Now the sun turns red, and it seems I have to go to some impossible place and do some impossible thing—instead of what I've been planning and working toward doing for five years! And you ask me if I want to!"

He stared at them, checking just in time the bitter laughter that was threatening to rise inside his throat again. They did not answer.

"Well?" he challenged. "Why

should I want to?"

"To help your race live," answered the shorter one, emotionlessly. "That's the only reason that will work. If you don't want that, then we've been wasting our time—and time is precious."

"You mean—" Miles looked narrowly at him. "You wouldn't choose

somebody else?"

"There's no one else to choose," said the shorter one. "No one, that is, who'd be worth our time to work with. If you don't want to go, we'll leave."

"Wait—" said Miles, as the two turned away. They stopped, and turned back again. "I didn't say I wouldn't," said Miles. "It's just that I don't understand anything about all this. Don't I have a right to have it explained to me, first?"

"Of course," answered the taller one, unexpectedly. "Ask us whatever

you want to know."

"All right," said Miles. "What makes me so different from every-body else in the world, to make you

pick me?"

"You have a capability for identification with all the other people in your world," answered the short one, "that is far greater than that of any one else alive on that world at this present moment."

"Understand, we don't say," put in the taller one, "that at the present moment you've got this identification. We only mean that the capacity, the potential to have it, is in you. With our help that potential

can be developed."

"Your race's representative against the Horde has to have this identification," said the shorter one. "Because you're going to need to draw upon their sources of—" he hesitated, and then went on, "of something that they each possess so far only in tiny amounts. You must combine these tiny amounts in yourself, into something large enough so that you can effectively operate the type of weapon we will be giving you to use against the Horde."

He stopped speaking. For a moment Miles' mind churned with the information that had been given him. It sounded sensible, but he felt unexpectedly stubborn.

"How do I know this is all going to be for the benefit of human beings

anyway?" he asked. "How do I know that it's not a case of our not being in danger at all—but your needing me and whatever this thing is that everybody has a little bit of, just for your own purposes?"

Their faces did not change as

they gazed at him.

"You'll have to trust us on that point," said the taller one, quietly.

"Tell me one thing, then," said Miles, challenging him. "Do you really look just like human beings?"

'No," said the smaller one, and the word seemed to echo and re-echo in the room. "We put on this appearance the way you might put on a suit of clothes."

"Trust us or not," said the taller one. "If your world contributes a representative to the galaxy's defense, that will entitle it to whatever protection all our galaxy's defensive forces can give it. But your contribution is tiny. One of our people has fighting abilities worth many times that of the total population of your world. So, to us it's a small matter whether you join us or not. Your help counts—because the slightest additional bit of strength may be enough to swing the balance of power between the Horde and ourselves. But it is small to us, no matter how big it seems to you."

"In short," put in the smaller one, "to us, you represent a fraction of a single individual defender like myself, against the Horde. To yourself, you represent several billions of your people. The choice is up to you."

"If we're just one isolated little world, away out here," said Miles, with the uneasy suspicion that he was clutching at straws, "and not worth much, why should the Horde bother with us at all?—If they're so many of you worth so much more in towards the center of the galaxy?"

"You have no understanding of the numbers and rapacity of the Horde," said the smaller one. "Sup-

pose we show you a picture."

Instantly the room was gone from around Miles. He stood in the midst of dirt and rock—an eroded desert stretching to the horizon. Nowhere was there an intelligent creature, an animal—or even any sign of a bush, or tree, or plant. There was nothing—nothing but the raw surface of a world.

Suddenly he was back in the room

again.

"That is what a world looks like after the Silver Horde have passed," said the shorter one. "The Horde processed everything organic for food. Their numbers are beyond your imagining. We could give you a figure, but it would have no real meaning for you."

"But," said Miles, suddenly and sharply, "if the Horde came through the last time, and cleaned off all the worlds that had life on them, how is it there are records like this?"

"We've never said that all the galaxy's worlds would be ravaged by the Horde," said the taller one. "Some small percentage will escape by sheer chance. Even if we fight and lose some of the ships that oppose them will escape, even from battle with the Horde. And these will begin to populate the galaxy again. So it was, the last time, millions of your years ago, when the Horde came through. Those who lived here before us in the galaxy's

center met them as we will meet them; and fought them, and lost. For a million years after that, the Horde fed its numbers on the living worlds of our galaxy until the pickings became so lean they were forced to move on. But as I say, some ships eluded them. Here and there a world was missed. After the Horde had passed, civilization began over again."

"But even if I go, you say I may make no difference in stopping the Horde," said Miles, "and if I stay, our world may be one of those that the Horde somehow misses, any-

way."

"This is perfectly true," said the smaller one. They both looked at him impassively. "But as I said earlier, our time is precious. You'll have

to give us your answer now."

Miles turned and looked out the bedroom window, which also looked on the small strip of grass of the interior courtyard. Beyond the strip of grass was a bare concrete wall. He looked at that and saw nothing in it—no mark, no shape. It was nothing but a featureless wall. Equally blank was the reaction he felt within him toward the rest of the world. In spite of what Marie had said, in spite of what these aliens seemed to think, it was not people that mattered to him—but painting.

Suddenly it pounced upon Miles, like a lion from the underbrush, the realization that it was not merely the continuance of his work, which was at stake here—but the very possibility of that work existing at all. If he should stay here and paint, refusing to go with these two—and then the Horde came by to wipe out

his world, and his paintings with it, what good would any of his painting have done? He had no choice. He had to defend the unborn ghosts of his future canvases, even at the risk of never being able to paint them.

He turned to the two aliens.

"All right," he said. "I'm with you."

"Very well," said the shorter one. Miles' acceptance had not altered the expressions of their faces, or the tones of their voices, any more than anything else he had said or done.

"What do I do, then?" asked Miles. "I suppose we go to your

ship?"

"We are already in the ship," said the shorter one. "We've been in it ever since you agreed to join us."

Miles looked about him. The room was unchanged. Beyond the little window, the strip of lawn and the further wall of the interior courtyard was unchanged. He turned to see the two aliens moving out of the bedroom into the sitting room of the suite. He followed them, and stopped short. The two treasury agents were gone, and where there had been a door to the Pentagon corridor there was only wall, now. The aliens waited while he stared about him.

"You see?" said the shorter one, after a moment.

"There's no door," Miles said

stupidly.

"We don't use doors," said the aliens. "Soon, neither will you. This suite will be yours until we deliver you to the Battle Line. Now, if you'll come back into the bedroom, we will begin your development."

Once more they led the way back into the bedroom. They stopped by the side of the bed.

"And now," said the shorter one, "please lie down on your back on the bed."

Miles did so.

"Please close your eyes."

Miles did so. A great silent song of comfort and reassurance seemed to be enfolding him, buoying him up—lifting him up, in fact, like the crest of a wave on an endlessly, peacefully rocking ocean. He mounted the crest and slid slowly down into the next trough. The darkness moved in on him. He gave himself up to the rocking comfort.

When he woke it was daylight—
or its equivalent—once more beyond
the windows of his bedroom. Daylight—not red as the daylight had
been since the moment of his painting on the river, but cheerful, yellow daylight, filled the interior
courtyard via the skylight. He looked
around the room, and saw the two
aliens standing not far from the bed,
side by side, watching him.

Slowly he became conscious of himself. He felt strangely different, strangely light and complete. So lacking in the normal little pressures and sensations was he, that he glanced down at himself to see that his body was still there.

It was. He lay on the bed, wrapped or dressed in some sort of metallically glinting silver clothing that fitted him closely, covering all but his hands and his face. His body had never felt this way before. His mind had never felt the same—for that matter. His head was so clear, so free of drowsiness and dullness

and all the little hangovers of human tiredness, that his thoughts seemed to sing within it. He looked again at the two aliens.

"You can get up now," said the

smaller of the two aliens.

Miles sat up, swung his legs over the side of the bed and rose to his feet. The sensation of his rising was indescribable. It was almost as if he floated to his feet, without muscular effort. As he stood facing the two aliens, the feeling of lightness of his body persisted. He felt, although his feet were flat on the floor, as if he was standing on tip-toes, with no effort involved.

"What's happened to me?" he

asked, wonderingly.

"You are now completely healthy. That's all," said the taller alien. "Would you like to take a look at yourself?"

Miles nodded.

He had barely completed the nod, when the wall behind the two aliens suddenly became a shimmering, mirror surface. He saw himself reflected in it, standing beside the bed, wrapped in his silver, close-fitting clothes; and for a moment he did not recognize himself.

The man who stood imaged in the mirror was erect, straight-limbed and looked bigger—bigger all over in some strange way—than Miles had remembered his mirror image ever looking before. But it was not this so much that caught at Miles' breath as he looked at himself. There was something drastically different about him now. An icy feeling of excitement ran down his spine.

In the tight, silver sleeve that en-

closed it to the wrist, his left arm was as full-muscled and large as his right. And the hand that terminated it was in no way different from the healthy hand at the end of his right arm. Slowly, almost dazedly, he turned his eyes forward to the two aliens.

"My arm-" he said.

"Of course," said the small alien. Miles turned back to the mirror surface. Hesitantly he lifted his good right arm to feel the left hand and arm. They were solid and warm, alive and movable, under the fingertips of what had been his lone good hand. A bubble of joy and amazement began to swell within him. He turned once more to the aliens.

"You didn't tell me about this," he said. "You didn't tell me my arm

would be fixed."

"It was of a piece with the rest," said the taller alien. "Now, it's time for you to start to become charged with the identification-sense of your fellow humans."

Miles stared at him with interest. "Shall I lie down on the bed

again?" Miles asked.

"No," said the taller alien. "This next is nothing we can do for you. You have to do it all yourself. You've been away from the surface of your world for two and a half days now. During that time, the people of your world have been informed through all possible news media that soon you'll be back, and moving about among them. They've been told, if they see you, not to speak to you or show any awareness of you. They're simply to let you wander among them, and treasure up in their minds the sight of you."

"That's all I do?" demanded Miles.

"Not quite all," said the smaller of the two. "You have to open your inner consciousness to their sense of identification with you, and what you'll be doing in their name. You must endeavor to feel toward them, as they feel toward you. You must learn to consider them precious."

"But where do I go first? What

should I do?" Miles asked.

"Simply—wander," the shorter alien said. "Do you know a poem called *The Ancient Mariner?* Written by a man named Coleridge."

"I've heard it," said Miles.

"Then maybe you remember the lines with which the Ancient Mariner explains his moving about the Earth to tell his story."

". . . I pass, like night, from

land to land;

"I have strange power of speech . . ."

". . . You will find," went on the smaller of the two aliens, "that it'll be with you something the way it was with the poem's Ancient Mariner. If you want to move from one place to another, you only need to think of the place you want to be, and you will be there. You'll find that no locks will be able to keep you out of anyplace you want to enter. No walls will bar you. The people of your world who can be reached by the news media have been warned to expect this. They have been told to expect you anywhere—even in their own homes. They have been asked to cooperate by ignoring you when you appear suddenly among them."

"What if they don't ignore me?"

asked Miles. "Your asking them to do it doesn't guarantee they will."

"Those who don't ignore you," said the taller alien, "won't be offering you the necessary identification you are out to gather from as many of your race as possible. So remove yourself from the presence of anyone who does not cooperate, because you will be wasting your time with whoever it is. As far as any inimical actions are concerned, you'll find that while you can touch anything you like, you can't be touched or hurt by anything, unless you wish it—and this includes anything that might harm you-right up to and including your race's nuclear weapons. Nothing can hold you, and nothing can harm you."

He fell silent. Miles stood, uncer-

tainly for a moment.

"Well," he said, at last. "Should I

go now, then, and start?"

"The sooner, the better," said the taller alien. "Simply think of the spot on the surface of the Earth you want to be, and you'll be there."

"And when should I come back?"

asked Miles.

"When you've gathered together an identification-sense with enough of your fellow humans, you'll know it," said the shorter alien. "Simply decide then to come back here to the ship, and you'll be here. Then we'll leave together for the Defense Line that's being set up outside the spiral arm of the galaxy, to meet the Silver Horde."

"All right . . ." said Miles, slowly. He felt strange. It was as if everything that had happened to him had happened within a few moments. At the same time, he was surprised to feel that he was not overwhelmed by it all. Now, particularly since he was in this rebuilt, newly perfect body of his, all that the aliens said seemed entirely natural and all that he had to do seemed entirely normal.

He wondered where on Earth it would be best to go to first. While he was still wondering, a stray impulse made him look once more into the mirror image of the wall. He saw himself there, and he could not help smiling at what he saw. He turned back to the aliens.

"I'm a new man, all right," he

said to them.

For the first time since he had met them, Miles saw one of them shake his head. It was the shorter alien.

"No," said the shorter alien. Neither of them were smiling back. "You're not a new man. You're Everyman."

5

E HAD BEEN PUZZLING OVER the point at which he wished to arrive first on his return to Earth, but at the last minute it proved to be no trouble whatsoever. He stood now in darkness in a small room. The blind was drawn nearly all the way on the single window. Below it the window had been raised a little, and the white curtains waved sleepily in the soft inrush of cool night air. The girls in the dormitory were normally assigned two to a room, but Marie, as a counselor, had a room to herself. Looking about, he saw her now, a still figure under the covers of the bed in one corner of the room.

He walked softly over toward her

and looked down at her sleeping face. She slept on her side, her pale features in profile against the white pillow.

"Marie," he said softly.

She did not waken. He repeated

her name, a little more loudly.

This time she stirred. Her hand drew back down under the covers, but her eyes did not open. He reached out one hand to the switch of the bedside lamp on the small table only a foot or so from her face. Then he changed his mind, and his hand drew back. To waken her to the sudden glare of the lamp seemed too much of a shock.

He looked over at the slight rectangle below the shade where the window was open. An inspiration came over him. He thought of the light, the pale light coming in through that opening, as gathering and strengthening in the room; and as he watched, it built up around them. Either that—or his eyes became accustomed to the dimness—he was not quite sure.

"Marie—" he said, bending over and murmuring directly into her ear.

She stirred again, and this time, her eyes blinked and then sleepily opened. For a moment they stared at him without recognition, and then they flew wide.

"Miles ..." she whispered.

"Marie—" he said. He bent over and kissed her. And her arms went up and around his neck, at first softly and then fiercely holding him. For a moment, they clung together, and then he drew back, loosening her arms but holding her hands with his own hands as he sat down on the edge of the bed. "Marie," he whispered. "Never mind what you've been hearing people on Earth should do. Talk to me."

"Yes, Miles," she said, and her mouth curved in a slow, oddly tender, smile. "You came here to me," she said.

"I had to accept, Marie," he said.
"There wasn't anything else for me
but to agree to do what those two
said."

"I know," she murmured, looking at him through the dimness. "Oh, Miles! You came to me!"

"I had to see you first," Miles said, still holding her hands. "I wanted you to know all about it, before I—" he hesitated, "went ahead with all of it."

She lay looking at him in the faint but pervasive light he had increased from the slightly open window.

"What're you going to do now?" she asked him.

"I don't know—" he said. "What I'm supposed to do, I guess. Roam around the world and see if I pick up some kind of a charge from the people I meet and see."

Her hands tightened on his.

"How long will you do that?" she asked softly.

"I don't know," he answered.
"The aliens said I'd know when I was ready. According to them, I don't think it's supposed to take too long. They kept talking about the fact that time was precious."

"Maybe you shouldn't be here talking with me, then," she said, but her hands held as tightly to him as ever.

"Maybe not . . ." he echoed. And, strangely, once he had said it,

the feeling of urgency began to grow inside him, as if somewhere within himself he contained the knowledge that time indeed was precious. The knowledge that he must not waste it, as he was wasting it now.

"I guess I've got to go," he said. He released his fingers from her grip, which held on tightly for a second more, and then let him go.

"But you'll come back?" she asked, as he stood up beside the bed. He saw her face, by the trick of the shadow in the room seeming to lie far below him, instead of merely an arm's length away.

"I'll come back," he answered.

"I don't mean before you leave—" she said, quickly. "I mean afterwards. You'll come back, safely?"

"I'll come back safely, all right," he said. And with the words a strange, bright, animal-like anger seemed to kindle inside him; a deep, white, atavistic fury, a determination that he would come back—in spite of anything.

He bent over and kissed her once more, then released the arms she had locked around his neck, and stood up erect again.

"Goodbye," he said; and willed himself to be on the sidewalk before the dormitory.

Instantly, he was there.

He turned and walked off a little from the light of the entrance into the shadow of the Norway pines lining the driveway. He wondered what to do first. Where to go? With all the world to choose from, he found himself confused by the countless numbers of places he might visit. Finally, he threw it all from his mind, and chose at ran-

dom. He had never been to Japan. He thought of Tokyo.

Abruptly, he was there. It was bright morning. He stood on a crowded street and passersby flowed about him, as if he were a rock caught in a stream. The buildings were all Western-looking. The people he saw were all in Western dress. Only the rattle of their voices, sounding high-pitched and unfamiliar gave a touch of strangeness to the scene. Then, it was as if his mind broke through a thin film like a soap bubble that enclosed him—and he found himself understanding what they were saying.

He stood listening, and watching those who came by for any reaction to his appearance there, dressed in his strange, close-fitting suit of silver. But, although eyes glanced at him, they glanced away again. For a moment he was astonished that the response of the people in the world should be so strongly conditioned by the instructions of the aliens. And then something that came to him by the same route as his understanding of the Japanese words being spoken around him, told him that it was as much politeness as anything else, that was keeping the gazes of those about him from lingering on him. He began to walk down the street.

As he went, be began to lose the first self-consciousness that had wrapped him on finding himself in the middle of the crowd, dressed as he was. The understanding and communication he seemed to be holding with the people about him, just below the level of consciousness, grew stronger as he passed among them. He was conscious of feeling

their presence about him, as if some hidden radar-like eye was registering their presence over and above the impressions of sight and sound and smell that touched his sensory nerves. It was like something felt and something heard at once—so that as he became accustomed to it, and—in a sense—opened himself to it, he felt it like a great, soft, sad roar of sound; a sort of voiceless music reflecting the character and the spirit of the people about him.

The flavor of that soundless sound, that inner feeling, that flowed from them as a group, reached in and touched him deeply. And now that he devoted his attention to it, he began to distinguish in a sense, to touch—individual between the threads pattern. Threads that were individual emotional responses or empathies—he did not know the right word for whatever they might be, but he felt them, like living things under his fingers. Also, now that he had picked out these individual feelings, he could feel that from each one he touched in this manner, he himself gained a little bit. He felt himself drawing knowledge and strength from them as the sun sucks up moisture from the surface of a body of water.

But after a while, he began to reach the limit of that absorption. His mind took him to London, to a street down which he had walked on a trip several years before—a street entering Piccadilly Circus. It was Regent Street, and the pale light of dawn was just beginning to wash the faces of the buildings along its curving length. There were

few people about, but from these, he received strongly and clearly. Again, again, again... always what he felt, or tasted, or heard within him was different. But now he knew what he was looking for, and from this point on he began his pilgrimage about this world of his birth.

He roamed it, his world, from a Spanish hillside to a Yukon lumbering camp, from the mountains of Mexico to the streets of Brasilia, to Capetown, to the African jungle, to Bokhara, to Moscow and the Russian steppes.

He walked down the streets of Helsinki. He drifted in the thin air above the sharp mountains that divide Genoa from Milan. skimmed a few feet above fishing crafts in the blue harbors of the north Mediterranean shore. Daylight and dark, all the hours of light and shade and weather and seasons flickered about him, like the changing slides of scenes shown on a screen by a slide projector. And gradually, these scenes blended together. Light and dark, north and south, land and sea, winter and summer, yellow, black, brown and white and red-all peoples, places and all times wove themselves into a tapestry of feeling that was the over-feeling of the people of Earth, and of Earth itself.

But by the time he had achieved his tapestry of feeling, some days had passed. He floated at last, once more above the point where the Mississippi and the Minnesota Rivers joined, and the Twin Cities of St. Paul and Minneapolis lay together. This had been his starting place. He was aware now for the first time, that since his beginning—how many days ago?—He had not felt any need for food, or drink or sleep. The only need he had felt was the need that had grown upon him to know and understand the people he surveyed. Now it was almost done.

He had grown in knowledge, in his traveling. He understood now, what he had felt in a cruder sense, when he had first realized that if the Horde destroyed the world, his paintings might as well have never been painted. He felt a strong thread now—not thread—cord, for it was woven of all the threads of feeling he had gathered from individuals about the Earth—connecting anything he did with the people of Earth.

In a sense everything that was made or done by any member of the human race belonged to the race. This was something he had never understood before. But, he reminded himself now, Marie had known it—or at least she had sensed it, and tried to tell him that night of the day in which the sun had turned red.

His time was up. He looked away from the Twin Cities, from Marie and, lifting his head, looked in his mind's eye out to the alien space ship.

He stood in the living room of the suite that he had first entered in the Pentagon. The two aliens stood facing him; the shorter one waved a hand at one wall of the room. Miles looked at it, or through it—he was not sure which—and saw the sun,

changing back as he watched from its red to a normal yellow color; and below it, the Earth, blue under that yellow light. As he watched, the blue globe that was the Earth began to shrink.

Abruptly, all space began to move. The lights of the stars lengthened out and became streaks. They became fine bars of light extending in both directions.

"Where to now?" asked Miles.

"To our Defense Line, beyond the spiral arm of the galaxy," answered the shorter alien.

Even as he spoke, Miles felt a sudden sense of disorientation—a strange feeling, as if, in less than no time at all, he had suddenly been wrenched apart, down to the component parts of his very atoms, and spread out over inconceivable distances, before being—in the same infinitesimal moment—reassembled again at some far distant place.

"First shift," commented the taller alien. "At the best we can do, there will be five more like that with necessary time for calculation between."

All in all, it took what Miles estimated to be something like a week and a half of interior time aboard the ship, before they finally reached the Defense Line toward which they were heading.

They came out, not at the Line itself, but some hours of cruising time away from it. This, Miles was given to understand by the shorter alien, was because of the safety factor required in the calculations of a shift. For a shift brought them only approximately to the destination they had figured, and to calculate without a margin of safety

might mean coming out in the space occupied by some other solid body.

As it was, it took several hours of moving through curiously starless space, before Miles began to pick out what seemed to be a star, a single star, far up ahead of them.

As they grew close to this however, it began to take on the disc shape and yellow color of a sun, like

the sun of Earth.

"No," said the shorter alien, standing beside Miles in the large, almost featureless room with the large screen which seemed to be the pilot room of the aliens' ship. Miles looked at him. Miles was becoming used to having his thoughts answered as if he had spoken them aloud.

"It's not a real star," went on the smaller alien. "It's an artificial sun—a lamp we've set up here to light our battle line for us when we meet the Horde."

"Where's the Defense Line?"
Miles asked.

"It ought to be in view in a few minutes," answered the shorter alien.

Miles turned to look at the other. In spite of the change that had taken place in him, and in spite of the fact they had been together aboard the ship now for some days, he had gotten no feeling of response from the two aliens. It was as if they were wrapped around, not merely with human appearances, but with some sort of emotional and mental protective device that kept him from "feeling" them the way he had left the people of his own world, as individuals. It struck Miles now, that from the first he had had no

names for the two of them. They had simply been the taller and the shorter, in his mind; and that whenever he had spoken to one, the one at whom he directed his words seemed instinctively to know the responsibility to answer.

"What are you people like, in there toward the center of the galaxy?" Miles asked now, looking down at the other. "I don't think I ever asked you." The alien did not turn his head, but kept gazing into the screen as he answered.

"There's nothing I can tell you," he said. "Even if I could explain us to you, you wouldn't understand. Even if you could understand what we're like, knowing it would only frighten and disturb you."

A little anger stirred in Miles at this answer. But he held it down.

"Don't tell me you know everything, you people?" he asked.

"Not everything," answered the alien.

"Then there's always the chance that you might be mistaken about me, isn't there?" said Miles.

"No," said the alien, flatly.

He did not offer any further explanation. Miles, to keep his anger under control, made himself drop the subject. He turned back to watching the screen. After some minutes, during which the orb of the distant sun-like lamp continued to swell until it was very nearly the size of the Sun as seen from Earth, he began to catch sight of glints of reflected light, forming a rough bar across the lower part of the screen.

"Yes," said the alien beside him, once more answering his unspoken question. "You're beginning to see

part of the ships, the supply depots and all else that makes up our Defense Line."

As they got even closer, the Line began to reveal itself as visible structures. But even then, Miles discovered, the screen could not hold any large part of it in one picture. With a perception he suddenly discovered he now possessed, Miles estimated the Line to stretch at least as far as the distance from the Solar System's Sun to her outermost planet.

Miles had assumed that they were fairly close by this time. But to his intense surprise they continued to drive onward at a good speed, and the ships continued to swell on the screen before him. It was some seconds before he realized that the ships they were approaching were truly titanic in size, as large in proportion to the ship he was on, as the ship he was on would have been to a four engine commercial jet of Miles' native Earth. These great ships were certainly no less than several thousand miles in diameter.

"If you want a word for them," the alien beside Miles answered his unspoken thought, "you might call them our Dreadnaught class of fighting vessel. Actually, they're not fighting vessels the way you'd think of them, at all. They're only vehicles to carry a certain critical number of our own people, who will use their personal weapons upon the Horde when the Horde gets within range. Without our people inside it, that ship you see is a simple shell of metal and not much more."

"I'll take you now to your position on the Line," said the taller alien. For several hours they slid at high speed past globe-shaped vessels of varying size, from the enormous bulk of the Dreadnaught down to the ships smaller than the one Miles was on. As they approached the far end of the Line, the ships grew progressively smaller. Also their shape changed. No longer were they all globular. Many of them were rod, or cigar-shaped.

"These are the ships," the taller alien explained to Miles, without being asked, "of those outlying races, who prefer to fight in their own way and with the ships they have built themselves, and with which they are familiar. Because they're effective, we let them do this. You, and those you'll be joining, will fight in ships and weapons we supply."

In silence they moved on, until the ships dwindled to the point of being very small indeed; until finally the point was reached at which the ships, instead of hanging in space beside the raft-like structures which evidently held their supplies and material, were small enough to lie upon those rafts. Still they went on, until they came at last to what seemed to be the end of the Line.

Here, on a raft several times the size of a football field, lay a ship hardly any bigger than a nuclear submarine of Earth. The larger ship holding Miles and the taller alien, stopped perhaps half a mile from it.

"Now," said the taller alien—and without warning he and Miles were transported to the raft.

Miles found himself standing on a metal surface, at the foot of a metal ladder leading up to an open doorway in the side of the ship. The doorway was dark, in contrast to the light outside from the distant sunlamp. Miles could not see what

might be inside.

"This ship," said the taller alien, quietly, "is the smallest of our scout ships. It is staffed by twenty-two individuals, each a representative of a world like your own. You will become the twenty-third, and last individual to make up its crew. In the weeks to come, you, with the others, will learn to maneuver it and together use its single weapon. Now, follow me. I'll take you to join the rest of the crew."

The taller alien floated up the ladder. Miles, starting to float behind him, felt an unexpected spasm of stubbornness. Instead of levitating, he seized hold of the ladder and climbed it.

As his head drew level with the entrance, he could see inside. The taller alien was waiting for him in what seemed to be a small room or hatchway with a further entrance beyond. Miles joined him and the alien turned without a word to lead him through the interior hatchway into a large room, furnished with chairs and tables of various sizes and dimensions. Miles walked after him into the light of the room—and stopped abruptly.

The room was full. On its furniture and around its walls, stood and sat a variety of different-appearing beings. All were four-limbed, standing upright on the lower two and with hand-like appendages at the end of their upper pair. They were all roughly the same size and proportion and general shape. But there was tremendous variety.

No two of them had the same

skin color. No two of them had the same facial appearance. All had roughly similar features, as far as possessing two eyes and a single nose and a mouth was concerned. But from there on everything was different. Their appearance ranged from that of the completely innocuous, to the completely ferocious—from one being who seemed as round and inoffensive as a toy bear to one who seemed a walking tiger, equipped with a pair of ripping teeth projecting over his lower lip from the upper jaw.

"Members of this ship," said the alien, stepping aside to let them all see Miles. "Let me introduce you to your new fellow crew-member, who on his own world is known as Miles Vander."

He spoke in a tongue Miles had never heard before but which Miles found he understood, as he had earlier understood all the various languages of Earth.

He turned back to face Miles.

"I'll leave you in their hands," he said in English. And disappeared.

Miles looked around him.

Those of his new fellow crewmembers who had been seated about the room, were now getting to their feet. Those who were on their feet were moving forward.

"Well," said Miles, speaking in the language he had just heard,

"I'm glad to meet you all."

There was no response. They continued to close in on him, making a tight circle, with no space between any of them. Now he sensed it—There was an atmosphere in the room of savagery and blood lust, of anticipation and fury. They closed

in silently like wolves about a stranger wolf, the one with the tiger-like features moving in directly before Miles and directly toward him.

The tiger-like being came on. Even when the others stopped, now locked in a tight ring around Miles, he came on until he stood only at

arm's length from Miles.

"My name is Chak'ha!" he said. He spoke the common language in a growling throaty combination of sounds that no human vocal apparatus could have originated or imitated; but Miles understood him perfectly.

—And, even as he said it, Chak-'ha launched himself, claw-like nails outstretched, tusks gleaming, at Miles' throat; and Miles went down

under the attack.

6

As HE FELL BACKWARDS WITH the being called Chak'ha on top of him, Miles felt panic, like a cold jagged knife ripping upward through his belly towards his throat.

For a moment he froze, staring up at the toothed face snarling down into his own. Then, out of something deep within him came a counteracting mingled fear and fury, as primitive and brutal as the attack upon him. Suddenly, he was fighting back.

It was a simple, instinctive animal-like battle. They rolled upon the metal deck together, fighting, scratching, biting and digging at each other with every nail, tooth, or bony extremity that could be used as a weapon. For some seconds, for

Miles, there was nothing but this. He had awakened into an instinctive rage out of simple fear for his life. But just as the rage had followed fear, now something beyond rage followed again.

Suddenly he found that he did not care what Chak'ha was doing to him as long as he was able to continue what he was doing to Chak'ha. The adrenalized passion of destruction filled and intoxicated him.

He had his hands now around the thick-skinned, leathery throat of Chak'ha, his thumbs digging in. Chak'ha's sabre teeth and claws were slashing him wildly, but he felt no pain—he was only dimly aware of the blood running from his many wounds. Die! Die!—His mind shouted at the alien, as he tried to tighten his grip on the other's windpipe, wherever in that thick neck it might be . . .

But Chak'ha was not dying. He was continuing to slash at Miles, and gradually Miles began to realize that his own grip was weakening. He became aware that he was losing blood too fast. He was failing.

A cold inner wind blew suddenly across his hot passion for killing. It was not the alien who was in danger of dying—it was himself. Something deeper than panic moved in him, and suddenly he remembered all that for a moment he had forgotten. Marie, the paintings he had yet to do, the people of his Earth. His grip was slipping weakly from Chak'ha's neck now—but he could not afford to die!

Without warning, for the second time in his life, he went into a state of hysterical strength. Suddenly, the tiger-faced alien was a toy in his hands. Chak'ha had already pulled loose from Miles' grip on his throat, and half-turned away. But Miles caught him again now, easily. Miles turned him, slid one arm beneath Chak'ha's right armpit, and the other under the alien's left armpit, then clasped his hands together and pressed. The neck of Chak'ha bent like a straw-filled tube of leather and there came from it a creaking sound . . .

—Abruptly, a strange gray fog seemed to fold itself about the mind and body of Miles. Dimly, he was aware that it was nothing his opponent had done; nor was it anything that had been done by any of those standing in a tight circle around him and his enemy. It was something that seemed to come from the ship itself, or from something

beyond the ship.

Unexpectedly, the fires of his hysteria were smothered. His muscles lost their strength. He was aware of his arms falling limply away, his fingers loosening and losing their grasp together behind the neck of Chak'ha. Like a man under heavy sedation he rolled off the back of his opponent, and lay lost in the gray fog, which deepened into blackness . . .

When he woke at last, it was a gradual awakening. He felt that he had been asleep for some time that was not a short time. He lay on a bunk. He lifted his head now to look at himself, the deep bites and scratches—in fact all the injuries he had taken in his battle with Chak'ha—were already scabbed over

and healing. He felt weak; but aside from this, and aside from the aches, which were no worse than those after a hard game of football as he remembered it from his junior high school days, he felt as well as ever.

He turned his head. Across the width of the small room from him, on another bunk, was the tiger-faced alien. Chak'ha was also awake and looking back at him. The other's two tusks glinted in the illumination from the lighting panel overhead. It was impossible to read Chak'ha's expression, but even with the weakness and the aches, Miles felt gathering once more within him the white heat of that lustful joy of killing he had experienced during the fight.

He grinned at Chak'ha, challengingly. But the other dropped his own gaze.

"Do you jump everybody who comes aboard here for the first time?" asked Miles. Chak'ha lifted his gaze.

"No more," he answered. "This boat is full now. You were the last. Now I'm last."

There was something odd about the meaning of the word of their strange common shipboard language which Chak'ha had used to give the meaning of "last". It was as if Chak'ha said "last", but at the same time also gave it the meaning of "least". It was a subtle, but undeniable connotation that Miles could not quite pin down, for the odd reason that he found he knew this strange language too well.

"What do we do now, then?"
"Do?" answered Chak'ha. "Noth-

ing. What's there to do?"

He dropped back on the bed, and rolled over on his back staring at

the ceiling of his bunk.

Puzzled, but curious, Miles made an effort to get up. Wincing, he managed to get his legs over the edge of the bed and rise to his feet. He was stiff and sore, but, he decided, certainly able with a little bit of will power to make himself get around. He walked stiffly out of the small room and into the corridor outside.

Another member of the crew was passing. It was the round, bear-like alien. Miles stiffened, ready for anything up to and including physical attack. But the rotund alien merely gave him the briefest and the most incurious of glances, and walked on. Miles turned to stare after him, then followed. Now would be as good a time as any to explore this vessel to which he had been assigned.

Gradually he examined the vessel's interior from stem to stern. Astonishingly, it seemed to have no power plants at all—beyond what might lie concealed in the small space below the consoles of the control panel in the bow room of the ship. Beyond this control room, which was set up for no more than three individuals to work in at one time, there were crew quarters, rooms with one to as many as four bunks in them, the number of bunks seeming to vary without reason or purpose from room to room. There was the lounge, which he had first entered, taking up the large middle part of the ship and furnished with a number of different items of what he took to be furniture or recreational devices -among them, he was half amused, half embarrassed to see, was a very earthly overstuffed chair with a small round coffee table alongside it.

Within the rest of the hollow cigar-shape of the ship, Miles discovered twenty of what looked like gun emplacements, ten on each side of the vessel.

In each one of these was what seemed to be a weapon consisting of a gunner's seat joined to a heavy mechanism on a swivel. Hand grips flanked the mechanism on the side facing the gunner's seat, and on the far side there projected toward a bubble-shaped transparency what Miles at first took to be the equivalent of a gun barrel. But on closer examination, he found that it was not a hollow cylinder as any gun barrel with which he was familiar should be. It was a solid rod of metal, in the end of which he could discover not even the pinhole end of a passage for whatever force the weapon expelled.

There were too many questions for him to answer by himself. He needed help. So far, the only one who had spoken to him at all had been Chak'ha. He turned back toward the room in which the tigerfaced alien lay in his bunk, but a feeling of wariness stopped him. Chak'ha was going no place. There would be ample time to ask him questions later. Perhaps, thought Miles, caution placing a hand on his shoulder, it would be to his advantage to see what he could deduce on his own, before exposing his ignorance—even to the one other crew member he had conquered.

He went back to the lounge and sat down in the overstuffed chair he

had noticed there earlier. The minute he seated himself, the small coffee table beside him chimed softly; and silently from nowhere he could see, a cup of coffee materialized, black and steaming, sitting on a saucer in the center of the table.

Miles was not hungry. It came back to him forcefully now, that he had not been hungry-had not in fact wanted any food at all-since the Center Aliens had first altered and improved him. But as the coffee cup appeared, he became conscious that at the back of his mind, as a sort of counterpoint to his bodily stiffness and soreness, he had been thinking about coffee, out of habitual reflex. Curious now, he tested the table once more by thinking about a slice of apple pie. It, too, appeared upon the table, beside the cup of coffee and with a fork on the plate that held it.

But, when he picked the fork up to taste it, a globe of grayness, an opaqueness, formed abruptly about him. Suddenly he was unable to see anyone else in the room. A little alarmed, he put the fork down on the coffee table, and the opaqueness immediately cleared. He picked up the coffee cup and once more the barrier to sight surrounded him.

With that, he understood.

He was to be given privacy while he ate. Either that, or his crewmates were to be protected from the sight of his eating. More likely, thought Miles, it was the latter.

He ate the pie and drank the coffee. As soon as they were emptied, the utensils which had held the pie and coffee disappeared from the coffee table. The opaqueness cleared

from about Miles' chair, and he sat back to watch and observe his crewmates as they passed through, or rested in the lounge.

Within the next three or four hours, as he watched, fully three quarters of the twenty-two other individuals aboard the ship passed before his eyes. Occasionally, there were gray blurs in other parts of the room as other crew members indulged in whatever eating or other habits were native to them. Outside of these occurrences, however, no one that Miles watched appeared to have anything particular to do, or to be engaged in any particular job or function. And this observation of his was reinforced by a general air of idleness, of indifference, even of hopelessness, that seemed to hang about the ship and its crew as a whole.

There was curiously little communication between the crew members Miles watched. They moved about singly, as individuals; and no time during the three or four hours he watched did he see two of them engage in anything lengthy enough to be called a conversation. On the other hand, there was a curious pattern of behavior that seemed to hold them all. It was a pattern that Miles at first felt, with that same new sensitivity to the emotions of others that had been wakened in him by the Center Aliens. He felt it without being able to trace it down to any specific actions or lack of actions. Then gradually, he began to interpret what he sensed.

It seemed that each individual aboard had certain other individuals whom he ignored. —And to all

other individuals that he did not ignore, he deferred. Furthermore, he in turn was ignored by all the individuals to whom he deferred.

—As, Miles suddenly realized, the bear-like alien had ignored him, after one brief glance, when they had met in the corridor earlier.

It dawned on Miles that everyone, except Chak'ha, had ignored
him since he had entered this ship
—and particularly they had ignored
him during his exploratory tour of
the vessel, just now, before coming
to the lounge.

With that, the answer came plainly to him. There was evidently a pecking order aboard, a social system in which each member of the crew was deferential to those above him and contemptuous of those beneath. There were no equals on the ship, then. Obviously, the way you moved up in rank was to fight your way up, as he had fought and beaten Chak'ha, thereby making Chak'ha last and least.

So, now with his victory over Chak'ha, he was second from the bottom in that order, thought Miles. Why—the remembered, inviting white passion of battle glowed suddenly again to life inside him—all he needed to do to improve his situation on this ship, was to fight his way up through the ranks. There could be no danger of losing his life in the process, since evidently the Center Aliens who had built the vessel, had made provision against such killing.

Anyone, then, with the guts to take the necessary punishment could challenge anyone else aboard with impunity. None of the other aliens aboard whom Miles had seen—except perhaps the bear-like one—looked like an impossibly powerful or dangerous opponent. Of course, now that Miles had learned that they were not allowed to kill or cripple each other, he could probably not count on another explosion of hysterical strength to help him win, as it had with Chak'ha.

But, on the other hand, with a little study of his opponents and a plan of attack . . .

—An emotional reaction set in suddenly, like a cold and heavy wave of sea-water taking him in the face and leaving him gasping. Miles sat stiffly, shocked at his own thoughts.

Could this be he, Miles, sitting here and eagerly measuring the other occupants of the lounge, with a careful eye to see how vulnerable they might be to his own teeth, nails, and muscles?

Disgust and anger with himself welled up inside him. So, this was all it had been worth, all those years of his painting and theorizing and working? —Nothing more than something he could forget in a minute, once he was given a new, strong, two-armed body to play at fighting with, under rules that guaranteed he could not be badly hurt, or killed.

What had happened to him?

—For that matter, what had happened to the purpose for which he had been brought here? Had he been physically rebuilt, charged with the hopes of a world of people, and shipped out here to the edge of the intergalactic dark, just so that he could come to this ship and roll on

the deck, fighting with equallycharged members of other races like his own?

If so, there was something the Center Aliens had not told himsomething suspicious and potentially rotten about this whole business of the Silver Horde and the Battle Line.

But whatever it was, beginning now he was going to make it his

business to find it out.

TIGER-FACED HEAD Chak'ha rolled upon the bunk rolled away from the gaze of Miles. Clearly Chak'ha did not want to talk.

"There's just nothing to do," Chak'ha said, looking away from him now, looking at the blank inner wall of his bunk. "There's just noth-

ing else to do."

"Nothing to do but fight with each other?" Miles demanded. "No training to be done? No practicing with our weapons? No practicing with the ship itself? What kind of a fighting ship is this?"

"It isn't a fighting ship," said Chak'ha to the wall. "It's The Fight-

ing Rowboat."

"The Fighting Rowboat?"

"That's what we all call her," muttered Chak'ha. He remained with his face turned away, offering no further explanation.

"Look at me!" ordered Miles. Slowly, reluctantly, the tiger mask

turned back to confront him.

"What do you mean, this isn't a fighting ship?" demanded Miles.

"I mean what I say," said Chak-

'ha, stubbornly. "This ship will never fight anything-let alone the Silver Horde."

"How do you know?"

"Everybody knows," said Chak-'ha, with a sullen air of hopelessness. "Everybody on the ship knows. We began to know it, when we found out they didn't care what happened to us, or what we did here."

"Well, if we aren't here to fight the Silver Horde, what are we here

for?" said Miles harshly.

"Who knows?" replied Chak'ha, gloomily. "I suppose the Center Aliens know, but they're not likely to tell us."

"Nobody-no one aboard this

ship knows?" demanded Miles.

Chak'ha, without moving upon his bunk, gave the impression of shrugging to Miles' emotion-sensitive

perceptions.

"Maybe some of the higher-up ones here know," he said. "Maybe Eff—" The name was a sound like the letter "f" prolonged and ending in a sharp whistle-"who's second. Or Luhon, who can beat anybody aboard. Maybe somebody like that knows. I don't."

"Which one's Luhon?" demanded Miles. "I'll ask him."

Chak'ha's head rolled on the bunk, negatively.

"He won't tell you."

"Never mind that," said Miles. "Tell me which one he is."

"He's thin and quick and grayskinned," said Chak'ha, in a lifeless voice, "and his external ears are pointed."

Without a further word, Miles turned and went out of the room. He reentered the lounge and studied its occupants, but none of them fitted the description Chak'ha had given him. Finally he turned and went up forward. There, alone in the bow control room, he saw a slight, gray-skinned, furless individual with ears that would have fitted well on a pixie or elf. Whoever he was, if he was Luhon, he looked like a light-bodied harmless being to have outfought everybody else aboard the ship. Miles studied him for a second, watching from the doorway of the control room. The other was playing with the keys on a control console. He ignored Miles, as all aboard had ignored him; and Miles was able to notice how smoothly and swiftly the fingers of the other moved. For all his apparent slightnesss of limbs, he must have muscle if he topped the pecking order, Miles concluded; and if suppleness and his ordinary speed of movement was any index, it might be that his speed was remarkable. Miles went forward into the room, until he stood just behind the other individual, who appeared to be checking out the console of the control board before him. Glancing at that control board now, Miles was surprised, for a fleeting second, to discover that he understood its controls as well as he understood the common language they spoke aboard the ship. Then he swung his attention back to his reason for coming here.

"Are you Luhon?" he demanded.
The other neither turned nor
moved. Instead, he went on with his
movements, ignoring Miles as if
Miles was nowhere in existence, let

alone less than three feet behind him.

"I said," repeated Miles, slowly and distinctly. "Are you Luhon? If you are, I want to talk to you."

The other still continued to work with his controls, apparently deaf and blind to the presence of Miles in the same room with him. Miles waited as the seconds fled away into minutes.

"Will you answer me?" he said at last, clenching his teeth upon the anger building inside of him.

Luhon made no response.

Suddenly the inner fury boiled up whitely inside Miles. His arm muscles tensed and jerked with the impulse to reach out, grab the other by the shoulders, spin him around and choke an answer out of him.

Luhon still continued what he was doing, unperturbed. But, just in time, Miles noticed the pointed right ear twitch, and flick backward in Miles' direction.

Caution clamped suddenly again upon Miles. Apparently he was not as ignored as he had thought. Luhon was not only aware of him, but confident enough of his own physical superiority to stay with his back turned to Miles—practically inviting Miles to make the first attack.

The time might come, thought Miles, when he might want to have it out with Luhon. But not yet—not, at least, until he had seen more of the other, particularly in action, and discovered the source o Luhon's power and victory over his fellow crew members.

Miles turned and went out of the control room. He went back through

the ship, out through the open hatch and down the steps onto the open platform on which the ship lay. He needed to think—and in order to think clearly he needed to get completely away from the apparent puzzle of the ship, with its twenty-three representatives of twenty-three races, apparently brought here for no purpose but to quarrel and to fight with each other.

He explored the platform. It consisted of nothing but a flat structure —like a raft in the blackness of the surrounding space, harshly and metallically revealed by the unmoving, unchanging glare of the artificial sun that the Center Aliens had set up to illuminate the Battle Line. From where Miles stood on the platform, that artificial sun was larger, but but not so yellow as the sun of Earth. Miles walked around the platform and discovered nothing else on it, but a sort of shed, which he entered and found filled by twentythree strange machines, and stores of what appeared to be-judging by the fact that one of them was a pile of earthly food stuffs-special rations for each of the various crew members aboard the ship. Miles went on through the shed and out a door at the far end. Behind the shed he saw, lying in a metal cradle, a smaller craft which looked like a miniature version of their ship. It was apparently some sort of courier boat, with room and seats inside it for two individuals.

Inspiration woke in him. He went hastily up to the ship, slid open the door on its side and climbed in, closing the door behind him. Seating himself in one of the

seats, he examined the control board of the small vessel.

It was as he had suspected. The controls here were immediately as understandable to him as the contols at which Luhon had been working in the larger ship. The anger, still surging below conscious level in him, erupted in a flare of new determinations.

He would get an answer—one way or another.

He touched the controls of the ship before him, with hands as sure as if they were practiced for years. The little ship floated upwards from its cradle, turned slowly in the bluewhite glare of the artificial sun, and headed up the Battle Line.

For a few seconds it seemed rather to hang in space than to move. But then, without any physical feeling of acceleration, it apparently began to move faster and faster. A feeling of exhilaration began to warm and glow within Miles. At his fingertips, the little ship moved as if it was an extension of his own physical being. He felt as if its speed was his speed; its power, his power; its sureness of response, his own.

Now he was already past the area of smaller, intermediate and odd-shaped alien ships, and approaching the first of the large, globe-shaped ships of the Center Aliens. He could see the first of them now, far ahead of him at full magnification on the battle screen built into the console on which his fingers rested—

Without warning, there was someone in the other seat of the two-man ship, seated alongside him. Miles turned his head and looked.

It was one of the Center Aliens.

He was so like the two who had brought Miles from Earth, in the stillness of his pseudo-human features, that for a moment Miles thought one of his old acquaintances had rejoined him. But then he felt the stranger-quality in this particular Center Alien—as he felt emotional differences in Chak'ha, and Luhon and others of his own crew. This Center Alien said nothing, but his hands rested on the other console, which was a duplicate of the control console before Miles, and the little ship turned and headed back the way it had come.

For a second, Miles stared. Then his own fingers leaped to the controls before him. But there was no

response from the ship.

"What're you doing?" snapped Miles, turning to the other. "I want to talk to somebody—somebody in

authority!"

"Talk to me," answered the Center Alien. There was no inflection to his words, but Miles felt an indifference in the Alien, as remote and icy as contempt.

"I was told our ship isn't ever going to fight the Silver Horde!" said

Miles. "Is that true?"

"Quite true," answered the Center Alien.

"Then why bring me out here in the first place?" demanded Miles. "Why bring any of us—any of us on the Fighting Rowboat?"

"It's true that individually, and even collectively, you add little directly to our general Battle Line strength," answered the Center Alien. "All of you together amount to less than one of the least of my own people, in this respect. But

there is more than the direct addition of strength to be considered. Besides his own, personal powers, which vary widely from individual to individual, each one in the Battle Line has a function in which all are equal. That is to act as a resonator, or amplifier, of the group strength, and as a channel through which that strength may be directed at the enemy. There is what you might call a feedback effect—from the group to the individual and back again—where the psychic force is concerned."

"Feedback?" Miles stared at him. "Psychic force?"

"The weapons aboard your shipand aboard all our ships-" said the Center Alien, as their small, twoman ship continued to slide back past the odd-shaped vessels of the Center Aliens' outer allies, "have a dual function. They bring to bear against enemy ships not only a physical, but what I call a psychic force. Psychic is not the correct word, but it is the closest I can come to a word in your understanding. The physical element of these weapons is effective enough—it can rip open any Horde ship that comes within the effective range of the weapons. But it is the weapons' ability to project our general psychic strength against the invaders on which our own strategy of defense is based."

Miles frowned. "Why?" he asked.

"Because the strategy of the Horde's attack is based, by contrast, upon the overwhelming numbers of its ships and people," said the Alien. "The Horde counts on being able to pay any price required by a battle, just as long as for every dozen, or hundred, or thousand, of its own ships which are lost, it accomplishes the destruction of at least one opposing ship."

"A thousand for one?" Miles

looked narrowly at the other.

"At least that high," replied the

Center Alien, emotionlessly.

Miles frowned again. The words of the Center Alien sounded as if they should make sense to him, but at the same time their real meaning seemed to skitter away from his understanding, like a dried leaf before a November wind.

"The psychic force can kill, then?"

he asked.

"No." The Center Alien spoke the short, negative word, briefly.

"Then I don't follow you," said

Miles, grimly.

"The psychic force cannot kill—but it can control; to the extent of dominating the individual by the group will, or the will of the lesser group by the greater. So, we will use it against the Horde. With sufficient outflow of psychic power, we hope to hold paralyzed all of the invaders who come within range of our weapons, while our weapons destroy them."

He paused. Miles nodded slowly. "I see," said Miles, thoughtfully.

"Yes," said the Center Alien,
"you see. By this means we hope—
not to conquer the Horde, for that
is impossible—but to convince them
that we can slaughter them almost at
will, while remaining very nearly invulnerable to their weapons, and so
make them pay such a heavy price in
lost ships for each ship of ours they

manage to destroy, that they will turn away toward some other galaxy that may be less strongly defended against them."

"If the psychic force is that effective," said Miles, harshly, "why can't we on the Fighting Rowboat be with you when you hit the Horde

with your own ships?"

"Because the psychic force is not, in fact, that effective," said the Alien. "Each use of it requires an expenditure of energy by each of the individuals making use of it. As long as they do not become weary, these individuals may not only use their own, innate psychic force, but may draw upon our general pool of strength, channel it through themselves to make them many times as effective as they would be alone-But the energy of no one, not even of we of the Center, is inexhaustible; and you twenty-three would become exhausted very much more quickly than should we. Exhausted, an individual loses contact with the general pool of strength. In such a case you would face the Horde with only your own feeble psychic powers and physical weapons; and your ship's destruction by the Horde would follow almost immediately."

"What of it?" demanded Miles. "They're our necks we're risking—"

"They are not yours alone," interrupted the Alien. "You refuse to understand. As contributors of original psychic force you twenty-three are nothing—less than the weakest of one of my own race, all of you combined. So that if we lost you, we would lose less than one effective individual unit like myself, in terms of original force. But as resonators and

amplifiers, you are individually equal to all other individuals in the Battle Line. So, that in losing you in that respect we would be losing the equivalent of twenty-three units."

He paused.

"Do you see, now," he said, "why we prefer to keep you back out of the battle and safe, where we can draw on you for resonated strength, without risking your almost certain loss if you joined us in the fighting?"

Again he paused. But Miles said

nothing.

"You are unhappy about this," said the Center Alien. "That is because you are still a victim of those emotions which we of the Center long ago amputated from our own egos so that we could continue our intellectual development. Because you have such emotions, you assume that we have them also and that our decisions about you are colored by emotion. But they are not. That is why, when we actually join battle with the Horde-and whether we do or not, will depend on whether our Center computational matrix calculates that we have a chance for victory—the actual fighting contact will be made by us of the Center and some few of the older, more advanced races on whom we can rely. It is simple logic that dictates this, as it dictates that you be held out of the fight, and safe."

They were almost upon the platform now. The Center Alien said no more, but brought the little ship in for a landing in its cradle. As it touched down, he disappeared from the seat beside Miles. Wrapped in his own bitter thoughts, Miles slowly opened the door on his side of the craft and climbed out. He went back in to the main ship.

But this time he avoided both the control room and the lounge. Instead he went down the connecting corridors until he came to the first of the weapons, standing isolated and alone within its empty transparent bubble that faced outward into the blackness of intergalactic space. For a long moment, he stood looking at it; and now his mind, alerted by what the Center Alien had said, saw with the same sort of knowledge that had told him about the control consoles of both ships that these weapons had been neglected and ignored.

It was not that they were rusted, or decayed. But with that feeling part of his mind which had become so sensitive lately, Miles felt the coldness of long disuse that hung like a fog about the weapon before him. Feeling it now, he began to understand at least part of what the Center Alien had been trying to tell him. Psychic force must pulse through this device before him, if it was to help destroy the Horde. But he also recognized something now, that the Center Alien had not bothered to tell him. If this weapon was to be operated in battle, a certain amount of the psychic force of whatever individual operated it, would necessarily have to be used up, first, merely to warm it up in a psychic sense, before it would fire. That was the penalty of the long disuse with which the twenty-three aboard this ship had treated it. It confirmed the indifference, amounting to contempt of the Center Alien

as he had explained his superiority over Miles.

It did more. It explained the self-contempt in which the twenty-three held themselves. Their undeniable, unavoidable knowledge of their own inferiority and uselessness, compared to the power and wisdom of the Center Aliens—in fact, to everyone else in this Battle Line. It would be that knowledge and self-contempt which had driven them to set up the pecking order, so that all but the weakest of them would have at least one other individual to whom they could feel superior.

Miles became aware that his jaw muscles were aching. He had clenched them some time since. He forced his mouth to open now and relax them. Inside him, his understanding of the situation here was complete at last, carved upon his mind like letters in stone.

What use was it to them—to himself and the human race—to be physically saved from extermination; if the price of that saving was to face the fact that their greatest accomplishments and dreams were less than line-drawings on a cave wall; and that in the eyes of the race which dominated the galaxy, men were no more than ape-men, scratching themselves mindlessly as they lolled in the sun?

The Center Alien had advised him to resign himself to the situation. Miles laughed, harshly. Wise and powerful the Center Aliens might be, but here was proof that their wisdom and knowledge were not all-perfect.

If nothing else, they had underestimated humans—and Miles, himself. Powered by that same capacity for emotion that this advanced people had despised and discarded, Miles knew inside himself now that he was no more capable of resignation than an eagle is of forgetting he has wings. Moreover, since there was no hope of resigning himself, there was no point in his trying resignation.

He would make up his own mind about what he would do. And that meant that in spite of both Horde and Center Aliens, the Fighting Rowboat would take its place in the battle—when the time came. Yes, the Fighting Rowboat would fight.—If he had to take it out alone against the Silver Horde, it would fight.

8

"TELL ME HIS NAME AGAIN," said Miles.

"His name is Vouhroi," replied Chak'ha.

They were seated together in the ship's lounge. Miles had made Chak'ha bring his own chair and table unit over close beside Miles' own. Now, unlike all the others aboard the ship, they sat in the lounge together in conversation, as they had for nearly two weeks now. Chak'ha had resisted this closeness at first, but Miles had forced it. Then, in the end, the tiger-faced alien had yielded and accepted what was almost a friendship. In fact, he had become more dependent upon it than was Miles.

No doubt the other twenty-one aboard the ship had observed this conversational closeness. But since Miles and Chak'ha were together at the bottom of the pecking order, it seemed that none of the others would lower themselves to notice their exception to the normal social pattern aboard the vessel. So, for nearly two weeks, undisturbed, Miles had been able to study the others as they moved about the ship and occasionally—without apparent reason—merged in battle or continued to ignore or give way to each other in accordance to their relative positions in the pecking order.

Luhon was the leader—there was no doubt about that. Just below him was Eff, who, oddly enough, turned out to be the rotund, bear-like alien who had seemed so harmless to Miles at first sight. These two seemed satisfied with their relative positions. But below the rank of Eff the members in order in the pecking order were continually being challenged by the member immediately below them.

Miles had begun to plan. He could do nothing until he was in control of the others aboard this ship. That meant winning his way to the top of the pecking order. Vouhroi was the first step he must mount. He had studied Vouhroi, therefore, not merely with the desire of someone wanting to improve his rank among his fellows for his own satisfaction—but with the same combination of hunger, fury and creative desire with which he had attacked his paintings, back on Earth. It was a study and method of attack on a problem that would not consider any result short of success.

The one he studied was a lean, but powerful-looking, cat-like alien.

—Not heavily cat-like as was the

tigerish Chak'ha. But with the longlegged, high-haunched, feline grace of a Canadian lynx. Vouhroi's chair in the lounge was almost directly opposite that of Miles; and, while he had never overtly acknowledged Miles' existence, Miles himself had come to be expert at reading the small signs in the other aliens that warned him that they were aware of his presence and braced against any sudden unexpected attack by him.

A surprise attack was only one more tactic in the ruleless battles that were fought between members of the crew. No advantage was unfair if it led to winning. Coldbloodedly, Miles made plans to make use of the unfair advantages at his own disposal. He gave Chak'ha instructions.

The end result of those instructions was the conversation that they were having now as they sat in the lounge looking across at Vouhroi. The timber of Miles' voice, and that of Chak'ha, were very close—close enough so that practice could make them almost identical. For over a week now, Miles had been secretly practicing with Chak'ha to imitate the pronunciation Chak'ha gave to Vouhroi's name.

Now he repeated the name after Chak'ha pronounced it. The tigerfaced alien nodded.

"Right," he said, at last. "It sounds right, the way you say it now."

"Good," answered Miles. He glanced across at Vouhroi, apparently dozing, with half-closed eyelids, across the lounge. "I'll go forward now. You wait a few minutes, and then stroll aft."

Miles got up from his chair in the lounge, and wandered toward the front end of the lounge and from there into the corridor leading up to the control room in front. He went halfway up the corridor, turned, put his shoulders against the wall, and waited.

From where he stood, flattened against the inside wall of the corridor, he could just see the entrance to the further corridor leading back to the crew quarters, and could see against the inner wall there, the blocky outline of Chak'ha, waiting.

Then, he shouted, in the closest imitation of Chak'ha's voice and ac-

cent he could manage.

"Vouhroi!"

"Vouhroi!" It was a shout in Chak'ha's voice from the other corridor. Chak'ha was now running into the lounge, continuing to shout as he came. "Vouhroi! Vouhroi! Vouhroi! Vouhroi! . . ."

Miles launched himself forward toward the lounge, running at top speed and as noiselessly as he could. He had a moment's glimpse of Chak'ha rushing in from the opposite direction—of Vouhroi with his back turned, staring at Chak'ha. Then Miles hit the lynx-like alien with a hard tackle at waist level.

He slammed the unprepared Vouhroi down against the deck of the lounge—hard enough, Miles would have thought, to knock out a human being. But, even as he was thrown to the deck, Vouhroi was attempting to twist around in Miles grasp, and though his head slammed hard on the uncarpeted surface beneath them, he did not appear to be stunned.

Miles already had Vouhroi in the same full-nelson which had worked so well with Chak'ha. At the same time as Miles began to exert pressure against the other's neck, he clamped his own human legs around the legs of Vouhroi, and tried to hold them as Vouhroi attempted to kick and scramble loose. But the alien's legs were too powerful. They broke free, and Miles shifted his leg-grip to a scissor-hold around Vouhroi's waist.

Vouhroi surged about, and, for one furious moment, succeeded in rising to his feet, with Miles riding on his back. Then Miles' weight overbalanced him, and he fell backward, heavily, upon Miles. Lying underneath the alien, Miles continued to apply pressure to Vouhroi's neck. He half expected the overdrive strength to come to his aid, as it had with Chak'ha. But it did not come, and it was not needed.

Already, Vouhroi's neck was starting to give. It did not, indeed, have as much inner stiffness and strength as had Chak'ha's. Miles felt it bend . . . and, almost at once the tranquilizing gray fog, the feeling of weakness and indifference, closed in about him and his opponent, and he drifted dimly off into unconcern, the battle fires of emotion within him damped and extinguished.

When he woke on his bunk after this second battle, however, there was a face looming close above him. It was the face of Chak'ha—and coming from Chak'ha, Miles sensed clearly a strange emotion—something between glee and triumph.

"Awake, Miles?" asked Chak'ha.
"Awake," replied Miles, a little thickly.

The face of Chak'ha came closer. He lowered his voice to what, for him, was the equivalent of a whisper.

"We did it, Miles! Didn't we do

it?"

"I did it," said Miles. "With your

help."

"That's what I mean," whispered Chak'ha, savagely, "—with my help. You did it with my help.—The two

of us, together."

Chak'ha's eyes half closed. Once more there came from him, to Miles emotion-sensing capability, a feeling of great relief and joy and friend-

ship.

For the first time, Miles realized that Chak'ha had expected to be disowned by Miles once Miles had moved one more step up the ladder. There was something deeply touching about the emotion that flowed from the tiger-faced individual bent closely above his bunk. Miles reached out to grasp one of the thick, stubby, clawed hands of Chak'ha in his own. Chak'ha looked down at the joined extremities in surprise.

"This is how we do it among my people," said Miles, and shook Chak'ha's hand, then let it go. Chak'ha looked for a moment wonderingly at his own released paw, then stared back at Miles, and the feeling of happiness from him in-

creased.

Miles drifted back off into slumber, carrying that feeling of happi-

ness and friendship with him.

In the next few weeks that followed, he fought his way up through the pecking order. In each case, after winning he tried to make friends with the alien he had just conquered. One or two of those he had beaten became friendly. But none of them became as close to him as Chak'ha, who now followed him about continually. In time, there were left only two crew mmebers aboard who did not acknowledge Miles' presence or answer when he spoke to them. These were Eff, and Luhon, the one whom nobody else could beat.

The opposition had grown progressively more difficult as Miles had mounted the ladder of the pecking order. His last fight, with a dark-skinned humanoid named Henaoa, had taken all of Miles' strength and skill to win. Logically, therefore, he could not expect to conquer the two

remaining crew members.

The secrets of their individual strengths were now quite clear to him. In Eff's case, the rotund body was all muscle—he was not plump, he was a chunk of heavy-bodied power. In Luhon's case, his secret was that speed which Miles had already observed. Certainly, there must be strength connected with it. But in any case, Luhon's reflexes were such that it would be necessary for Miles to conquer the gray-skinned alien first blow—because the chances were that he would not have a chance to land a second.

But Luhon was in the future. Eff was in the present, and Miles was aware that Eff had been subtly on guard, ever since Miles' last victory.

For a full week, Miles studied Eff. At first it seemed that there were no points of weakness about him. The joints of his body were solid, and deeply set in muscle and flesh. His neck was so short as to be almost nonexistent. The full-nelson that

Miles had used to advantage several times now, would not work this time—let alone the fact that Eff had undoubtedly noted its use and was on guard against letting Miles get behind him.

In the end, he concentrated his study upon Eff's waist and the lower part of his trunk. As far as he could discover, the bear-like alien had a human-like chest, ribs and diaphragm. There was just a chance in that fact, if Miles could catch Eff at the right spot on the ship.

He had to wait several days before that chance came. During those days he stayed close to Eff, who only by the merest flicker of an eyelid, or twitch of a furry ear, acknowledged the fact he was being followed. But Eff's vigilance did not relax. In spite of this, the time came when Miles, following closely behind him, saw Eff less than two arm'slengths away from him, turning from the corridor around a little angle into the lounge.

—Miles leaped upon him from behind.

Eff had been on guard against any attack, and he was turning to face Miles, even as Miles hit him. But Miles had waited for just this place to start the fight. The momentum of his charge drove the bear-like alien into the angle where two walls met, so that in falling Eff was crowded between, into the corner. He went down on his side, with Miles' legs closing about the thick waist and one furry arm. As they landed on the floor, Miles caught Eff's remaining free arm in both hands and twisted it up behind the stocky body.

Even with his two arms against Eff's one, he found it almost impossible to keep that other arm imprisoned. The arm caught by Miles' legs, however, was held. Eff's shoulder was wedged in the corner, his arm and waist prisonered by the muscles of Miles' interlocked legs in a scissor-grip which Miles proceeded now to tighten around Eff's waist, his left knee driving hard up into the alien's diaphragm-area just below the rib cage.

Eff struggled, but they were locked together. Miles could do no more than hold Eff's left arm twisted up behind him while their combined weights and the legs-scissors kept the other arm pinned. To the watching crew members that soon gathered in a semi-circle around them, it seemed as if nothing was happening. Not a great deal was happening—of which only Eff and Miles were conscious.

Miles' left knee was continuing steady pressure, pushing, grinding in and up against the bottom of Eff's lungs, driving the air out of them.

They lay there together in the angle of the wall, barely seeming to move. But the struggle continued . . . for an intolerably long time it seemed to Miles. He could feel that the pressure of his legs was gradually shortening the breath available to Eff, but Eff did not seem weakened. Every so often he surged mightily, if without success, against the hold with which Miles was keeping him pinned.

But now, Miles felt his own strength leaking away. He had only so much power of muscle in his arms and legs, and that power of muscle was gradually being exhausted in keeping the heavier and stronger alien beneath him, tied up. He felt himself beginning to weaken, and overdrive was not coming to his aid. Almost, he gave up—and then the old, familiar determination rose in him. He heard his teeth grinding together, through the bones of his head. He would crush this enemy of his. Crush . . . crush . . .

But, suddenly, the gray, tranquilizing mist was rising about him. He felt his grip slackening, he felt his combat-fury ebbing away from him. For a second he was dumbfounded, disbelieving. He had not lost, yet. Why was the invisible protective device of the ship stopping the battle. It was not fair . . .

The gray mist rose inexorably around him.

9

FOR ONE WILD MOMENT HE tried to fight mist and Eff at once.

Then, with the last flicker of conscious thought left to him before the tranquilizing effect stole all feeling from him, understanding woke in him. He realized suddenly that it must be the other way around—that he must have brought Eff to the point of suffocation and unconsciousness, where the tranquilizing effect needed to exert itself to save the rotund alien's life. Miles had won. . . .

This time, the tranquilizing effect lifted swiftly. It pulled away from both him and his opponent while they were still lying on the floor of the lounge. Miles pushed away the hands that were trying to lift him and got to his feet unaided. Opposite him, he saw Eff also getting to his

feet. The bear-like alien's face opened in a grimace that would never have been recognizable as a smile if the outwash of emotion from the other had not confirmed that a smile was intended. The furry chest was heaving after air, and Eff's words came out in short gasps, but there was a cheerfulness to them that Miles had not yet encountered in any of the aliens aboard whom he had conquered.

"Now—what? I've been wanting to know what you've been after ever since you started fighting your way up to my position on the ship."

Still gasping for air, himself, Miles stared at Eff. With the exception of Chak'ha, he had found no crew members willing or capable enough of friendship to meet him on a level basis after he had conquered them. Invariably they had assumed the subordinate position.

But apparently, with Eff, being conquered physically did not mean that his soul had been dominated. This was a good sign for the success of the ship and crew.

"I'll tell you what I'm after,"
Miles replied, "when I've beaten
Luhon."

Around them the other crew members who had been spectators were drifting off. Only Chak'ha remained. Eff glanced at the tigerfaced alien for a second, and then back at Miles.

"You'll never beat Luhon," he said, not didactically or stubbornly, but in the calm tone of somebody who patiently states a fact to a child or someone of simple intelligence.

"Believe what you like," said Miles. He hesitated, then took a long chance. "How about helping me?"

Eff looked at him frankly.

"I won't help you fight him," answered Eff. "But outside of that, I'll help you with anything reasonable."

"That's all I ask," said Miles.

Eff grinned more widely. Chak'ha moved in until he stood close to both of them, and the aura of emotion that Miles sensed around all three of them seemed to flow together into one unit of mutual understanding.

From that point on began Miles' first days of anything like comrade-

ship aboard the small vessel.

Once he had opened up, the bear-like alien turned out to own a warmth of character closer to human warmth than any Miles had found otherwise aboard the ship. Eff was an extrovert. He was frank; and—except for his belief that Luhon was unconquerable—apparently daunted by nothing, even including the Center Aliens. Amused by Miles' determination to attempt the apparently hopeless task of fighting Luhon, but fascinated by it, he joined happily in helping Miles study Luhon.

"—I tell you," Miles kept insisting to him stubbornly, "that Luhon has to have a weak spot! Any organism, by its very nature, has to have drawbacks as well as advan-

tages."

"To be sure he has to have weak spots," replied Eff, shrewdly. "But are they weak spots that you have strong spots to correspond with? Luhon's simply too fast for you. He's too fast for any of us aboard here. He's from a heavy world—one where the gravity is much more than any of us are used to."

Miles shook his head. He did not believe that some key could not be found to the slender, quick-moving alien who continued—out of all those aboard—to ignore him.

In fact, Luhon was isolated now in the old pattern of behavior; for all the rest aboard had begun to associate with and talk to each other, regardless of rank. They did it seldom, and they did it warily, but

they were doing it.

But if it bothered Luhon to be set aside, separate within the old pattern of behavior aboard the ship, he did not show it. He spent his waking hours working with the ship's controls and he continued to ignore everyone aboard, Miles included. Nor could Miles notice any increase in the minimal signs that betrayed Luhon's awareness of Miles whenever Miles got within jumping distance of the gray-skinned alien. Moreover, at the end of two weeks of study, with all the help that Eff and Chak'ha could give him, Miles had yet to find any sure counter for that inhuman swiftness of physical reflex Luhon possessed.

The best Miles could do was to plan an attack that should give him at least the advantage of choosing the time and place of battle. He could hope to get in one quick blow—and that would be all. Therefore it would need to be a crippling or knockout blow. The best place for that blow to be landed, Miles thought, was the narrow and apparently soft mid-section of Luhon, just above the waist. He planned his blow, and rehearsed it in the privacy of the cabin he shared with Chak'ha until it was essentially automatic.

Then he stationed himself one day just within the open doorway of his cabin. Eff and Chak'ha took up their posts in the lounge.

Miles waited. It was a long wait, and he ended up sitting rather than standing, until a preliminary signal, which was Chak'ha's own peculiar bark of laughter, alerted him to the fact that Luhon had commenced to move through the lounge headed aft. Miles got swiftly to his feet.

He stepped noiselessly to within half a step of the open doorway, listening, with ears tuned to unnatural acuteness by the tension within him, until he heard the footsteps of Luhon approaching down the corridor outside the cabin. A coldness enfolded his forehead, and he knew that he had begun to sweat with anticipation. He tensed, poised—

The laugh of Eff rang out again

from the lounge.

Miles launched himself forward. He had a glimpse of a gray body before him, swiftly twisting away. His fist grazed a gray side. He felt the shock of a sudden heavy blow at the side of his neck. He caught himself, bounced off a corridor wall and—before he could even try to strike again—another blow somewhere on his head sent him sliding down and away into unconsciousness. . . .

When he opened his eyes, he found he was lying on his bunk. His neck ached with an ache that seemed to penetrate across his chest and down the opposite side of his body. The faces of Eff and Chak'ha floated above him. He opened his mouth to speak, but to his surprise what came out was barely more than a whisper—and even that hurt his neck.

"What happened?" he whispered.
"What I told you would happen,"
replied the voice of Eff. "He was too
fast for you."

The feeling of disillusionment and defeat closed around Miles like quicksand. He slipped back into unconsciousness once more.

But when he opened his eyes next, it was from sleep, and it was as if his mind had come to its own conclusion and made itself up while he slumbered. Chak'ha was not in the room, but Eff was. Miles struggled to sit up on the edge of the bed. His neck ached and his head was dizzy. But he made it. Eff looked at him with a tolerant humor.

"Help me up," husked Miles. Eff came forward and pulled Miles

to his feet.

"There," said Eff. "Now you're up. But what's the use in that? You're just going to have to lie down again."

"No," whispered Miles. "Help me—walk."

He headed toward the doorway of the room, with Eff holding one arm and guiding him. As he went, he seemed to draw strength from the very movement itself. He turned left down the corridor.

"Where's Luhon?" he whispered hoarsely to Eff.

"Where he almost always is," replied Eff, watching him curiously. "Up front, by himself, in the control room."

"Good," husked Miles. He continued to totter on down the corridor, with Eff helping to balance him. But his strength was coming back rapidly with that near-magic return of health that was part of the

Center Alien science built into the ship. By the time he was halfway across the lounge he was able to shake himself free of Eff's sustaining

grip, and walk alone.

When he entered the forward corridor leading to the control room, he was striding a little in advance of Eff. The pain was still in his neck and head, but he could bear it. And the action of his muscles was coming more easily to him—which was important.

Eff caught up with him. "What're

you going to do?" he asked.

"Wait and see," answered Miles. He went on, Eff beside him, until he reached the entrance to the control room. There, as usual, sat Luhon, at the controls. But for once his fingers were not playing with them. Instead, his gaze was lifted above them to the Control Room's main vision screen, which was set now on a view of intergalactic space—looking in that direction from which Miles implanted inner knowledge told him the Silver Horde was expected to come.

Putting out a hand to stop Eff from following him beyond the open doorway, Miles walked forward without pausing; and, when he was within range, launched himself without any attempt at trickery at

the back of Luhon's neck.

—This time, when he awoke he remembered nothing beyond that single jump forward. His neck, surprisingly, was not so painful now. But his head was one single, solid ache, as if Luhon's retaliation this time had been all in that area. He lay a while, waiting and hoping for the ache to diminish.

He turned his head and saw Chak'ha and Eff, this time both in the room, watching him. Painfully, once more, he struggled to sit up on the edge of the bed. Neither of the others came forward to help him.

Rage suddenly flooded through him—not rage at Luhon, but rage at the two who stood watching.

"Come here!" he croaked, hoarse-

ly. "Help me!"

It was not a request he was making of them. It was an order. And there was enough of the old pecking order pattern left in them, so that both came to him, and helped him to his feet. There was a moment's hesitation on the part of the other two aliens. Then, silently, they each took an elbow and guided him out into the corridor and once more toward the front of the vessel.

This time, as he walked through the lounge—which now was filled with silent, watching crewmen in all their various alien shapes and expressions of feature—recovery was slow in coming to him. But come it did. By the time he was halfway down the corridor toward the control room he was once more walking without assistance.

He made it to the entrance of the control room and there paused. Because this time, evidently alerted by the sound of footsteps approaching, Luhon had turned about in his chair and was facing the doorway. His eyes met the eyes of Miles, plainly this time and for the first time, without any pretense of avoidance.

Luhon's face, insofar as six weeks had taught Miles to interpret the gray-skinned alien's features, wore a look of puzzlement. He stared searchingly at Miles in the doorway.

Miles launched himself forward in a tottering rush, his hands outstretched to grab Luhon's throat.

But before his hands closed around the gray throat, Luhon was no longer before him. Miles found himself seized and swung about. He was pinned, with his back against the slanting face of one of the control consoles. With ease, Luhon held him helpless there, and the gray-skinned face looked down into Miles' from a distance of a few inches.

"What do you want?" asked Luhon.

It was the first time that Miles had heard the voice of the other. It was a soft, low-pitched voice, a strange voice to belong to someone who had outfought everyone else aboard this vessel. And it, together with the emotions that Miles felt emanating from Luhon, was deepstained with puzzlement.

"I want—" Miles' voice was almost too husky to be understandable, "to fight the Silver Horde."

Once more Luhon looked at him for what seemed a long time. Then Miles felt the grip that was holding him pinioned against the console released.

"And that's why you fought your way up to just below me?" demanded the gray-skinned alien. "You wanted to take over this ship to make it into something that could fight the Silver Horde?"

"That's right," said Miles. He added, brutally, "—none of the rest of you seemed to have the guts for it."

He tensed, bracing himself for a sudden attack by Luhon.

But the gray-skinned alien only stared at him for a moment longer, then turned half around so that he had both Eff and Chak'ha in the doorway within his field of vision as well as Miles. Then he took a step backwards.

"I didn't believe we could fight the Silver Horde," he said. His eyes fastened brilliantly upon Miles. "I still don't. Also I know that you could never beat me, no matter how many times you try. Do you understand that?"

Miles shook his head.

"No," he said. "You can't kill me. So in the end I'll beat you. No matter how long it takes, or how many times I have to try."

Luhon took another step back. He looked at Miles, and once more Miles braced himself for a lightning attack. But no attack came.

"All right, then, in that case," said Luhon, "I am defeated."

Miles stared at him. "Just like that?" he said. "Why?"

"Because," answered Luhon softly, "I did not take the little boat and try to talk to the Center Aliens. Because I did not plan to fight my way up to the top in this ship for any purpose other than to be on top. Because I, even now, don't believe you can make this ship into something that will go out to fight the Silver Horde.—But, most of all, because I want to fight the Silver Horde as much as you do."

It was just beginning to sink into him now that Luhon had actually given way, had stepped down and allowed him, Miles, to take top position aboard the Fighting Rowboat. The reaction had begun a warm

glow that seemed to spread out from the center of his body, soothing all his hurts and aches and clearing his head amazingly. "Let's get them all together in the lounge now and talk to them."

"Yes," said Luhon, "let's go to the

lounge."

They went. As they entered the lounge, with Eff and Chak'ha abreast, followed by Luhon beside Miles, and moved to stand together in one corner from which they could survey all the rest of the room, the eyes of everyone else there came upon them.

Luhon raked the room with his eyes. His gaze fastened on Vouhroi, who was closest to the corridor leading back to the crew quarters. "You, Vouhroi, go back and bring every-

body else up here."

Vouhroi went. The silence in the lounge continued unbroken. The eyes of those there remained fixed on the standing four in the corner. For the first time, a small doubt crawled through the lower level of Miles' mind. They were four, combined now—three who were the top in physical abilities aboard the ship plus Chak'ha, who was least. But with the breakdown of the old pecking order anything was possible. What if, seeing this combination of four, the others of the nineteen remaining, moved to combine themselves in an opposing group?

Five other crew members, followed by Vouhroi, filed back into the lounge and filled up the empty chairs, with the exception of those chairs belonging to Miles and his three companions. They sat still, looking at Luhon.

"Miles just conquered me," said Luhon. "So, he's on top now, aboard this ship. He believes, and we with him here agree, that from now on things are going to be different." He glanced aside at Miles. "Tell them, Miles."

"There isn't going to be any more fighting amongst ourselves," said Miles looking around at the different alien faces. "From now on we're going to work together, and we're going to make the Fighting Rowboat into a ship that can actually go into battle against the Silver Horde when it comes."

A small sound came murmuring from the rest of the crew members, like the sound of a wind through the swaying branches of a grove of trees. It was a combination of sounds, in many verbal ways, of astonishment and disbelief.

"—I know!" said Miles, swiftly. "The Center Aliens don't think we can do it. But I think we can. Have any of you gotten close to those weapons and felt what they're like with the sensing part of your minds? They're cold! We'd have to work with them to warm them up. But who knows what they'd be like if they were warmed up?"

He paused. They looked at him, neither assenting nor dissenting.

"All right," said Miles, slowly. "Is there anyone here who won't go along with the rest of us in doing this?"

—Beside and behind Miles, Luhon, with Eff and Chak'ha moved forward a step.

No one spoke. For a moment Miles was tempted to let it go at that. Then some inner instinct warned him that he needed to force his listeners into a positive statement of agreement, rather than just a passive acceptance with his plans.

"Those who're ready to go to work at once," he said, "take a step

forward."

There was a pause, a rustle of movement; then Vouhroi stood up—and one by one, in groups they all rose and stepped toward Miles.

"Good!" said Miles. He kept his voice calm, but triumph sang inside him. "Now, let's find out what it takes to operate this ship and her weapons!" he said. "I'll go to the control room. With me will be Luhon, as my second-in-command, and Eff as my third-in-command. Chak'ha will join the rest of you on the weapons. Scatter around the ship now; find yourself a weapon, and try to warm it up."

Without waiting for any sign of assent from them, Miles turned and strode from the room toward the passageway, the corridor leading up to the control room in the vessel's bow. He heard footfalls behind him and knew that Luhon, Eff and Chak'ha were following, while a general confused sound of voices and movement behind him indicated that some at least of the rest of the crew were obeying. He led the way up into the control room, and paused before the center of the three seats that faced the control consoles there under the large vision screen with its view of the blackness of intergalactic space.

"We'll have to practice, too," he muttered, as much to himself as to the three others, who had followed him in.

"Shall I show you how, friend Miles?" murmured the soft voice of Luhon in his ear. Miles turned sharply to face the gray-skinned alien.

"Do you know something about this I don't?" Miles asked. "The information about these controls was evidently put into me by the Center Aliens back when they first took me over."

"So it was in me—in all of us—" answered Luhon, unperturbed. "But you have to remember I've fought this ship thousands of times, and you haven't."

Miles stared at him. Another ripple of amusement sped from Luhon to break against Miles' perception.

"What do you think I've been doing up here all alone, all this time?" asked Luhon. "Thousands of times, in my imagination, I've fought this ship against the Silver Horde—never believing that it would actually ever happen that I would really fight her. You know the controls, friend Miles, as well as I do; but I know the ship better than you do."

Miles nodded. He sat down in the center control seat. Luhon took the seat to his right, and Eff slid into the seat at his left, as if at the order of some unspoken command.

"Suppose we lock in together as a single pattern, just the three of us to start," said Luhon, calmly. "And I'll take the two of you on a computerized version of one of my imaginary battles."

His fingers flew over the controls of the console before him, and Miles found his own fingers flying as well. The consoles were identical—he already knew that, from that informa-

tion the Center Aliens had earlier planted in his mind. Each of them could control this ship independently; but there was a triangular reinforcement of purpose and strength if one individual and one console led, and the other two followed and reinforced. Now, with Luhon leading, but with the master controls still in off position so that the vessel did not actually fly or fight, Miles followed Luhon into the grayskinned alien's imaginary battle against the Silver Horde. The ship, Miles realized, as his fingers flashed over the controls, could be flown. But the weapons were dead-and not only because the crew of the Fighting Rowboat had ignored them all this time. Some master control of the Center Aliens held the weapons locked and useless.

But the psychic patterns, the emotional reflexes, of Miles and his two companions were joined together now into a single reacting unit. Their thoughts were not joined, but they reacted in unison and with an automatic understanding of each other. It was a strange feeling to Miles; for within Eff's share of that pattern Miles could now sense the direct, open, and vital quality of the bear-like alien; and in Luhon at his right, he could sense the deep, darkrunning feelings beneath the gentle exterior of soft voice and swift, silent movement. Just so, understood Miles now, the other two would be sensing him to a greater degree than they had ever sensed him before.

Meanwhile, computer-created before them all now, there had appeared on the vision screen before them something like the shape of a silver crescent—in the light of the artificial sun over the battle line. A silver crescent, horns forward, pointing toward them. It was, Miles' Center Alien-implanted knowledge told him, a reconstructed image of what the Silver Horde had looked like, attacking this galaxy a million years before.

Their fingers moved automatically on the consoles in response to their wishes. The instruments before them recorded the Fighting Rowboat as lifting from its position—even while in reality it still stayed where it was. In mock-action, it was recorded as drifting outwards to join with the vanguard of other ships from the Battle Line, advancing against the invaders.

Now the screen showed that advance. At the far left end of the advancing line was the tiny shape of the Fighting Rowboat. Even the ship next to it—the smallest of the great, round ships of the Center Aliens—was many hundreds of times its size and mass.

The silver crescent shape was pulsing and swelling rapidly on the screen. Now it began to be visible in depth, if not in thickness, like a great flat scimitar, swung at them in the same plane as their own Battle Line's formation. A few moments more, and its front edge began to fuzz, to reveal itself as an incredible multitude of individual vessels.

Luhon stepped up the magnification on the screen. The view of the approaching front line of scout vessels of the Silver Horde jumped at them. They were small ships—even smaller than the Fighting Rowboat itself, which would have made three of them; but there were literally millions of them in this first line of invaders, alone. A feeling of berserk joy leaped from the imagination of Luhon and communicated itself to Miles and Eff. In his imagination the little Fighting Rowboat suddenly thrust with extra energy and leaped ahead of its huge partners—until it, alone, was drawing away toward the enemy in advance of all the rest of the front line of galaxy ships.

Now they were almost upon the scout ships. Now, they were suddenly among them, striking right and left with their weapons—paralyzing the psychic opposition of the creatures' smaller vessels long enough to slash open the silver ships with the physical edge of their combined weapons. Like a wolf among a pack of weasels—in the imagination of Luhon—they raged right and left up and down the uncoming wave of Horde scoutships, snapping, shaking, slashing, and killing.

But now, the larger ships of the invaders, their second wave, was almost upon the Fighting Rowboat. It would take a miracle to manage their escape. But the imagination of Luhon had programmed the miracle into the exercise. In the nick of time, the Fighting Rowboat flung free, and raced away—just as the heavy vessels of the Center Alien came up to engage with the second wave of the Horde.

—Suddenly, Luhon's programmed battle ended. Suddenly, the pattern of the three minds broke apart. Miles sat back, exhausted, in his seat, and looking about saw Luhon and Eff slumping in equal reaction on either side of him.

For a long moment the feeling of the imagined victory continued to glow in Miles. But slowly that glow dwindled, flickered, and went out.

Of course, it was not true. It would not be like that. It could never be like that, except in the self-indulgent imagination of one of them, like Luhon. Only in imagination could pygmies join in battle with the giants without being destroyed. The lucky chances that had saved them time and again in Luhon's visualization of the attack, in actual fact would not be. The Fighting Rowboat would get its chance to fight only at the price of almost certain destruction. That was something they all had to face.

For himself, Miles found himself facing it with a cold and settled determination. As the feeling of that determination solidified like some hard and massive diamond within the very core of his being, he felt the minds of Eff and Luhon linking up with him in pattern once again; and he felt a comparable hardness of determination in them.

Good. It was settled, then. Instinctively, now the center point of the three mind pattern. Miles began to reach out. He reached out and drew into the pattern of three, the fourth mind of Chak'ha, then that of Vouhroi . . . and so on down the line of weapons on either side of the ship, as the psychic pattern reached out to enclose all those aboard her.

The skill with which he did this was clearly another of the abilities that the Center Aliens had given him. He had not suspected that he had it, until he used it. But now that he had used it, he became sud-

denly conscious of how little the Center Aliens had expected it to be used in this way before the moment in which the large pattern of the total Battle Line should activate them all as part of itself. Now, however, the pattern had set itself up, alone, in the minds of them all as one unit aboard the ignored and overlooked, tiny Fighting Rowboat. A fierce and angry pride kindled within the pattern; Miles was not sure whether he was its kindling point, but as the heat of that feeling spread out amongst them all, it illuminated within each individual the same hard, diamond-like core of decision to fight, even at the cost of dying, that Miles had found in himself, Luhon and Eff.

They were barbarians in the sight of the Center Aliens. A thousand bloody, primitive battle cries out of their near and savage ancestry clamored in the minds and memories of each one of the twenty-three who were now locked in the pattern. They clamored also in the brain of Miles, at the leading point of that triangular-like pattern. Out of that welter of recalled sound, a single phrase leaped clear and plain into his mind. No proud and noble speech of the battle field, but the grim and sordid chorus rising from the bloody sand of the arena. The one-time salute of the gladiators of Imperial Rome to Rome's Emperor.

Morituri te salutamus!

"—We who are about to die salute thee!"

10

THE WEAPONS DID NOT WARM UP quickly. Somewhere in their com-

bined physical and psychic mechanism was some sort of minimum operating level of potency. It was three weeks before they had all the guns on the vessel capable of responding—in theory—when Miles called upon them at once for mass fire.

Meanwhile, the actual approaching Silver Horde had been sighted. It was not visible yet upon the vision screen in the control room of the Fighting Rowboat, but a pale ring of light circled the spot on the screen where it would first become visible. Even this much was like a stimulant to the twenty-three aboard the Fighting Rowboat. They worked eagerly with their weapons and the ship, now-dry-firing, for the weapons remained locked. But that fact made little difference. As far as the feedback of response from weapon to the one man handling it, the feeling was the same as if he actually used it against one of the ships of the Silver Horde.

With Miles now in command, they also practiced actually lifting the ship from its platform, running half-a-dozen light-years out beyond the Battle Line, and there slashing at the computer-created enemy.

The computer element itself was evidently a small version of those large calculative mechanisms that were possessed by the Center Aliens in their enormous ships. It would be those larger computers which, calculating up until the last moment before the attack of the Horde, would decide whether opposition would be worthwhile.—Or whether it would not be better for the warships assembled here to break up and run, to hide and try to survive

—so that they might protect what few worlds were ignored, from stragglers and small hunting parties of the silver invaders. The small computer aboard the Fighting Rowboat would have no hand in this decision. But it could be used like this to program an imaginary attack of the Silver Horde, calling on the crew of the spaceship to repulse it. More than this, it could rate how well they did.

In the several weeks that followed that first takeoff, with all guns now operating in dry-fire, the computer aboard the Fighting Rowboat charted a steady increase in abilities and effectiveness of the ship and crew. However, as the line marking their progress mounted on the chart, it began to level off. Soon it became plain that they were ap-

proaching a plateau of skill.

"I don't understand it," said Luhon, as they sat together in the control room of the ship. The ship lay on its platform and the rest of the crew had abandoned their weapons for rest, after a long session of dryfiring and simulated battle. "We've all handled those weapons at one time or another. You can feel there's no theoretical limit to the psychic energies those weapons can take from us. There couldn't be, because whatever we can feed into them, it's going to be many times multiplied when the full psychic pattern of the total Battle Line locks in and takes

"It's plain enough," put in Eff.
"It's not the weapons that're at fault.
It has to be us. It looks like we're reaching the limit of our capabilities.
But I don't believe that."

don't either," said Miles, thoughtfully. "As I understand it, from the information the Center Aliens put in me when they changed me over—check me on this, both of you—any individual's psychic power is like the power of any one of his muscles. Continual exercise should increase psychic power, just as it increases muscle power. All right, maybe a limit eventually has to be reached, depending on individual capacity; but it doesn't feel to me that we ought to be reaching ours this quickly. How does that check with the feeling in you two?"

"It checks," said Luhon, briefly. His pointed ears twitched restlessly. "If those Center Aliens were half-way decent, we could get in touch with them and ask them what was wrong. But they wouldn't be inter-

ested in helping us."

"Maybe they couldn't . . ." said Miles thoughtfully.

The other two looked at him.

"What we're having trouble with . . ." Miles hesitated, "may be outside their experience. Either because it's something they've never run up against. Or because it's like something they had so far back in their own history that they've forgotten what it was like. Look—these Center Aliens can get many times the effectiveness out of one of those weapons than one of us can. The one I talked to told me that he had more power in himself than all of us on this ship put together."

"I can believe it," said Luhon.
"But I don't see any help in know-

ing that."

"It suggests something," said Miles.

"What?" asked Eff.

"Well," said Miles, "obviously, we're different from the Center Aliens. Maybe it's the difference that's tripping us up. Suppose we ask ourselves just how we are different."

Eff gave his short bark of a laugh. "We're barbarians," he said.

"They told us that."

"That's right," said Miles. "So, maybe it's some barbarian quality of ours that's getting in the way of our doing better with these weapons." He glanced from Eff to Luhon and back again. "What do you think?"

"Well . . ." began Luhon slowly, "we don't have their knowledge, obviously. But as I understand it, it isn't knowledge that feeds the psychic force. It's . . ." again he hesitated, ". . . something like the spirit in the individual."

"Spirit, that's it! The whole emotional pattern we have!" said Miles. He looked closely at Luhon. "You see what I think I see, in that direction?"

Luhon's ears flicked. He stared back, without answering.

"I don't see anything at all," put in Eff.

"Wait a minute," said Luhon slowly. "Miles, you mean that something about our emotional pattern is holding us back?" Abruptly he stiffened in his chair. "Of course—they don't react the way we do! They don't lose their tempers. They don't

His voice trailed off thoughtfully. "That's what I mean," said Miles. "We get wound up, self-intoxicated on our own emotion when we fight. The Center Aliens don't." He paused and glanced from Eff to Luhon

again, holding them both in his gaze. "Maybe our trouble's just that —intoxication, this battle-fury of ours, that keeps us from making better use of the weapons."

"But if that's it—" Luhon broke off, sharply. "What're we going to

do about it?"

"Practice," answered Miles, harshly. "That's what we can do. Practice using the weapons without getting worked up about it.—I know it won't be easy to do," he went on as Luhon opened his mouth to speak again, "but we can try—and maybe we can break through what's blocking us, this way. We'll start right now. We're all dead tired. It should make it that much easier to damp out our emotional reactions."

Eff laughed. Luhon spun about and sounded the signal throughout the ship that summoned all crew members to their battle stations on the ship. The gray-skinned alien gave the slight body twitch that was his own symptom of amusement.

"They'll enjoy this," he said. He began announcing to the rest of the

ship Miles' plan.

Meanwhile, Miles was calling on the computer element of the little ship for another simulated attack of the Silver Horde. It was not merely the rest of the crew that was weary. He, Luhon and Eff were weary as well. As he lifted the ship from the platform and headed out into the interstellar darkness, he deliberately relaxed the tension that searching for an answer to their problem had built within him; and he felt weariness flood through him like a depressant drug.

It was several hours before they

brought the ship back to its platform and had a chance to examine the computer's rating of their performance. It was down, of course, from what they had been scoring—but the interesting thing was that it was several points above what the computer calculated it should be, with their weariness fed in as part of the performance equation.

The next emotionless trial run that they held after that was a fiasco. The rested minds of the twenty-three aboard the Fighting Rowboat could not contain their emotional reactions, and the results were wildly spotty—highly successful in the case of some individuals—disastrous in the case of some others. But they kept at it, until they had once again reached the stage of weariness they had reached on the first occasion.

With weariness, the individual performances evened out. But the total performance was still less than their best, previously. Stubbornly, Miles clung to the possibility that, with practice, they would be able to hold their emotions down and break free of the plateau.

So it finally turned out. By the time the Silver Horde was identifiable as a small crescent shape in the control room screen, the ship's computer showed that they had tripled their fighting effectiveness from what it had been at the plateau level.

It was time, thought Miles, for the Center Aliens to be told. Once the Center Aliens saw what the Fighting Rowboat could do, they could no longer reasonably withhold permission for the little ship to join the vessels actually engaging the Silver Horde.

He left word with Luhon of what he intended to do, took the small ship that was parked on the platform, and once more headed in towards the center of the Battle Line.

This time, he did not make it even to within sight of the first, great, globe-shaped ship of the Center Aliens.

Without warning, Miles found himself no longer in the little ship. Instead, he and a Center Alien in human form, now stood in an area—it was hard to call it a room—that was walled and floored and ceilinged with shimmering yellow light. Directly before them in one wall, a milky blue and white globe seemed to either float, or spin at an incredible speed.

It was hard upon Miles' eyes to watch the globe. He looked away toward the steadily flowing yellow light of the wall, which was more bearable. Swarming in suddenly upon the heightened perceptivity that the aliens had given him, came an impingement, a feeling of being surrounded on all sides by many minds. All at once he realized that he was inside—literally inside—one of the huge ships of the Center Aliens.

"You will look at (—)" the last word said by the Center Alien had meanings beyond the ability of Miles' mind to grasp. It translated vaguely into his mind with words like "eye" or "window". But he understood that it was the globe to which the Center Alien referred.

He forced his eyes back to the globe, which caught and held his

gaze with a strength and intensity that was so great as to be almost literally painful. He felt himself, his mind, his memories, everything about him, in some way being examined.

For a long moment the examination continued. Then abruptly, it was over. He found himself free to look again at the yellow, flowing light of the walls, which he did gratefully.

"It is settled then," said the voice of the Center Alien, beside him. "You will be given an observational test."

Abruptly, he was back in the small ship. The Center Alien sat beside him, and they were headed back toward the end of the line where the Fighting Rowboat waited on its platform.

When they left the small ship and Miles started up the ladder into the Fighting Rowboat, he became conscious of the fact that the Center Alien was not following him. Turning about, halfway up the ladder, he saw the Center Alien standing still, on the platform about a dozen steps off.

"Go ahead," said the Center Alien. "I will observe from here."

Miles went on up the ladder and closed the entrance port of the Fighting Rowboat behind him. The air of tension and excitement within struck him like a physical blow in the face. He stalked rapidly through the lounge and into the control room, where Eff and Luhon were already in their seats. Their faces looked a question at him, but he did not answer that question to them, alone. Instead, he sat down in his own

seat before the central control console; and, touching a communications control, spoke to all of them aboard the ship.

"Calm down," he said. "All of you, calm yourselves. We can't put on any demonstration keyed up the way we are now. I'm giving everybody two minutes to damp down his emotions. Remember, we're under observation here, and we're going to be judged from the moment we lift off the platform."

He dropped his finger from the control and sat back limply in his chair, trying to relax, himself. He did not look either to right or left at his two under-officers. Before him, on the control console, a chronometer marked off those second-like sections of time which made up the intervals of time roughly analogous to Earth minutes.

As he sat there, Miles could feel his own tension lowering like the red line of the spirit-level in a thermometer, plunged into ice water on a warm day. Not only that, but-he could feel now—the general air of tension in the vessel was slipping away, also. At the end of two minutes the emotion of the twenty-three aboard the ship had evaporated. There was left only the hard purpose-the hard, cold purpose-of their intent on the exercise. The Fighting Rowboat was now a good dozen light-years out in front of the rest of the Battle Line. Miles pressed a control on the console before him. The illusory Silver Horde ships that were the first phase of their battle exercise were produced by the computer on the screen before him and on the screens that were the transparent bubbles enclosing the weap-

ons lining the ship's sides.

Miles hands leaped over the console before him; and the hands of Luhon and Eff followed him on either side, as the small ship flung itself against its imaginary enemies, some fifteen or twenty of the Silver Horde's scoutships, smaller than herself, but backed up by one of the ships of the second Horde's second line, which was several times as large and with many times the fire power. As they closed with the imaginary enemy under Miles' direction, the Fighting Rowboat altered direction, using her mobility, which was greater than that of the secondline Horde ship, to keep a screen of Horde scoutships always between itself and the superior weapons of the second-line ship. As it did so, the Fighting Rowboat's own weapons flashed outwards, killing off the enemy scoutships, one by one.

Then, when the number of enemy scouts was down to only four ships, the Fighting Rowboat turned and fled, having done a maximum amount of damage to ships it was able to kill, and held up for a number of precious moments a larger ship that it was not able to destroy. In theory, the Horde second-line ship, being held up in this way, should have been a sitting duck for the larger ships on the galactic side who were able to outgun it. The total effect of the exercise had demonstrated in theory, an effectiveness in the Fighting Rowboat that was better than three times what it had possessed originally.

Glowing with inner triumph, Miles turned the small vessel back toward the platform. Inside him was a sort of quiet pride for the other twenty-two aboard. Not one of them had broken emotional discipline. They had remained as cool-headed and objective about their fighting, as—Miles thought—any Center Alien, himself, could have done.

They headed back to their platform; but, as they approached it and hovered ready to land upon it, something materialized below them.

It was a Horde scoutship.

This had not been in the programmed exercise. But reflex took over, automatically. Miles hit the alarm control, even as the Silver Horde scoutship leaped into the air from the platform. A sudden explosion of emotion—all coolness forgotten—struck Miles from the rest of the twenty-three, even as their weapons opened fire on the scoutship.

But, even as they commenced to fire, the scoutship vanished—and hanging there, in space before them, was the small, unprotected figure of the Center Alien who had been observing them. His eyes met Miles' through the vision screen, and something like a solid blow seemed to strike Miles from within.

It clove through the reflex of white, raging battle-fury within him. It froze him, abruptly paralyzed and with a mind suddenly empty of decision. His hand hovered above the controls, but did not drop to touch them.

About him, the weapons of the Fighting Rowboat were silent. Miles felt his hands moved then, as if by some outside force.

His fingers descended stiffly on

the controls then, and he brought the Fighting Rowboat back to its berth on the platform.

Looking out through his screen, once they were down on the platform, Miles saw the Center Alien standing where he had stood before, obviously waiting. Miles rose from his seat before the console, turned and walked out alone. Around him and behind him as he left it, the other twenty-two who manned the ship were silent, still in their places, locked there by the shock of defeat. Miles walked down the corridor out the now open hatch and down the ladder which had slid itself out as the hatch was opened. He approached the Center Alien and stopped only a few feet from him. His eyes met the eyes in the apparently human face of the Center Alien.

"So you see," said the Center Alien, coldly. "There are stages to the development of a civilized, intelligent race. Once, we too were like you. We had the old, savage instincts still in us. But we came to the point where we could deliberately rid ourselves of those instincts—as you would amputate a diseased limb. And from then on we went on to develop other skills."

He paused, looking at Miles. Miles could think of nothing to say.

"Naturally," said the Center Alien, "you have the barbarian's instinct to fight, when you are attacked. But do not confuse that instinct with ability to fight—which, by comparison with ourselves, you do not have."

He vanished. Miles stood, numbly staring at the blank platform where the other had stood.

N THE Fighting Rowboat, THEY had come during their weeks of training to believe that they had improved to the point of being at least half-equal to the Center Aliens, individual for individual. Now, a Center Alien had stopped all twenty-three of them cold, with nothing more then his own personal psychic force. The effect upon the twenty-three was crushing.

Their contempt and anger was not turned against the Center Alien who had made them betray themselves. It was turned against themselves—and after that, against Miles. When Miles returned to the ship after his last words with the Center Alien observer, it was as if he stepped back into a cage of wild beasts, all prowling about with downcast eyes, apparently not looking at him, but waiting only for the smallest movement or sound on his part that could be used as an excuse for an attack.

Grimly, he gave them no excuse. He knew them, now, after these weeks of working together; and he knew that the worst thing he could do at this time would be to urge them to go back to their training. Deliberately, except for Chak'ha, who alone had not deserted him, he ignored them; and went back to his own self-training at the control console, alone. Day after day, he worked there, while the dot that was the Silver Horde grew steadily on the control room vision screen.

And, slowly, having nothing else to fight, nothing else to do, the rest of the twenty-three began to return to him. First Luhon, then Eff...

then gradually other members of the crew came to join Miles in the control room, standing behind him and watching the screen silently as he watched it. As Miles had gambled they would, those emotions which had betrayed them as barbarians before the Center Alien observer, now began to take hold of them once again whether they wished it or not. For this reaction, too, was predictable and instinctive.

The Silver Horde was plainly visible on the screen in all its numbers now—right down to the last line of rear guard vessels.

Watching them sent a cold feeling, like a chilling draft, across the back of Miles' neck. By this time the Horde was plainly aware of the Battle Line that was waiting for them; and, far from avoiding it, their fleet had clearly altered course to meet the Battle Line head-on. Early in the fourth week following the Fighting Rowboat's failure before the Center Alien observer, this shift in course became obvious to Miles, and during the rest of the week it began to penetrate the minds of the rest of the crew.

With that penetration, a strange thing began to happen aboard the Fighting Rowboat.

Without consultation, almost in fact with a silent, unanimous consent, the twenty-three began to take up their old duties aboard the ship; and, again without consultation, Miles found himself one day with Eff and Luhon seated on either side of him, lifting the Fighting Rowboat once more from the platform for a training session.

They ran through a programmed

attack without a flaw—and with no trace of that emotion that had betrayed them at the hand of the Center Alien observer. In fact, there was a new air of cold purpose aboard the ship. They all felt it, but Miles most of all. To him, as leader, it felt as if a powerful hand had been laid between his shoulder blades, shoving him irresistibly forward into rehearsal after rehearsal for the attack that was coming.

In fact, there was a new closeness about them all aboard the Fighting Rowboat. The approach of the Horde, after their shattering by the Center Alien observer, had gathered up the fragments of their collective spirit, and welded it back together again in one solid mass—harder now, because it had been tempered by what they had been through.

Their efficiency and potency with the weapons climbed sharply. By the time the Horde was less than a week from decision point—that moment in which retreat would be no longer possible for the ships of the Battle Line—Miles' rating charts showed the Fighting Rowboat to have more than doubled its effectiveness over the moment in which the Center Alien had come to observe them.

"—But they'll still never agree to let us fight," said Eff, standing beside Miles as he checked the last point of advance on the chart. "We're still only animals to them. Useful because they can drink our blood before the battle to make themselves strong for it. But outside of that we're so much cattle to be left behind when the real action comes!"

"Still, anything can happen," an-

swered Luhon softly, from Miles' other side. "Maybe the Horde will decide whether we fight them or not; maybe the decision won't be up to the Center Aliens once the real fighting starts."

Miles said nothing. But he understood the other two, just as he undestood the new, welded, singleness of decision of all aboard the Fighting Rowboat. The other twenty-two had come to that point he himself had reached a long time ago. They had stopped trying to reconcile the powerful, undeniable feelings burning within them with the cold and distant attitude of the Center Aliens. Now, they simply disregarded the fact that the Center Aliens had refused them the right to fight, if and when the battle was joined. They did not try to deny that refusal; they only ignored it and continued to prepare themselves as if their part in that battle was inevitable.

Meanwhile, the Horde came on.

Miles looked up at the screen.

It had been extended now, curved forwards through forty-five degrees at each end, to encompass the full picture of the Horde as it was now seen from the viewpoint of their ship in the Battle Line. Now, in the directionless blackness of intergalactic space it no longer seemed to be coming at them horizontally.

It filled the expanded screen horizontally, and stretched into the screen additions with the horn-like tips of its forward-curving ends; but it had expanded as well in its middle section to fill the center screen from top to bottom. Now it seemed to be not so much ahead of them,

as above them, hanging over them, rushing down on them like some great voracious amoeba, pulsing with life in the successive shifts of its successive lines of ships, its horn-tip arm stretching forward to enclose them and cut off retreat.

"—Those arm-tips must be level with us now, don't you think?" said Luhon, echoing Miles' own unspoken thought. All of the twenty-three aboard the ship seemed to think with one mind, lately. Luhon punched controls on the console before him, requesting a calculation.

After a moment, it flickered on the small console screen before him. He touched the wipeout button.

"Yes," he said. "Theoretically, they've got ships behind us, now."

"How long to Decision Point?" asked Miles.

"Five hours, some minutes," said Eff.

Time went by . . . Now it was just four and a half hours to Decision Point . . .

Four hours to Decision Point . . . Three . . .

Two . . .

One hour. Thirty minutes . . .

"What's the matter with them?" snarled Eff. For once, his cheerful, bear-like face was all animal fury. "What are they waiting for? What's going to happen that's new in the next few minutes—"

"Attention!" The communications speaker above them broke suddenly into life with the flat passionless voice of a Center Alien. "Attention! Your weapons are now unlocked, ready to be used. You will leave the Battle Line immediately, head back into the galaxy, and attempt to find

a hiding place, around or on some world of a system that does not possess organic life. I will repeat that. Your ship's weapon controls and weapons are now unlocked. You are to leave the Battle Line immediately, return into the galaxy, and hide yourself on some lifeless solar system."

The voice ceased as suddenly as it had begun. So quietly it had spoken, so abruptly it had stopped speaking, that it was a few seconds before Miles and the others were able to react. Then a wave of common emotion—felt along that network of emotional sensitivity that enclosed them all—swept throughout the ship like a silent moan of disbelief, and new fury.

"They're sending us away," whispered Luhon. His eyes were glittering. "They can't do that to us."

"That's right," said Miles, in a voice he hardly recognized as his own. "They can't!"

For a moment he sat without moving; then at a sudden thought, his hand leaped out again to punch for a picture of the Battle Line, stretching away to their right.

It took shape on the screen in front of him. He pulled back the focus until he was able to see several dozen of the ships stretching off to the right. As he watched, one of the ships disappeared—it had gone into shift.

A moment later, the ship only two stations up from the Fighting Rowboat also blinked out and disappeared.

Miles' fingers had jumped to the communications section of the console in front of him.

"This is the last ship in line!" Miles was snapping, into the microphone grill. "This is the last ship in line, calling the ship sixth up from our position. Are you preparing to leave the Battle Line? Answer me! Are you preparing to leave the Battle Line? If so, why? Why? Answer me—"

"We hear you," interrupted the overhead speaker suddenly, in the common language of those aboard the Fighting Rowboat, but in unfamiliar harsh accents. "Yes, we are leaving. We are retreating with the rest. Why do you ask?"

"Retreating?" echoed Miles. "Retreating—you mean just we little ships are retreating? Or more than just us?"

"Haven't you been informed?" roared the harsh voice, above him. "The Center's computational devices have calculated and found an answer that predicts defeat if we try to stop the Horde. All are leaving. All—"

The voice was cut off suddenly, as Miles jabbed at both voice and sight communication controls. Abruptly, in the screen before them, formed a schematic of the whole Battle Line. It showed the whole Line from end to end, and the ships in all their sizes and varieties, but as if only a few yards separated them. As Miles, Luhon and Eff watched, ships were winking out of existence in that Line. Even the huge globular Dreadnaughts of the Center Aliens were disappearing.

It was true. After everything—after all their work and the work of the Center Aliens and others to set up this Battle Line—now just because of some cold answer given

by an unliving device, the greatest strength the galaxy could gather was not going to face the Horde after all. They were all going to turn tail and run, save themselves, and let the Horde in to feed upon the helpless worlds they had been sent out here to protect.

"My people . . ." breathed Luhon. His hand flashed out with that fantastic speed of reflex he possessed; and without warning, on the screen before them all, was the picture of the Horde again, like some evil, glittering silver amoeba, hanging over them all, reaching out as if to swallow not only the former Battle Line but the whole galaxy behind it in one vast and evil embrace.

Before Miles, in that moment, there also rose up a picture of his people and his world—the world as he had seen it, during those last days when he had moved like a ghost from spot to spot about its surface, and among its many people. He saw it, and at the same time in his mind's eye, he saw the picture of the world that the two Center Aliens had shown him—the world that a million years before had been cleaned to the point of barrenness by the Horde.

In his mind's eye now, he saw Earth like that. One endless, horizon-wide stretch of naked earth and soil, with nothing left. Everything gone—all gone. The cities, the people within them, their history, their music, their paintings, Marie Bourtel . . .

"I won't!"

It was more than a verbal shout, it was a roar within the very fibers of his being. A roar of no-saying

and all that retreating without an attempt to stop the invaders would mean. There was nothing intellectual or sensible about that great roar of negation that picked him up, body, mind and soul, like a whirlwind. It was as deep and basic within him as the ancient unconquerable savagery that had used to reach out and destroy the intent of his paintings.

—And it was echoed, around him through the emotional matrix enclosing them all, from the beings of the twenty-two other individuals who shared this ship with him. Like him, they were reacting, without the need for thought; and there was now not even a need for consultation.

Miles hands slapped down on the console in front of him. To his right, Luhon's flashing gray fingers were already blurring over his controls, and Eff was busy at his left.

Like a living creature with one mind, the Fighting Rowboat lifted from its cradle and flashed into shift—single-handedly and alone into attack against the uncountable numbers of the Silver Horde.

12

ALARM BELLS SHRILLED, SIGnal lights on the board before Miles
flared in bright silver warning. In
the screen before him, the great rippling mass of the Horde seemed unchanged, but instruments before him
signaled that the invader had taken
note of the little ship's attack, and
was even now ponderously beginning
to swing about to face this one end
of the former Battle Line, from
which a lone attacker had come.

The massiveness of that shift, in itself, had something blindly elemental about it; as if the Horde was actually nothing but some vast amoeba, reacting blindly to the

presence of prey.

The Fighting Rowboat was closing the distance between her and the nearest of the silver enemy scoutships at the rate beyond mental calculation. Automatic devices aboard the little boat had taken over now. Each shift was shorter than the one before. With each they were zeroing in on that front line of silver, minnow-like attackers. Shortly the last shift would bring them out at almost a matched velocity and direction. They would be running then, side by side with the first wave of scoutships, headed back toward the galaxy.

Meanwhile, aboard the Fighting Rowboat, a new sense of grim unity thrummed through them all. Not only did they feel each other in the common network of sensitivity. It seemed to Miles that they went beyond this, through the minds of those manning them, to the unlocked weapons themselves. The weapons seemed like quasi-living things, now; Miles felt them against his mind like the touch of the console keys against the ends of his own fingertips.

—The shifts were very small now. They were almost ended . . . —They

were ended.

Abruptly, the Fighting Rowboat found itself in black space, with the light of the artificial sun dwindled to a tiny bright dot far behind them. And around them, on instruments and on screen, registered finally the scoutships of the Silver Horde—each

one no more than a third the size of the Fighting Rowboat; but, within the Fighting Rowboat's vicinity, they numbered in the dozens.

In the light of the distant artificial sun, Miles could even see the closest two of them; as silver-dull gleams seen briefly, like the soft flash of the pale belly of a fish glimmering for a moment up through deep water.

Miles' hands came down on the controls in front of him, and the Fighting Rowboat flung itself at the nearest pale gleam.

Now, the whole crew was aware of the working psychic elements. Now, through their weapons, they could finally feel the alien minds of the members of the Horde aboard the nearest scoutships. The consciousness of the aliens was like small, hard fists pushing back at the globe of outward-pushing strength that enclosed and emanated from the Fighting Rowboat.

That bubble of strength flowed over and encapsulated the alien consciousnesses aboard the scoutboats within weapon range. Miles, with the others, felt how they held the scout-members of the Horde will-less within their bubble of psychic power.

They had done it. The closer scoutships were drifting helplessly, their crews paralyzed. Luhon's quick fingers danced over the firing-control buttons before him; and from the weapons about the Fighting Rowboat, pale sighting beams reached out to touch the scoutships—and a second later there stabbed down the center of those sighting beams a force which ripped open the enemy vessels.

The Fighting Rowboat struck, and moved, and struck again . . . Suddenly, they were in a little open space. They were through the first line of scoutships.

They had won. -At least, in this

first contact.

A furious feeling of triumph rolled through their network of common sensitivity. They had struck the enemy, and lived. Their savage souls exulted at the thought.

But now, plainly before them on the screen and swiftly closing down about them, were the second-line scoutships of the Horde; and these were each half again as big as the Fighting Rowboat itself.

The next contact was one they could not win. But their ancient instincts hurled them forward into the

battle, regardless.

Abruptly then, it happened-for a third time to Miles.

As it had when his painting had been stolen and he had climbed the cliff, as it had happened when he was fighting with Chak'ha, so it happened once more, now. He went into hysterical strength. —Into overdrive.

Suddenly, it was on him againlike a motor inside him, suddenly relieved of the governor that had artificially limited its potential power, winding itself up tight to full output. He felt all of one piece, and strength raced through him. Almost he could feel it churning and frothing, searching for the needed physical violence that would provide it with its necessary point of escape.

But there was no such point. His physical strength was not needed here; the ship was his muscles. All that was left to him to do, here, was push buttons; and that he could have done with the ordinary strength that was in him. His arms and legs ached to be in action; but there was no job for them. -Only the small, easy tasks they were already doing. A feeling of frustration, wild and furious as a storm at sea, began to build to hurricane force inside him.

-All the while, the Fighting Rowboat was closing with those larger ships of the Horde. And here sat Miles, tapping a great reservoir of strength in himself, for which there was no use.

The overdrive power boiled within him, like a whirlpool of force-like a circular river seeking an outlet and hemmed in by tall mountains. It raced faster, still faster, seeking an outlet—and then, suddenly, found it.

It was like a pass through the mountains, leading to a higher land. It was a release for the explosive, whirling power building within him —but it was something more, as well. It was, at this last moment before his own certain destruction, that which he had always searched for in his painting. An overdrive of the creative spirit, comparable to the overdrive of hysterical strength in the physical body.

In the same moment in which he recognized this, the pent-up force within him went pouring through the new-found outlet. It flashed through, and upward; leaving his body at peace but switching his intellectual centers suddenly to an almost unbearable certainty and brilliance. —And, without warning, all strain was over.

He glanced about him. The con-

trol room of the Fighting Rowboat seemed both brighter and smaller. The three dimensional objects within its metal walls seemed to stand out aggressively at him with a sort of super-solidity. He looked back at his two companions and found that even the flying fingers of Luhon seemed to have slowed.

Only they had really slowed. It was not as if his perception of time had altered—but as if it had sharpened to an intense degree. He was able to observe, leisurely, in one second, what it might once have taken him sixty seconds to observe. But he was aware that the literal time had not lengthened. Instead, it was as if his perception of it had become microscopic. —So that now he could use sixty smaller divisions within the second, and make as much use of each of these as he had been able to make of the whole second, before.

At the same time, his imagination and understanding went soaring. In one great sweeping rush, they integrated him with the rest of the crew aboard the Fighting Rowboat, rushing in self-intoxicated fury upon the death that was the multitudinous enemy of the Silver Horde-with the Battle Line that had been—and the Center Aliens who had set it upwith all and everything in time past and time present; from the historic moment in which the Horde had passed through the galaxy once before up through the coming of the aliens to Earth and the present moment.

In that moment of understanding he achieved an understanding of it all . . . overdrive, his fellow crew members, the Center Aliens, everything. It was as if a man might stretch out his arms to encircle a whole universe and lock his fingers together upon its further side. It was an understanding too big for one single concept of explanation. It was a whole network of comprehensions working together.

"Join up!" he shouted, suddenly into the intercom of the ship. At the same moment, he opened a channel for the overdrive power that was now in him into the network of sensitivity that encompassed them all. It flooded forth.

—And the other twenty-two members of the crew felt, recognized and absorbed it.

Like flame racing along lines of wet, high-octane fuel, the fire of his overdrive power flashed out and kindled overdrive fires in the awarenesses of his crewmates. They flared like him with a new fierce heat; and the fire spread from them to their weapons. Like sun-dried driftwood, the psychic elements of their weapons took flame.

—And from those weapons the fire reached forth in the shape of a many-times-multiplied psychic strength to capture and paralyze the new wave of the enemy, now closing about them.

Miles felt it, through the network of their composite sensitivity aboard the Fighting Rowboat—like the sudden tautening of a heavy cable mooring some massive ship to a dock. It tautened; and held. Their globe of psychic force was secure. It reached out well beyond the extreme range of the weapons aboard these ships of the Silver Horde that now

flocked toward it, holding all of the enemy within its perimeter helpless. While the physical weapons of the tiny Fighting Rowboat tore at and destroyed them, one by one.

The wild joy swept up all of them on the ship. Here, where they should have been destroyed themselves, they were winning. For a moment, it seemed to them all that they were invincible, that they could hold off and destroy the whole Silver Horde by themselves. But then, the steadily mounting pressure against their psychic hold, as more and more of the silver vessels drove in upon them, brought them to a more sober understanding.

As long as they could keep their present strength, they were invincible. As the Center Alien had explained to Miles, earlier, the ships of the Battle Line could not be touched by the physical weapons of the enemy as long as their psychic strength endured. But either weariness, or too many enemy pressing in at once upon them, could end that strength. For now, they were winning. But they could not win forever . . .

"Never mind that!" shouted Miles over the intercom. "We're winning! That's what counts! Keep it up. We're stopping the Horde—we're stopping the Horde!"

. . . Time passed. They fought and slew the Silver Horde . . .

But the end was in sight now. They were not yet weakening, but the number of larger scoutships and even some of the light-cruiser-class ships of the Horde were beginning to push against their globe of psychic combination. Aboard the Fighting Rowboat, they were many times more

powerful than they should have been, still. But they were like a giant of a man holding shut a door against the onslaught of an avalanche down the side of a mountain. To begin with, he holds the door shut easily against the onslaught of the rocks and boulders. But gradually, these begin to pile up their weight against his shield. Heavier and heavier . . . until the whole weight of the mountain begins to lean against him. And against a mountain no flesh and blood can stand.

So, Miles and all those aboard the Fighting Rowboat felt the breaking point near. Any moment now, the final element of pressure would be added, their shield would crumple; and all at once the force of ten thousand weapons of the invaders would tear the little Fighting Rowboat to nothingness. But there was no sadness in them. Instead there was a sort of deep-lying, grim joy, like the joy of a wolf who goes down in his last fight with his jaws still locked about the throat of one of his enemies . . .

"Hold on . . ." muttered Miles, to himself as much as to the other twenty-two he addressed over the ship's intercom. "Hold on. Keep holding a little longer—"

Sudden and thunderous, roaring without warning at them from the speaker not only in front of Miles, but from every metal strut and metal surface of the ship, came unexpectedly the voice of a Center Alien.

"Get back!" it roared. "Back to your place in the Battle Line! We're taking over the fight!"

taking over the fight!"

Miles was not conscious of having touched the communications controls before him. But suddenly on the screen there was no longer the image of the many silver ships of the Horde pressing in on them.

Instead, he saw a larger view of the battle. The little pocket of inviolate space that the Fighting Rowboat had maintained around itself was now only part of a larger scene, in which the front line of the Horde swirled, boiled and retreated before the advance of a line of different ships. It was the great globular Dreadnaughts of the Center Aliens and their allies come at last, after all, into the battle.

But it was already too late. Even as the voice blared at them through the communications speaker, some mighty blow struck the tiny vessel, and it seemed to Miles that he went flying sideways into nothingness.

ness gradually, but with a strange determination and effort, like a miner trapped by a rock fall, picking his way back to freedom and seeing the first small gleam of daylight as the last rock sealing him in, tumbled aside.

The room, and the motionless figures of Eff and Luhon, one on each side of him, were absolutely still. But, he discovered, so was he. His mind might be awake, but his body was asleep.

Understanding suddenly, a silent chuckle formed in the back of his mind. He recognized his condition, now. He was in the grips of that same tranquilizing power which had ended all fights aboard the Fighting Rowboat before the Horde appeared. The only difference between the oc-

casions when it had held him before, and now, was the fact that on mental overdrive, apparently, he was able to keep the sedative effects from the thought-centers of his brain.

Weighing the situation, Miles suspected that, if necessary, he could even free his physical body and give himself the freedom of movement. And this was interesting—for he had sometime since decided that the tranquilizing effect was only another version of the psychic weapon used to paralyze the Horde. Clearly, it was possible that, in overdrive and with some practice and effort, he might even be able to defy the psychic weapon, himself.

But there was no point in going to the effort to test his powers, now. He turned his attention back to the reason for his being under tranquilization.

He freed his neck and eyes enough to be able to look down at his body. He saw that he had been stripped of nearly all his clothing. On the arms, legs and body now revealed, saw several wounds, already closed. Only two wounds on his leg still were open, and even these were not bleeding. Rather, they seemed to be held unbleeding as if by some invisible, interior bandage. As he watched, one of them slowly closed, from the bottom upward, as if an invisible zipper was being drawn up the length of the slash. A moment later his other cut closed as well. Clearly, some unseen mechanism was at work repairing him; but his conscious mind took note that the curious part of it all was that this healing process, while directed from the outside, seemed to be effected

by the natural responses of his own body.

He looked about the rest of the room. Eff and Luhon were also stripped and in the process of being repaired. His glance shifted to the vision screen before him.

On it, he saw the full panorama of the battle still in progress. The glittering, new-moon image of the silver invading fleet, with the horn-like tips of its line curving forward and inward, had now changed shape. Those curving arms had now swung inward, to enclose the attacking ships of the Battle Line.

Once more, Miles was reminded of the image of a monstrous amoeba attempting to engulf and absorb some edible morsel. Just so, the silver fleet had gathered into itself the globeshape battle formation of the ships of the Battle Line. Around that globe, now, the ships of the Horde were swarming, enclosing the galaxy's ships completely. What Miles viewed now was a roughly silver, oval shape, with a large globular bulge in its midst.

Miles gazed at the battle action, which, because of its vastness in scale, both in numbers of the ships engaged, and in the amount of space they occupied, seemed on the screen to be taking place in slow motion. -In slow motion and on a microscopic, rather than a telescopic, scale; for all the light-years of distance involved and the thousands of milesper-second velocities of the individual ships. Suddenly, there exploded in Miles a fierce hunger to know how it was going—the battle as seen by the Center Aliens and others within that globe of space, now covered thickly and hidden from him by the swarming silver ships of the Horde.

The hunger gave birth to the means. Immediately, the fiercely burning energy of overdrive within him seemed to light up one small corner of his awareness; and he discovered there a tendril of feeling, a connection with the network of sensitivity which was now in existence out there in the midst of the boiling fleet of Silver Horde vessels.

He seized upon that trace and followed it. It grew as he searched along it—and suddenly he found what he hunted. He was locked, emotionally and mentally, into the network of sensitivity which joined together the ships and crews of all those in the now-engaged Battle Line.

His point of view was central. It seemed to him that he existed at the very center of that vast globe of interior space held by the ships of the galaxy. Here, there was no light at all, but in his mind's eye he saw it all as if everything was brightly lit—as if he stood at the center of a sun which illuminated everything.

Around him was space. Beyond this, was an invisible, globular shell of defensive power, held together by points spaced regularly about its surface, points which were the ships of the Battle Line. Beyond this shell for a depth of several thousand miles, were helpless ships of the Horde, in a thick layer—their vessels only a few miles apart, so great was the density. Aboard those invader ships was silence. Their crews were paralyzed and still, held helpless by the psychic force, and awaiting the busy scythes of the powerful

physical weapons projecting from the Battle Line ships. These weapons were sweeping back and forth like searchlights, to explode—almost to disintegrate—every solid object they touched.

Outside this shell of helpless invader ships was the rest of the Silver Horde, pressing inward, trying desperately to overload the psychic mass potential of the Battle Line fleet. As Miles watched, that pressure grew, until it threatened to overload the Battle Line fleet, and tear apart, not only the buffer-zone layer of helpless Horde ships, but the formation of Battle Line ships beneath them.

But, just as overload threatened, an order pulsed outward over the network of sensitivity, from whatever vessel or group of vessels among the Center Aliens commanded the rest. Abruptly, the shell of defended space shrank. Suddenly, the Battle Line ships were that much closer together. The surface they defended was decreased proportionately, and the layer of helpless invader ships, standing in the way of the rest of the Horde that had hoped to nose in among them, was that much thicker.

With the decrease in size came a proportional increase in power. The nut that the Silver Horde was attempting to crack had become smaller, but denser.

The fight went on . . .

Now, to the eyes of Miles' physical body, seated before the vision screen of the console back aboard the Fighting Rowboat, the shape of the Horde itself was nothing more than one large ball of silver maggot-like shapes, completely hiding those they

attacked. Anyone who had not known that the Battle Line was trapped within that seething mass, thousands of miles in diameter, must have believed that there was nothing left but the Horde, itself. —Or that the battle, if there had been one, was already won. Only Miles' linkage with the sensitivity network allowed him to know that the combat still went on.

It had reached the point of deadlock, now. The uncountable numbers of the Horde were jammed as tightly as they safely could be about a linked fleet of Battle Line ships that had shrunk to what was its smallest practical diameter of defended space.

Like two massive organisms entangled in a motionless, straining, struggle for life or death, the Battle Line and the Silver Horde clung, locked together. It was the sort of straining deadlock which, between human wrestlers, could not have existed for more than a matter of minutes without one opponent or the other giving way in exhaustion. But so massive were the antagonists wrapped in their death-struggle beyond the spiral arm of the galaxy, that this deadlock continued not for minutes but for hours. And for hours —that seemed like minutes—Miles endured with it; while around him, Eff, Luhon, and the others returned to consciousness and began to move around the Fighting Rowboat.

They did not speak to Miles. Just as his sensitivity continued linking him with the network of the encompassed Battle Line, so their sensitivity to him had continued. They were aware that he was, somehow, with

the battle, out there on their screens, in a way that they could not be. So they moved about him silently, and left him in silence to endure with those who still fought on, hid-

den by the Horde.

Miles was only peripherally aware of his crewmates. Almost all of his awareness was concentrated on the network of sensitivity of the embattled ships. About their globe, the Silver Horde was still clustered and the deadlock continued as if it would never break-

Then, abruptly, it broke.

Suddenly, the physical eyes of Miles, watching in the vision screen aboard the Fighting Rowboat, saw something that must have begun to happen some moments before, but which was now for the first time becoming apparent. The globe shape of the Horde-swarm enclosing the ships of the Battle Line was no longer globe-shaped. Instead, it was beginning to bulge at one end, becoming faintly pear-shaped. Now, as Miles concentrated his attention upon that bulging end, he saw that the bulge was growing, was stretching out-was, in fact, pulling off from the mass surrounding the ships of the Battle Line. Now, as he watched with a perception that speeded up the slow motion imposed on the battle action by the vast units of time and space involved, the bulge began to thin out to a point, stretching away from the fighting ships of the galaxy, and away from the galaxy, itself.

Slowly, the line of fleeing invader ships lengthened and thickened. The awareness of their retreat pulsed through Miles back into the sensi-

tivity network of the still-enclosed Battle Line, and the knowledge was received there like a trumpet call of victory-but the fight went on.

Because, for the englobed ships of the Battle Line, the battle was not yet over. Those silver ships still just without the layer of paralyzed invader vessels continued to fight blindly to move in and overwhelm the defenders. It would be long hours yet-perhaps several daysbefore the Battle Line dared break its defensive formation.

But, outside as seen on the vision screen of the Fighting Rowboat, the shifting shape of the invading fleet continued to lengthen and withdraw, pulling away from its engagement with the Battle Line and forming a new sickle-shape headed off in a direction away from the galaxy.

The invaders had been turned from their feeding-ground. The Silver Horde, that no one had been able to stop a million years ago, had now been stopped and averted from its goal. The galaxy, the stars of home, the Earth, itself—was saved.

WAS NO DARKNESS aboard the egg-shaped craft that was transporting all twenty-three of the Fighting Rowboat's crew to the command ship of the Center Aliens; but Miles had the feeling that if it had been dark, Luhon's eyes would have glowed in the obscurity like the fierce eyes of a cat in the night.

". . . We shamed them into it!" Luhon said, almost in a whisper in Miles' ear. "When we talk to them friend Miles, remember that! They'd decided to run; but when we attacked, we shamed them into com-

ing back to fight!"

Miles said nothing. Within him was an awareness that both the problem and its resolution had been both wider and deeper than Luhon or any of the others understood. But there was no time for him to explain this to them, now. Luhon's words still echoed in his ear even as the gray ship transporting them seemed to melt away about them; and they found themselves apparently hanging in space, at the midpoint of the interior of one of the huge Center Alien vessels.

They hung-or stood-there, like bodies at a point where gravity balanced in all directions. It was a little like being in a fun-house full of distorting mirrors. For, looking about casually, Miles could see that they were literally miles in every direction from the interior surface of the globe-shape surrounding them. They were too far normally to make out the fact of what was abnormally and immediately apparent to them —that the whole interior surface of this globe was filled with individuals of the Center Alien race, and their allies. It was as if an auditorium should be built in the shape of some huge ball, coated within by seats completely covering its inner surface.

When Miles glanced generally at the interior of the globe surrounding him, he saw only a blurred grayness in the far distance, illuminated by a light that seemed to be nowhere in particular, but filled all the interior space equally. However, when he looked directly at any one spot on the interior globe-face, it was as if some telescopic window suddenly materialized between him and that point. All at once he was staring into the faces of the aliens seated or standing there, as if no more than ten or a dozen feet separated them from him.

Clearly, this gathering was in honor of the Fighting Rowboat. But, clearly also, the occasion was something more than a mere celebration. Miles felt, with his new sensitivity, a puzzlement reaching out toward them from the surrounding audience. He and his crewmates were being viewed with a strange curiosity and no little lack of un-

derstanding.

Suddenly, they were joined at their mid-point position by two of the Center Aliens. To Miles' eyes, these still wore human forms. He reached back into his own mind for support, and the now-familiar overabruptly flowed reaction through him, making his vision sharp and clear. The two Center Aliens who had appeared looked no different from all the others he had seen; but the deductive section of his mind told him that they must be different. These two would not have been chosen at random to stand and talk to the crew of the Fighting Rowboat before the eyes of the-was it hundreds of thousands, or millions? that occupied the inner surface of the globe, watching them. No, it was almost a certainty that these two were as close to being the supreme authorities among the Center Aliens as any of that race available, here and now.

"We have brought you here to do

you honor," said the taller of the two Center Aliens. For all the lack of variance of feature in this one, as in the others of his race, Miles judged him to be old—possibly very old.

"Thank you," said Miles. "We appreciate the fact that you want to honor us. But there's a question we want to ask you—all of you."

"Ask anything you wish," replied the Center Alien, and Miles could feel the millions of individual minds all around them at that distance at which it was at once hundreds of miles and a few feet only away, focusing their attention on him and

on the question to come.

"Why did you come back?" Miles asked. "You told us that there was no hope of winning the battle. But, after we attacked alone, it seems you changed your mind. —Of course, we all know the results. The Silver Horde was driven off, after all. But what are we supposed to think about your actions, first running, and then returning? Were you wrong in your first judgment of how the battle would go? —Or, did the sight of us attacking alone, make you more aware of your own responsibilities to stand and fight?"

The Center Alien spoke: "May I remind you that it was not an organic decision—our conclusion that our joining battle with the Silver Horde could only result in our defeat. It was a computed decision, the logical result of many factors considered and handled by non-living devices which are far superior to the aggregate decision—making possibilities of even our minds. The factors of the situation

were made available continually to these computational devices. At Decision Point, their assessment was plain. The Horde had a tiny, but undeniable edge in the total of probability factors needed for victory. We could not logically hope to fight them and win. Therefore, we made the only sensible alternative decision. That all those within the Battle Line should flee and attempt to save themselves as well as possible; in order to have the largest possible number of intelligent, technologically trained individuals with which to rebuild the galaxy after the Horde had passed."

"But you changed your minds,"

said Miles.

"No," answered the Center Alien.
"We are advanced beyond the point where we could, as you say, change our minds—make an emotional judgment at variance with the results of our computations. We came back, not because we 'changed our minds', but because new computations gave us a different answer."

"New computations?" demanded

Miles.

"Of course," replied the Center Alien quietly, "I imagine even you can understand that by attacking as you did, you could introduce a change into the factors on which a judgment of the battle's outcome had been figured. Three matters of sheer chance affected the present situation, and altered the future picture built upon that situation. First, there was the fact that you had suicidally, and against all reason, chosen to attack alone against the total might of the Horde. Second, there was the fact that your attack

came from what had been the furthest end of our Battle Line, in front of which the Horde had lined itself up for battle. Third, there was the fact that, reacting with the instinct of their race, the total fleet of the Silver Horde began to turn to meet your attack, instead of ignoring it and allowing it to be absorbed, and yourself obliterated, by the smallest fraction of its numbers necessary to deal with you. These things, as I say, altered the factors of the situation. Now, I am sure you understand."

With his sensitivity, Miles could feel the other crew members, behind him, equally spellbound by

bafflement.

"Perhaps. But explain it to me,

anyway," said Miles.

"If you wish. You have earned whatever explanation you desire,". said the Center Alien. "As I say, your illogical, suicidal attack altered the factors of the situation. -Not only to our view, but evidently to the Horde's as well. Your attack, alone, must have been something they could not understand. So that they expected the worst and turned their full strength to crush you. Our devices recomputed and found, as a result, that where before the slight but decisive edge of advantage had been in favor of the Horde, now because of your action there was an equally slight, but decisive, edge of advantage in our favor."

The Center Alien paused. Miles could feel all the eyes within that huge globe upon him and the rest

of the twenty-three.

"So," went on the Center Alien with the same unvarying tone of

voice, as if he was discussing something of no more importance than the time of day, "we came back and engaged the Horde, after all."

For a moment, within Miles' brilliantly burning mind, a faint flicker of guilt woke. With an ability to understand that he would not have had if he had not been in overdrive, he read clearly and sharply some of the meanings behind the Center Alien's words. The individuals of this race, for all their lack of apparent emotion, wanted to live as badly as he did. Also, while their decisions were clearly governed by their computing devices, clearly they had no means of knowing whether that computation was ultimately correct or not. They had only known that the answer they got was the best that could be gotten within their power, and the power of their computers. So, just as they had fled without shamebut undoubtedly with as deep an inner pain at the thought of what they were doing in abandoning their worlds to the onslaught of the Horde-so, they had returned without question. They had returned with as deep an inner courage as was possible to them, to enter a battle which they only believed, but could not be sure, they would win.

Miles felt Luhon stir against him. There was a quality of indecisiveness in that movement that announced that the gray-skinned crewmate was cut adrift from his earlier fierce desire to make the Center Aliens admit to cowardice. Now it was plain they could not be taken to task at all in the sense that Luhon and the others had envisioned. For they

had done nothing, after all, but be true to their own different pattern of behavior.

"Thank you," said Miles, "now we understand."

"We are glad you understand," said the taller Center Alien. "But, since this is a moment for understanding, there is something we

would like to ask you."

"Ask away," said Miles, already

expecting what was to come.

"Of all the races who joined us in the Battle Line," said the Center Alien, "you twenty-three were the only ones who did not obey our order to retreat and save yourselves. Instead you did a clearly reasonless thing. Alone, with no hope, why did you attack the Horde the way you did? Was there some way you could guess that by attacking you would bring the rest of us back to join you in fighting, after all?"

It struck Miles then, with the clarity of his overdrive-sharpened mind, that this was the first time he had ever heard one of the Center Race ask a question. Obviously, this could only mean one thing. It must have occurred to this advanced race that the only reasonable possibility was that Miles and the others had some means of calculating the battle odds, within their own minds and bodies, which was superior to the calculating devices the Center Aliens themselves used.

"No," answered Miles. "We didn't expect you back. We knew we were attacking the Horde on our own, and we knew what had to happen if we met them alone."

"Yes," said the Center Alien. There was a second of silence. Then he went on—to Miles' extra-sensitive perceptions, it seemed, a little heavily. "We were almost certain that you could not have expected help. But, seeing you did not expect help, the question remains of why you did it?"

"We had no choice," said Miles.
"No choice?" The Center Alien
stared strangely at him. "You had
a clear choice. Your choice was to
leave, as you had been ordered to
do."

"No," said Miles.

Once more he was conscious of standing between two points of view: the point of view of the Center Aliens, and the point of view of his crewmates, neither of which fully saw and understood the situation. It was up to Miles, now, to satisfy them both, even if he could make neither understand what he now understood.

"Maybe it's because, as you say, we're primitive compared to the rest of you in the Battle Line," said Miles, slowly. "But our choice wasn't a head-choice, it was a heart-choice. I don't believe I can explain it to you. I can only tell you that it's that way—with us."

He paused. From the beginning the huge globe-full of watchers had been silent, and there was no more silence now than there had been before. Yet Miles felt a certain extra focusing of attention upon him, a metaphorical holding of the breath, by the hundreds of thousands of millions who were lisetning. He went on.

"Our peoples," Miles said, slowly, "are part of us, you see. The way our arms and legs are parts of our body. We couldn't any more coolly abandon them just to save ourselves, then we could coolly submit to cutting off all our arms and legs, so that the useless trunks of our bodies would be left to survive. If our people had to face death, the least we could do-not the most, but the least-was to face that death with them. It wasn't any thinking decision we made. I repeat, it was an instinctive decision—to kill as many of the Horde as we could before we were killed, ourselves. It wasn't any different for us than if we'd come back and found our planets turned to desert, our people dead-and then we'd run into the Horde. Then, just like we did here, we'd have set out without thinking, to kill as many of the Horde as we could before we were killed ourselves."

Miles stopped talking. The silence that followed on his words this time was a long silence. But at last it was broken by the same taller of the two aliens standing with the crew of the Fighting Rowboat at midpoint.

"We were right originally, then," said the Center Alien, slowly. "It was a part of your primitive nature that caused it, and we could not understand because it is a part we have long abandoned. You are still on that early road from which we departed a very long time ago. Do not think, though, that we are less grateful to you because of what you have just told us."

He turned a little, so that his gaze was directly on Miles. Almost, the Center Alien seemed to speak directly and privately to Miles.

"No matter from what source it sprang," said the Center Alien, "from will or mind or instinct—the fact remains that what you did changed the battle-picture and resulted in our saving of our galaxy. What can we do for you and these others to show our gratitude?"

Miles had been prepared for the question. Now, he answered quickly before any of the others from the Fighting Rowboat could speak up.

"We want to stay independent," said Miles, "and much of what you could give us might not be good for that independence. But there are a few things . . . Now that we've been brought together aboard the Fighting Rowboat, we'd like our races to stay in touch. So give us ships, then; or show us how to build our own ships, so that our twenty-three different races can communicate, and travel back and forth between our separate worlds."

"The ships and the knowledge you ask for are yours," said the Center Alien. He hesitated. "—And, if in the future you should want more than this from us, we will arrange a method of communication so that you need only ask."

"Thanks," said Miles. "But I don't think we'll be asking."

14

HE SUMMER SUN OF A LATER year was sinking toward the hours of late afternoon, above the high banks of the Mississippi River by the University of Minnesota campus, when the envoy from the race called (by themselves) the Rahsesh alighted from a government car at the

edge of a road on the west bank of the river. Before the envoy, humans in plain-clothes guarded a small section of green lawn that ran outward a short distance to the edge of a bluff. Recognized by the guards, both in his personal and diplomatic capacity, the alien envoy was admitted through their lines. He went alone across the grass to where a man stood with his back turned, painting on a large canvas set up on a heavy easel. A brown-haired girl sat quietly in a camp-chair near him, reading.

The painter was in light slacks and white shirt with sleeves rolled up. Smears of gray, blue and yellow paint were on his bared forearms, on his hands and fingers; and the canvas before him was heavy with wet paint of many colors. The envoy from Rahsesh went swiftly, smoothly and quietly up to stand at his

elbow.

"Am I interrupting you, friend

Miles?" he asked the painter.

"No," Miles shook his head without looking around. "I'm all done, Luhon. I'm just putting a little polish on a last few sections. — You've met my wife—Marie?"

She raised her head to smile at Luhon, before returning to her

book.

"No. I'm honored to meet her," said Luhon. "Continue with your occupation, friend Miles. I can wait."

"No, go ahead. Talk," said Miles, still without turning. "Do you know you're the first one in? None of the rest of our old crew from the Fighting Rowboat have got to Earth yet."

"They'll be along shortly, I'd guess," said Luhon. "Did each of

the races pick its former representative to be its envoy? It occurred to me that there might be races which might want to send someone else."

"Not for this meeting," said Miles. His brush-point placed yellow color lightly upon the canvas. "Each of our twenty-three races need all the understanding they can get about each other and that sort of understanding's only possible through someone who already knows the rest of us. In fact, just in case there'd be no doubt about it, I said as much in the message I sent around to the other races. You must've noticed my recommendation to that effect in the letter I sent the Rahsesh."

"I noticed," replied Luhon, gazing at the canvas with some small interest and curiosity. "But it occurred to me that perhaps the recommendation was special, in my case."

"No," said Miles.

For a few seconds neither one said anything. Miles worked away at

his painting.

"You know, friend Miles," said Luhon, thoughtfully, "when the Center Aliens asked you, after the battle with the Silver Horde, what we all wanted in the way of reward you answered him without talking it over with the rest of us, first."

"That's right," answered Miles,

painting.

"And now—" murmured Luhon, "here you've called a meeting of all of us on your world speaking for all our races, again all on your own. Also, that notice you sent around, friend Miles, didn't say especially what we were all getting together to discuss."

"It said," said Miles, "that what

we were going to discuss would at first be understandable only to those who, like we twenty-three, had had experience with the Center Aliens and the Silver Horde."

"True," said Luhon, "and that was enough to satisfy my government—and, I suppose, to those who govern the other twenty-one races. But is it going to be satisfactory to the twenty-three of us, ourselves, when we all come face to face again? —I

"All right. You've asked me," answered Miles, and paused to squint at the descending sun, sending its rays slanting now across University buildings, trees, river bluffs, and river—all the scene of Miles' painting. "And you've made a point of coming early, to be sure that you'd be the first to ask me."

"I was your second-in-command."

"True," said Miles, straightening up and stepping back from the canvas, brush in hand, to get a longer perspective at what he was doing. "All right, friend Luhon. I'll give you your answer, first. I've called us all together again here to begin making plans for the day when it'll be our turn, eventually, to take over control of the galaxy from the Center Aliens."

His words sounded calmly on the warm summer air. But they were received by Luhon in a silence that stretched out and out.

Miles went on, unperturbed, examining his canvas. He stepped forward once more and began to make a few more tiny alterations in it with the yellow-tipped number ten brush he still held. Finally, behind him, Luhon spoke again.

"I have my people to think of," said Luhon, slowly. "If you've become mentally unreliable, friend Miles, I'll put off whatever friendship and allegiance I had to you, and so inform the rest of the twenty-three—crewmates and races alike."

"That's up to you," said Miles. "Meanwhile, why don't you think a little about what I've just said? I didn't say anything about taking over from the Center Aliens tomorrow, or next year, or even a thousand years from now. I said that we'd be taking over eventually, and we needed to start talking about that eventuality, now."

you forgotten . . ." "Have Luhon's voice was almost a whisper, "the numbers of the Center Alien ships in the Battle Line? Have you forgotten the number of Center Aliens that each of those great ships must have held? -And what one Center Alien was able to do to our whole ship and crew? Can you imagine how many like him there must be; and the number of worlds they must occupy, in toward the galaxy's center? Can you imagine all that, and the thousands of years of technological advantage they must have over us-and still say what you're saying?"

"That's right. I can," said Miles flatly, putting his brush away finally into a muddy jar of turpentine standing on a small table to the left of his easel. "Because it isn't numbers or technology that's the true measure of a race. We found that out when the Horde attacked."

"Did we, friend Miles?" Luhon's eyes narrowed to dark lines in his gray face.

"I'm reminding you," said Miles, "that the Center Aliens failed the rest of the galaxy, in the moment of the attack of the Horde. I didn't think you'd forget that?"

"Forget? No . . ." replied Luhon, slowly. His eyes widened once more.

"Think!" said Miles, turning for the first time to face him. "Nothing shrinks faster with time than the memory of a great struggle. Right now, my race has been completely shaken up, woken up, by its escape from the Horde. But the generation remembering this, the one that shared consciousness with me out there on the Battle Line, isn't going to live forever. How much will their grandchildren remember?"

He paused, staring at Luhon.

"Not—much," said Luhon, hesitantly. "If your people are like mine, forgetfullness will take the edges off memory, in time. That's true . . ."

"In a hundred years they'll start forgetting that we didn't really conquer the Horde—only caused it enough trouble so that it turned aside to easier feeding grounds. In a thousand years they'll talk about the great victory we won. In two thousand, it'll have been an easy and expected victory. Soon—very soon as the whole galaxy figures time, another million years'll have gone by and the Horde will be back again. And how ready will we be?"

Luhon hesitated.

"Very well," he said, after a second. "But why us? Why not leave the control and the responsibility of remembering to the Center Aliens, or whoever takes their place down in the middle of the galaxy? They kept the records of the Horde's com-

ing once before."

"Kept the records, yes," said Miles. He looked down from his slightly greater height at the gray-skinned alien. "But that's all they did. A million years ago, remember, the Horde wasn't stopped at all. It swept through this galaxy, almost emptying it of life. The Center Aliens must have been one of the few technological races of which individuals survived. But in spite of that, this time the Horde would have done exactly the same thing it did before—if it hadn't been for us. Us! We twenty-three aboard the Fighting Rowboat!"

"You have to admit," said Luhon, quietly, "luck had a lot to do with

it-with all of it we did."

"No," said Miles, "I don't have to admit that. Because it wasn't luck. It was something much more important than luck—and that something's to be the topic of this meeting I've called. Because we've got it—a hope and a power that the Center Aliens haven't; and that's why they failed, facing the Horde."

"Failed?" Luhon's voice was al-

most too quiet.

"They ran. We stayed—and saved the day," said Miles. "Because of our blind instincts, but also because of something I'd found and shared with the rest of you. The ability to go into an overdrive state, to tap hysterical strength of the mind and body. Only, 'hysterical strength' is really the wrong term for it. Because what it is, actually, is a breakthrough into a creative ability to draw on all the deepest reservoirs of our minds and bodies at once.

Remember how you felt, when we attacked the Horde and I reached out to all of you with the strength that was in me?"

"I remember," said Luhon.

"Then you remember that the Center Aliens didn't have anything like what I had, in themselves. If they had, we'd have felt it. More than that, they'd never have needed to run from the Horde in the first place; if their naturally much greater psychic strength could be multiplied like ours did, by their going into overdrive."

"Unmultiplied, their strength was enough—once they did come back and start fighting," said Luhon.

"Yes, once they came back!" said Miles. "But the point is, they didn't come. —Not until after we, with no hope, just instinct, had attacked the Horde and changed the battle odds for them. The odds meant everything to them—nothing else did."

"All this," said Luhon, "I admit, friend Miles. Maybe we do have something the Center Aliens gave up, and maybe their lack of it would have opened the galaxy to the Silver Horde if we hadn't been there. But how can you make this one, small, instinctive reaction a basis for some sweeping plan to replace the lords of our island-universe?"

Miles smiled, a little grimly. He picked up a clean piece of white cloth from the small table, soaked it in kerosene from a container standing nearby, and began to clean the red, the gray, the yellow paint, from his hands and lower arms.

"Because it isn't small," he said.
"You, I—all of us on the Fighting

Rowboat—made a wrong guess about the Center Aliens from the start. Seeing how old and powerful they were, we took it for granted that they'd long ago won all their battles with their environment, that they'd evolved beyond the point where they had to prove their right to survive in the universe. But we were wrong."

Luhon looked strangely at Miles. "I don't understand you," the

gray-skinned alien said.

"I'll explain," said Miles. He finished cleaning his hands and, wadding up the now sodden and stained piece of white cloth, threw it into a large coffee can, half-filled with

other paint-soaked rags.

"Somewhere," he said, "sometime, there may be an end to the physical universe. But only then-only when there're no more frontiers over which something unknown and inimical can come to attack-is any race's struggle for survival going to be over. Up until then, each race is going to have to keep on-keep on proving itself. The only differences are going to be that the challenges to its survival will keep coming from further and further away, as it expands the area it's made safe for itself to live in. -We humans, Luhon, are end products of an organism that started as a onecelled animal, and which, to date, has won every battle for life that's been forced upon it. How is it with your people?"

"The same," murmured Luhon.
"But surely the Center Aliens,
also—"

"No," said Miles. "Somewhere, back thousands of years probably, they made the decision to scrap their instincts for other abilities. And for all those thousands of years it looked like the right decision. Then the Silver Horde came back and proved it was wrong. Oh, the Center Aliens survived the Horde, physically; but that didn't matter, because it was us, not them, who saved them. They were proved vulnerable, and they can't go back to pick up what they've lost. All at once, their road into the future turns out to have been a dead-end route."

Miles looked for a long second at Luhon.

"So that's why we'll be taking over the galaxy from them," he went on. "Because, from that moment on, they'll have begun to die—somewhere in their race consciousness—just like any prehistoric species who took the wrong evolutionary road and finally came up against something they couldn't handle."

"But, friend Miles," said Luhon, "even if they do die off and we take their place—if we hold on to our instincts, how can we gain what they gained at the price of giving up their instincts? Where can we

go-"

"By another route," said Miles,
"—any other evolutionary road
where we hold on to instinct and
emotion. They couldn't have given
that sort of road much of a try
or they wouldn't have turned away
from it so early. They closed a door
to themselves that the rest of us,
with luck, are going through into a
much bigger universe."

"Bigger?" Luhon said doubtfully.
"Of course, bigger," said Miles.
"Take the overdrive—it's from in-

stinct and emotion that you get into overdrive. Can you imagine getting it any other way?"

"But we can't spend all our future

fighting off invaders, Miles."

Miles smiled. "Is that all you think overdrive is good for? That's the least of what it can do for you. It's a basically creative force—"

Miles broke off, and put a friendly hand on the smooth, gray-skinned

shoulder beside him.

"You'll see," Miles said. "You'll understand, once I explain it. —And I'll be explaining it to all of you from the Fighting Rowboat, once everyone's here for the meeting." He checked himself again. "Which reminds me, we'd better be getting back to welcome the rest of them as they get here. —Marie?"

She rose from her chair, holding her finger in her book to mark her place, and walked back toward the

road.

But, under Miles' hand, Luhon stood still. His attention suddenly caught and arrested, he was leaning forward, staring at the painting. Miles waited, and for a moment watched the gray face, in blunt profile, staring at the shapes and colors on the stretched cloth.

Finally Luhon sighed briefly and relaxed his attention. He turned to Miles, looking sideways and up at the taller human being.

"You've got a lot of sun in it,

friend Miles," he said.

Miles smile widened. He pushed the shoulder he still held, lightly, turning Luhon about, back toward the road and they started for the car there that still waited.

K. M. O'Donnell

JULY 24, 1970

July 24, 1970

Dear Mr. O'Donnell:

Your "time-machine" story has some merit and with revisions might be suitable as a "first" for one of our low-budget magazines; whether or not these revisions are anything you wish to undertake, however, must be your decision. The script, of course, is only 550 words and for \$5.50 many writers would be inclined to apply their efforts toward better ends . . . such as extraordinary theft. Still, this is a common problem in our branch of the market, and we hope to boost circulation soon through our "I want to go to the moon or beyond" contest; we'll then be able to install, perhaps, a quarter of a cent raise into the system. At any rate, I'd be most happy to see this one again if you, in turn, will have another look at it.

The first problem is that the basic device has become as despicable an editorial chestnut as those deals-with-the-devil stories, all authors of which an editor-friend of mine once promised to shoot in the future on sight. (I, however, deplore violence; we have too much of it.) Any script that begins—as yours does—with an editor rejecting the first-person story

of a writer who notes in his journal that he has begun the day by going into a recently-invented time machine and murdering his grandfather, and which terminates in the middle of a word is apt to be nestling in your thoughtful return envelope before it has fully gleaned the dull light of day that sifts into these offices. Nevertheless, I do like your twist in the middle, here, when the editor takes note of the fact that the writer, in a covering letter, states that the editor is a distant relative. This intimation—that the editor, his magazine and the submission itself might all vanish simultaneously because of temporal paradox is mildly provocative. In short, you demonstrate the paradox operating on more than a single level of negation and this is somewhat promising.

What I suggest you do, therefore, is to rewrite the story from the point of view of the editor of the magazine to whom the story is sent, using his sensibility rather than the epistolary method. Show, if you will, the increasing dismay of the editor as he realizes—in the process of rejecting the script—that he is possibly looking at the roots of his own causation.

Imply, thusly, that the editor

finds himself in a terrible dilemma: the story is hackneyed and the writer undoubtedly that inept crank who always, under whatever name, pops up in some corner of the day's mail load; nevertheless, he (the editor, that is to say) has spent his entire life muddling in nightmare and must, against his will, accept the possibility—the existence, I mean—of that which he has exploited. Indicate, then, that the editor wishes by all light of critical knowledge to reject the script insultingly yet fears to do so on the horrifying possibility that he is rejecting himself.

So, the editor returns the story not with a form rejection slip but, instead, with a request for rewrite so surely tortuous, unrewarding and beyond the writer's limited skills as to make the possibility that he will ever see the script or author again distinctly limited. Try to indicate that under his businesslike facade, however, the editor feels anything but businesslike; to the contrary his backbone is pressing against his sensitive spinal cord and his delicate hands even as they type the letter, crawl with dread; any moment he expects the keyboard, the backbone and his own offices, perhaps, to and . . . well, then? What then indeed?

If you will do this for me, Mr. O'Donnell, I think tha

SF Convention

1969 Lunacon (New York SF Conference) will be held at the Hotel McAlpin (formerly the Sheraton-Atlantic), 34th Street and Broadway, on April 11-13, beginning at noon on the 11th. The guest of honor is Robert A. W. Lowndes, long-time sf editor. Memberships: \$2.00 in advance or \$2.50 at the door. To join or for further information write: Mr. Franklin M. Dietz, President, N.Y. SF Society, Box 515 Washington Bridge Station, New York, N. Y. 10033. Please make checks payable to N. Y. SF Society.

Don Thompson

THE NEW SCIENCE

"WITCHCRAFT IS NOT A SCIence," said the intense young man, "but it could be one.

"Take alchemy—that was undisciplined hogwash, but after it was organized and codified and all the nonsense (or most of it) was removed, we had chemistry.

"I think—I believe—that the same thing can be done with witchcraft." He chose this as a dramatic juncture and picked up his coffee cup, drained the last half with a sweeping gesture, and pretended it had not really been hot enough to scorch his tongue. With elaborate casualness, he leaned back, opened his mouth, and inhaled and exhaled and inhaled and exhaled.

The other three young men at his table reacted with the disdain reserved for cafeteria inspirations and barroom revelations. Bradley waited for an opportunity to reintroduce sex as the general topic and the new waitress as the specific one; Wallace was more concerned with the letter his draft board had sent him two weeks ago, questioning his continuing student status.

Martin, as usual, had several minor things on his mind, none of which was important enough to serve as a substitute for Foster's conversational gambit, so, bored by silence, he accepted the bait.

"I suppose you intend to devote your life to codifying witch-craft, like those elderly Englishmen who spend decades translating the memoirs of Mesopotamian monarchs into turgid but proper English prose with no thought of recompense?"

It was the opening Foster wanted.

"You, my lad, are behind the times." He decided this topic called for his emulation of Professor Hume's mannerisms, and put his right hand under his belt behind his back, tucked his chin onto the knot in his necktie. "The work of years can now be accomplished in mere hours, perhaps minutes.

"Fellow sippers at the well of Academe," he said, lapsing into the pontification he loved to affect, "I offer you immortality. We four shall give the world a new science as a term project.

"Think upon it—four grad students confound the world before leaving the academic womb.

"With the reputation we shall gain from this achievement, we can write our own paychecks in the wonderful world of science. We probably—almost certainly—will win the Nobel Prize."

Abstractedly, Bradley said, "How nice of you to share it with us."

"All heart," murmured Wallace.

"Noble with his Nobel," said

Martin, who was ignored.

Foster tried to dispel the notion that this was just another college dream created by the smell of coffee. "I need you, frankly, or I'd do it all myself and keep the credit. One man—and one computer—could do it. The problem is to get to the computer, which is where you come in.

"Monster can analyze all that's been written about witchcraft in a night and give us what's workable in the morning." Monster was a massive computer, squatting deep in the bowels of the physics building. "I need you to help me get the use of Monster for a night, just one night, and we'll rank with Newton and Einstein and Euclid and Fermi and, uh, all those people."

Despite himself, Wallace was interested. "You mean, we give Monster all the data about witch-craft—fiction and all—and it pecks out the stuff that really

works?"

"Precisely, though I don't know about using fiction. Most of that stuff is made up or researched. I think we can stick closer to the original sources. That's where we'll find the real stuff, the stuff that works."

"If any of it works," Bradley said.

"Some of it does," Foster said.
"There's just too much written about it for it all to be phony. Primitive people have come up with scientific discoveries before, like chewing quinine for malaria. The computer just dumps all the superstition and leaves us with the nitty gritty, the core of truth back of the legends.

"And," he added, "if it doesn't, all we've lost is one night's sleep. A good bet: one night in the sack against immortality, wealth and

power."

The odds were right. They laid their plans, gathered everything they could get on witchcraft, devil worship, necromancy, sorcery, voodoo, sympathetic magic and related materials from the library. Instead of a mere night's sleep, they gave up weeks of study, dating and drinking time searching through card files and rummaging through the stacks, digging out tons of books, most of which had not been checked out for decades, if at all.

Monster, fortunately, "read" type, eliminating the need for punching everything on tape, a chore that would have taken decades with no thought of recompense.

Two months after the idea had

been broached in the cafeteria, they entered the basement quarters of Monster. The computer was alone, though scheduled for use by Sleepy Smith of the chemistry department. Dr. Jefferson Smith had earned his nickname from his absentmindedness, which had resulted in Martin's being assigned to follow him around and serve as his reminder, stopping him from lifting test tubes from the bunsen burner with his bare fingers, reminding him of appointments. Martin had carefully failed to remind him that he was scheduled to use the computer tonight and had, in addition, removed the key to Monster's room from Dr. Smith's jacket pocket. It was possible that Dr. Smith would remember the computer assignment on his own, but it was a possibility that a meteor would strike the campus administration building, too. The latter had a higher degree of probability.

It took an hour just to transfer the books from Bradley's hearse to Monster. It took the rest of the dark hours to have it read into the computer. Monster could read and record a page instantly, but it took time for a mere human to turn the pages for him.

The wee hours had grown larger when the last data was ingested.

Foster, the moment of truth at

hand, struck a pose, grinned fatuously, and threw the necessary switches to turn Monster from a recorder to an analyzer of data.

Eight red-rimmed eyes watched the humming computer, eight ears listened to the clicking of relays, four hearts beat faster.

Coded punch cards by the hundred flipped into the discard basket. Much of the data was garbage, obviously, but a thin, a pitifully thin, sheaf of cards went into the "accept" basket. This was Foster's nitty gritty, the core of truth at the center of the legends.

When Monster flashed his completion of the task, Foster lifted the accepted cards from the basket, fed them into Monster and programmed the computer to confirm data by experimentation.

Foster performed the acts wordlessly, aware for the first time that his flippancies about Nobel prizes and immortality were, indeed, not so flippant.

Monster selected a card, flickered, clicked, dimmed the room lights and, using the voice playback, chanted.

Silence fell on the room, broken only by the plopping and hopping of the four live occupants of the room as they leaped frantically about on the cold tile floor.

Monster ignored the toads, selected another card, and dried up every cow in the state.

Bryce Walton

TROUBLING OF A STAR

"Thou canst not stir a flower Without troubling a star . . ."

AFTER PROBING HALF THE GALaxy and ten thousand worlds, they gave up the search for life. All talk turned to Earth and women. And suddenly they had to go home.

Rubin, the psychologist, looked into their eyes again. He gave them the tests. He agreed. They should go home and they should start at once. They had better forget the world on which they had just landed and began preliminary tests. It was a sterile wasteworld like the others. Forget it all. Go back.

Emptiness without a shore comes back on you after a while, Rubin said. He was always saying things like that to Commander Cahill. The figures themselves were frighteningly incomprehensible. Thirty trillion miles between the stars, and all of that space empty but for tenuous clouds of hydrogen gas. 100 billion stars in the Galaxy. 10 billion other galaxies within sight. 1 million light years between the galaxies. 10

billion light years across the visible universe. But as far as anyone knows it goes on out for whatever forever is—getting emptier.

Airless, cold, empty, black, boundless. Totally hostile environment through which we move in our little life-preserving ship like goldfish in a bowl. Worse than hostile. It's indifferent. Implacably indifferent, waiting only for time to strike. Oh, we're tough, Cahill. Sure we're toughhighly adaptable. And we could keep going into this if we had just a little hope, encouragement. Reinforcement as we say. But we have had none. So what we've got is negative reinforcementno life, nothing; isolation loneliness increase. Finally the void leers. The emptiness sucks. You begin to have these old spooky thoughts again-about existence; what am I? How did I get here? Why? Or what? Or-

It's time to go back then. To warmth, roots, family. Mother Earth. Symbol and fact.

"Why not the womb?" said Commander Cahill. "None of us were ever lonely there." "That's part of it, too," Rubin admitted. "Anyway, the time comes when every man must go back. This is it."

"I don't feel that way." Cahill leaned toward the control board and snapped on the vision plates. Dust. Still nothing but that damn dead dust clouding everything.

"I know you don't feel that way, Cahill. Less dependancy. That's why you were made commander. You kept it going a long time without discovery and encouragement. You could keep going a while longer, who knows how long? But we can't. And you can't go on alone. That's too bad,

in a way."

Cahill, who was shorter than Rubin but half again as wide, shook his head slowly three times in intense frustration and ineffectual rage. His shaven head and face, in contrast to Rubin's hollow-eyed pallor, was space-burned to dark mahogany. While the others stayed longer in drugged sleep, Cahill had kept up his space walks on the ship's outer hull. Those billions of stars so terribly bright in the black void that you had to shade your eyes. "It's a big haystack," he said. "A million intelligent worlds could be lost in it. But that world-millions of civilized worlds-are here somewhere, Rubin. And we ought to keep going until we find something."

"And what if we don't?"

"Then what the hell's the sense of going back," Cahill flared. "We'll still be alone in the universe for all we know. It'll be the same hangup, won't it? Isn't that what the Earth is, Rubin, after all? Another spaceship? Rock and iron, crowded, bigger—maybe six billion trillion tons bigger. But just another spaceship going nobody knows where or why. And all alone, Rubin, all alone in the big indifferent soulless universe! What's the difference?"

"To you, perhaps not much," Rubin said. "Not yet. But for us it's now. Nostalgia. Longing to go home. Human nature. Empty lifeless space makes it a matter of immediate personal salvation. They must go back to where everything once seemed, at least, to be warmth and security—unconditional—"

"It isn't there now," Cahill said.
"The only security is out here.
Contact, interchange with others.
That's the only hope."

He stopped. Words were already used up and pointless. They had already outvoted him four to one.

Rubin shrugged and shook Cahill's hand, then joined the others in drugged sleep along the

rear bulkhead of the control room.

Cahill looked at them lying there in dream-drugged sleep. They had acted like children, eating their sleep-candy capsules like kids and hopping into bed to be tucked in. Cahill had shared something childish with them once—that intense curiosity about what they would find. This was different. This was the innocent trusting dependent look of children who know that mother waits to feed, warm, rock and sooth if they should wake up frightened in the dark.

Cahill remembered Rubin's puzzled query. "Doesn't the thought of those women bother you anymore? That one you used to talk so much about. Laura?"

Yes, Laura. He thought of her. The thoughts were sad and beautiful, often like pain. He could relive every moment he had known with her. No assist from dream-drugged sleep required. She had been very direct and physical, a lover of life and love. She had wanted to make love that last time in the desert mountains where the sky was clear, under all the stars possible—because they were where he was going.

Yes, Rubin. The thought of Laura bothers me still. She was all women, not just my mother—

He turned to the control board and went to work with the usual practiced skill, but now he moved with the detachment of a mortician forced to embalm his beloved. As Commander, it was his obligation to make final preparations for shifting back and forth from regular to the anti-matter energy drive that enabled them to jump between star-clusters, and now back to Earth, somewhat faster than the speed of light. The journey would still take a while, however. And a body under ordinary conscious conditions wouldn't take the strain.

He checked the drive units. He dragged out a protractor, heliocentric chart, photometer, astrographical and planetographical references. He re-checked ascension, declination, distance coordinates, detector relay currents, and cosmic drift.

He fed the programmed coordinates into the computer. Figures appeared on the board. The ship, now in automatic drive, would blast out of this sun system and into anti-matter drive in seven hours and two minutes Earthtime. That was a time schedule Rubin had warned them to observe with unfailing veneration.

Maybe Rubin was right. And now go back, frail man. Reel yourself back fast on an over-extended umbilical cord. Your challenge to the infinite and bitter night is over.

He got the kit of five hypothermic injection syringes from the cooler. He gave the four dreaming men their final shots and sealed their cowlings. He set the "alarms," then he lay down in the commander's niche near the control board and started to insert the hypothermic needle into his arm.

Instead, he got up and went back to the vision plates. Again he opened them for a last look. Dust. More dust. The air and gravity were thin. The flatly worn surface of this world offered little obstruction to winds that formed continuous drifting whirls of dust five to ten miles wide, thousands of feet high. A small white sun shown through the dust, sometimes like a blind eye. But there was no sign of it now. Only those misty streamers of yellow light slanting down like light filtering through the water of a milky sea. Looked as it had probably looked for a million years, like so many others—a wasteworld in a star cluster they hadn't even bothered to name.

We came so far, Cahill thought. As far as man had barely managed to dream. And was this all they would take back? A report of thousands of G-class suns, and planets circling with the useless, meaningless idiocy of powdery puffballs?

They had seen parent clouds of hydrogen, swam through vast clouds of primeval hydrogen atoms, the raw stuff from which all stars and planets and life must have been made. They had drifted past the swollen and reddened outer regions of aging stars, and white-hot dwarfs shrinking into blackened corpses, seen the remains of the dust to dust cycle of large stars, the rushing gas-clouds

of supernovas and the luminous brilliance of stars in embryo.

Thousands of planets suitable for the formation of nucleotides and amino acids, the building blocks of life. And it's here somewhere, Cahill thought. Life. Great and infinite varieties of intelligence and galactic civilizations. It has to be here. It has to have been here for billions of years. For the Galaxy is at least five billion years older than the Earth.

Figuring likely planets similar to Earth, in favorable distances from a small sun—figuring them to be as rare as one in a million, the number of Earthlike planets would still number hundreds of thousands. That chain of physical and chemical reactions which led to the appearance of life on Earth had to have occurred on other planets. Intelligent life had to have developed, died, flourished, gone on for billions of years among the galaxies.

Where the devil are you? Cahill pleaded. Have we just passed one another in the night?

It looked the same. But the wind sounded different. Its gritty whisper over the ship's hull seemed louder, more abrasive. Or perhaps a better term would be gnawing. A more eager gnawing. Because that's what it was. Winddust and sand gnaws everything away, given time. It dissolves the rock and solid strata; breaks, decomposes, gnaws away the high

points; fills in the hollows, and that sand-blasting action of winddust gnaws on across the surface, wearing and wasting . . .

Cahill looked at his watch. He still had a little less than six hours before he had to give himself the needle. He flipped the tab of the data-processing ticker and scanned the discouraging preliminary information they'd dug out of the planet before making the sudden decision to run home.

It was what they called a terrestroid planet; it was composed of about the same mixture of rocky materials and nickle-iron which makes up the body of the Earth. It was about the same size and distance from a similar sun. But it was a bit over nine billion years old-over twice that of Earth. Some heat still radiated from remains of thorium, uranium and potassium in the interior; this had extended the cooling time. Substantial amounts of water had covered the surface when it was young and had existed in abundance for at least a billion years. So advanced forms of life should have developed here.

They had found no trace of life—now or fossil. No organic molecules in the rocks. No fossil records. No deposit of one-celled plants, algae, or shells of bacteria-like organisms. No hard bodied animals; corals, starfish, snails or trilobites. No tracks made in

primeval slime by wriggling animal worms.

There had been rivers, lakes, seas, mountains, and low hills. Now there were apparently no promising vertical structures at all.

Cahill grunted and jerked the tape up closer to his eyes. This last part of the tape they had ignored because they had been crucially discouraged and had suddenly decided to go home. Maybe they had not even seen it. Beadle had been at the board then. He had said nothing. But here it was.

Seismo probes had revealed faint volcanic activity from one small spot—within a few miles of the ship. From this one small isolated sector came intimations of some moisture, and possible fragments of plant life!

Cahill looked at his watch again, back at the viewplates. Slowly he ran the flat of his hand across his mouth. His upper lip was wet.

Indecision seemed to last a long time. Then he moved. He still had a few hours in which to take one last look around. A gesture, one for the road.

Anyway they hadn't really given this one a fair shake. You have to walk on them to know. If there is anything you'd feel it. Cahill had always thought that unless you walked on a world you would never know for sure, despite the most sophisticated mechanical probes.

This world deserves a walk. Even a short walk, he thought. Even a small grain of salt contains a million trillion atoms. And worn-out worlds and dying suns are the debris stuff of gas-clouds that rush out from supernovas to form new suns and planets.

He hauled his T-17 spacesuit from the locker and put it on. He clamped on the biopack, hooked up the automatic recorders and automatic highspeed microminiature cameras, and entered the airlock. He didn't look at the others. He hesitated again and looked at his watch. But what did it matter? If something happened and he didn't make it back to the ship in time, the ship would blast off anyway in five hours and forty minutes. It would take them home.

Cahill heard the dust-wind, much louder now, grinding over his suit and his helmet. He checked his gauges and started away from the ship toward the reported direction of that faint volcanic life. He moved in long, practiced, low-gravity jumps. He turned up his mikes to catch any squeaks or whistles of meaningful sound, but there was only starstatic and the irregular thud after each ten-foot stride as he landed with enough force to disturb the mikes.

An hour later turned up nothing but more sandwhirls and haze

and flat desert, worn porous and crunchy under his boots.

It was late evening then. Temperature dropped fast toward freezing. The air began to clear and the wind to die. Clear areas opened across the desert floor and in the overhead dust clouds. Where the sky appeared, it was deepspace black and blazing with that terribly bright star-density of the galactic core. This world had no moon. But that luminosity of stars glowed on the desert through thinning dust like splashes of quicksilver.

Sometime later, he reached the edge of a sink. It sloped down gradually to a center depth of thirty feet and was some fifty yards wide. Along the bottom in pools of silver starshine lay a black still river.

Cahill studied it, aware of his slow controlled breathing. He watched it. He listened. It felt alive to him somehow. But nothing moved down there except dust devils swirling along like smoke. The dust-wind gritted very softly now around his helmet and there was still no other noise but starstatic.

But then he went down there, and it was like rubber balls rolling, crunching, popping under his boots. He crouched and under the beam of his light appeared closely-packed plants. Not black, but dark gray, mottled and shiny like a shark's hide. Pods the size of

oranges in clusters of three, with spiny, cactus-like leaves, all interconnected with tubular tendrils like seaweed or water lilies.

The ground along the sink bottom was a bit warmer. A thin vapor clung there. Some moisture had frozen underground and here -only here according to the seismo probes—some of that frozen moisture melted due to very faint localized volcanic action. The moisture seeped to the surface in this one tiny oasis. It formed ground ice at night. Melted a little during the days. Here —here alone—these podplants

clung to life.

Beautifully adapted to their environment, the pods stored water to last during burning days, perhaps for spells of drought. Their tough hard surface was impervious to the constant honing of dustwind. But their speckled hides, designed long ago as camouflage to blend in with gravel and rock, served no meaningful purpose now. They had nothing to hide from. Gravel and rock had turned to dust.

Why? Cahill thought ecologically. Things lived for and on and about other things. Interdependance and balance. And if there were no birds, no insects, no reason for fertilizing soil or to oxygenate air, why these few lonely, meaningless acres of podplants? Alone on a cinder, unaware of themselves, but struggling to live on with a fierce determination through fiery days and freezing nights-for who knew how many thousands or millions of generations. Rubin would say there didn't have to be a reason.

Cahill cut off a large bunch of podplant specimens and hooked them to his suit belt. He stood up and started to move out. But after three steps up the slope of the sink, he stopped and stood very still, listening.

His mikes were picking up a

different sound.

A kind of rustling and crackling. He couldn't tell if it was far or near, but it got louder. It sounded then as if he were rolling down a hill through piles of

crisp autumn leaves.

The sound swept, swelled and expanded. It enveloped. Dark shapes appeared, moving against the starshine. They spread, interlocked, separated and changed form and whirled about. They twisted around one another. They shrank into separate parts again and again, then recombined into larger shapes that bent and swayed like twisters, then shot up and spiraled forward.

And down. Straight down at

Cáhill.

And the sound increased to a vast swarming flutter like millions of tiny wings or leaves, a torrent of droning and humming.

Cahill bent and sprang out of the sink. He ran in long risky leaps toward the ship. Looking back, he saw thousands of tiny lights like pinpoints of energy that danced across the sky in changing, reforming patterns; like the lights of a gigantic, multicolored switchboard.

Flying sparks, dancing flame surrounded him. Something was everywhere over his suit and around his helmet. Something flickered over his visor and smeared vision.

His boots tangled in strands of podplant tendrils and he fell blindly, rolling, burying himself in stirred dust as dense and finegrained as powder.

He struggled up to one knee. He waited, tense, blind. His visor began to clear. The dust slowly settled like plankton through water. Motes of light spread and vanished away in the air, dark now but for the starshine.

Something moved. Like a shadow at first, more of an outline of some undefinable shape. Then it was nearer, less than ten feet away. And the shape was all too familiar. Cahill stared. He heard his breath and his heart going too loud and fast inside his helmet.

"Laura?" he heard himself. It was a whisper half dead in his throat. "Laura?"

At that moment he knew a terror worse than anything he had ever known or could ever have imagined. The terror of losing his sanity. He remembered Rubin's talk about the spaceman's nemesis—autistic thinking. Desires or wishes that originate in deep personal striving are seen or felt as being already fulfilled, and contradictions with reality are ignored or unnoticed.

"Where there's life there's hope," Rubin had said, with his serious grin. "And where hope is desperate enough it might create life."

Cahill felt, that suddenly and without warning, without a chance to defend himself, he had been seized and made mad.

A woman stood there—tall and beautifully naked, with ripe swelling breasts and hips. Near, waiting, breathing, her arms out full, her legs out, opening to him. And he thought he heard eager laughter—a whisper—but he could not really see her face. It moved but was indistinct like a smudged charcoal drawing.

She was nearer. Her naked skin seemed to be multi-colored fluff, or very tiny filmy feathers like those on the breasts of pigeons. All colors rippling, shimmering. Colors and designs shifted and changed. Hair flowed out wavering at right angles from her head on the wind like something seen under water. It turned to flames that parted, sparked, came together like the flames of a bonfire.

Cahill wiped his forehead shak-

ily against the absorbent lining of his helmet. Then with a great effort he bounded up and leapt

straight into the image.

Thousands of tiny pattering leaf sounds swelled. Her body quivered and flamed in more vivid, rapidly changing patterns of color. Cahill's yell was hoarse and deafening inside his helmet as her body fell into a million tiny motes and flew away in all directions.

He leapt away again toward the ship. The air everywhere was filled with that brushing and pattering, and what seemed to be the lights of millions of fireflies.

His visor fogged despite its special coating. His face was wet. The drying unit in his suit wasn't coping with the increased flow of perspiration, and he wasn't dissipating enough of his body heat. He kept running, leaping in ten foot bounds toward the ship.

But by the time he reached the airlock and got inside there was no sound around him. And there were no lights except those of the

stars ...

He tossed the podplants on the deck of the control room preparatory to throwing them into the specimen cabinets. He got out of his suit. He had forty-three minutes before he had to give himself the needle. An hour and forty-three minutes before the automatics took the ship away.

He ran the polaroid film from

his suit cameras through the magnifier. It was all there. The woman, the flames, the disintegration into a million motes.

He suddenly dropped the film and turned toward the vision plates, listening. He held his breath. But this time the rustling and pattering came from inside the ship. It was in the control room.

Looking down he saw the pods opening. And thousands of tiny winged insects fluttered out and filled the control room with multicolored clouds.

Cahill stumbled back in near panic at the thought of what alien poisonous plague he might have so thoughtlessly introduced—and with no time now to do anything about it.

They flew about the control room in wild, disorganized pattern. They formed into tiny clouds, then settled on the opened viewplates above the control board. There they began to crawl over one another in a slow, fumbling manner. They circled and crawled and formed and reformed in clusters of different colors and design.

Cahill knew then what he was looking at. Parts of a human hand formed against the upper right corner of the viewplate. At the lower left hand corner, an ankle, part of a foot, bits of toes appeared. A portion of breast, of pelvis, of hips and fragmented

belly—a jagged smear of partly completed mouth and face. Ragged patches and non-fitting parts

of a woman's body.

Cahill was out of time. He took the capsule. He got another hypothermic syringe from the cooler, lay down and put the needle into his arm. He remembered then—the reference he had almost forgotten. He had shifted his interests from anthropology to zoology because he had preferred living things to dead ones, and one of the most fascinating things he had ever studied was the flattid bug.

The incredible and astounding

mimetic ability of insects.

The flattid bug . . .

Protective imitation is common enough in nature. The stick bug so perfectly imitates a twig that it has thorns on its back. Moths that live in trees exactly resemble the veined leaves. Another moth with a flavor too agreeable to hungry birds develops wing patterns that precisely imitate a species of moth those same hungry birds find too bitter.

But the most incredible of all earthly mimetic genius was the flattid bug. Generations of the bug, from Kenya in Africa, had been bred for study at England's Cornydon Museum. When Cahill first saw it there he thought it was a large flower. A coral-colored flower made of many small blossoms like a hyacinth. Each blos-

som was of oblong shape, maybe a centimeter long. But on close inspection it turned out to be the

wings of many insects.

A colony of insects clung to a dead twig and resembled exactly a large flower. A flower so real that bees were drawn to it. At the tip of this insect flower was a single green bud formed by insects of a different hue. Behind it were half a dozen partially matured blossoms showing only strains of coral. Behind these on the twig crouched the entire flattid bug society. All with wings of purest coral to complete the colony's creation and deceive predators.

Cahill had stirred the colony with a stick. It flew apart. The air filled with the wild fluttering of flattid wings. They settled back on the twig at first with no special form, but in wild formlessness of what seemed random movement, but it was not. The flower soon formed again. The green ones had formed the bud; the others had taken their customary places all around. A lovely coral flower had been created again as camouflage.

All it takes is time, Cahill thought dully as the drug pumped into his brain. Life, infinite adaptation, anything is possible given those vast amounts of time.

How long for those colonies of flattid bugs to learn the instinctive ability to assume the complex shapes and colors of a flower? At least 300 million years.

How much longer to assume

the shape of a woman?

For maybe 500 million years those non-earthly insects had learned to seek safety in human form. Then something had happened to the humans—or those who had had human forms. And that could have happened 500 million, a billion, years ago. How many more hundreds of millions of years had passed since the human-like intelligence whose shapes the insects had assumed had disappeared from this planet? And how, why? Where?

The insects didn't care. They held on as long as the podplants lived to support them. Maybe they haven't even had to gather in human forms for millions of years, Cahill thought. Maybe this instinctive reaction was quiescent until they saw me there among the podplants. Did I frighten them? Did I disturb them? Did I activate old instincts for survival?

The last thing he saw before the cowling closed was the way they fluttered down dead over the control board and the deck.

Through Time And Space With Ferdinand Feghoot: LXIX

Ferdinand Feghoot was an ardent admirer of the great Sarah Bernhardt. It was whispered in Paris that he would do anything for her.

One cold winter day in the 1870's, they were strolling together along the Left Bank when suddenly, right before them, an elderly gentleman threw up his hands, cried out "Adieu! All is lost!" and cast himself into the river.

"Helás, it is Aristide Plonc, the good landlord!" screamed la Bernhardt. "Aristide, try to swim! Come in to the bank! Look, I will hold out my parasol to you!"

"I refuse!" cried the old man. "I am bankrupt! None of my tenants

has paid me! I will not come in!" And he went under again.

At that point, Feghoot took off his coat, plunged into the chill waters, and effected the rescue. After they had taken M. Plonc home, dried him, filled him with cognac, and paid his most pressing bills, Sarah embraced Feghoot warmly.

"You are brave, mon ami," she purred in his ear. "Poor Aristide, why did he do it? He must have been out of his mind!"

"Oh no," replied Ferdinand Feghoot. "He just didn't have enough rents to come in out of the Seine."

Daphne Castell

THE TOPIC FOR THE EVENING

John Hall Lowered his newspaper and his glass of sherry, and peered amazedly at his wife.

"Surprising thing in here, Mildred. Most surprising." He tapped the paper comfortably upon his discreet little paunch. "You'd hardly believe it, now, would you, if I told you that girl, Whatsername, was dead? Hanged herself in her garden, says here. Now why should she do that?"

"What girl, Whatsername?" His dumpy amiable Mildred wrinkled her "Why brow. shouldn't I believe you, John dear? I've always thought what an awful thing it is to take your own life, but a lot of people do, I'm afraid. She must have been very unhappy, poor thing." She picked up another strand of wool, a deep crimson, and fitted it, frowning slightly, into the complicated pattern she was knitting.

"That girl; now, Mildred, you must remember, eh? The one I talked about when I got home the other night? The one who got so shockingly tight at the dinner I was speaking at?"

"Oh, yes. Well, I thought at the time, dear, it sounded unusual for a woman, a business woman, to take *quite* so much to drink." Mildred sounded a little wary, as her husband poured himself another glass of excellent dry sherry. "Wasn't her business doing well?"

"Must have been. The Association of Business and Career Women doesn't have dead-beats on its books—not as fully-paid up

members, anyway.

"Chap in the paper says: 'Miss Bowyer had little contact with her neighbors; but a distant acquaintance believes that she had recently been unhappy in her personal relationships' (jargon for love affairs, that is) 'and that she had been suffering from overwork and worry.' Didn't sound as if she liked men much at that meeting. First thing she said to me was: 'I must confess to being a little puzzled that we should ask a man to address a women's association. It will make a change, though. I hope you'll enjoy it, Mr. Hall.' As though she certainly wasn't going to."

Mildred's lips moved soundlessly for a moment, counting. Then she observed: "Well, there you are, dear, that's another little piece of evidence to show that she was upset and not herself. I suppose it all suddenly became too much for her. I remember Eva Garnett saying only quite recently that sometimes she didn't know how she could carry on for another moment. I really believe, John, that some of these very brilliant and managing women just sometimes feel a tiny bit of envy for us stay-at-homes."

Her husband laughed tolerantly. "Women! Even the nicest of you's got a talent for backbiting tucked away somewhere; even you, eh, Mildred? You don't mind thinking about Eva Garnett envying you, even if she is one of

your best friends?"

Mildred smiled, her soft cheeks creasing into comfortable wrinkles. "Oh, well, it's all very harmless rivalry, after all.

"And you know what you're always saying, John: 'How you women do stick together!' We're

the best of friends, really."

"Yes." Her husband sighed. "Poor girl in the paper, someone's covering up for her. This 'distant acquaintaince' probably knew her a lot better, but isn't going to say so. She won't let another woman down, even when she's dead, and I shouldn't be in the least surprised if Miss Bowyer didn't lead

a bit of a rackety life. Parties till all hours, and maybe boyfriends, one of whom let her down. And it was clear enough that evening, she didn't mind a drink or two."

It was odd how vividly he remembered that evening. "She was a goodlooking girl, too," he explained to Mildred, "even if she was high as a kite. And she had a sort of defiance about her. Cheerful, she was, but thoroughly aggressive. As if she'd had enough, and was throwing the whole lot over her shoulder. Funny thing," he said, "not the sort I should have expected to kill herself."

Mildred shrugged, and gathered up her knitting in a hugging gesture. "I wish you wouldn't talk so much about it, John. They say that the most unlikely people do kill themselves. I don't like thinking about it, really I don't."

"No, but," expostulated her husband, "you have to admit it's interesting, Milly, I mean, having met the girl and so forth. Of course it's upsetting—I'm not a savage, dash it—but I'd have liked to know more about her."

The television set began to flicker bluely, and he reached forward and switched it off, muttering discontentedly that he didn't know why they bothered with the thing.

"Oh," protested Mildred Hall gently, "but I was looking forward to seeing the next program. Put it back on, there's a dear."

"In a minute," he said irritably. "Let me finish my paper." He finished his second glass of sherry

in small sips.

"But really, Milly," he began again, "she couldn't have been odder. I told you the queer things she said—and did! I told you, didn't I?" He had and Mildred said so, but he told her again, nevertheless. And in the re-telling, they seemed even stranger to him.

"And I thought she was going to say something else, something even odder, but she stopped, all in a moment, as if something had clamped her tongue down. I'd never seen a woman—" stopped and pondered uneasily. "And why me, you might say? Well, why? Unless it was because I was the only man there. And after all that—that show of life, she goes and kills herself."

"Don't worry about it, dear," said Mildred, and a slight edge sharpened her voice. She wriggled about, as if the chair cover had wrinkled, and put her knitting

down.

Her husband looked at her, and turned the television on with a sigh.

But Mildred, surprisingly, now seemed disposed to continue the

conversation.

"Just tell me again, John, what was it she said?" And on the repetition: "Really, it doesn't seem quite likely, does it? Are you sure you didn't misunderstand? It's—it was SO

womanly."

John Hall said emphatically that he could not possibly have misunderstood. "Or at least," he added, "I heard her all right. But it didn't make sense altogether, if you understand me."

"Oh yes," said his wife. "I'm

sure it didn't make sense."

"It was as if we were living in two different worlds." He had turned down the sound, and was musing over the television's shadow-play. "Like that, movement, but no communication."

"Well, that could be said about all human beings, couldn't it, dear? When you really round to working out how much we understand about each other, it amounts to nothing at all."

John Hall looked at her in surprise. It was not the kind of remark that Mildred usually made. It was deeply thoughtful, and slightly bitter. He shrugged.

"She didn't much seem to like the world she was living in, at any rate. When she talked she sounded as if she was out to make her world pay for everything it had ever done to her. She seemed to be shouldering quite a lot of that burden onto me, too."

"Yes," said Mildred thoughtfully. "I expect it did seem like that. She was that sort of girl."

Her husband screwed himself round in his chair and stared. He

breathed heavily for a few moments, and then said plaintively: "But I thought you didn't know her. I thought you'd never met her. You said you hadn't."

"You never asked me if I'd met her," corrected Mildred serenely, "and it didn't seem important to tell you I had. I hadn't seen her for quite a while. But after all, we'd all been living in the same town for years. Why shouldn't I have known her? As a matter of fact," she hesitated, "she didn't like me at all. Peggy Drury and I went to see her once. We had to—well, we were making a complaint about something."

"Some of her goods? Not up

to standard?"

"You could put it that way," nodded Mildred. "Anyway, we warned her. Peggy and I warned her. We couldn't have that sort of thing. It's usually only necessary to warn people once. We thought it fair that she be warned, before anyone took action."

"Then you think perhaps she might have behaved in that way because she knew I was your husband? She wanted to—well, to make things unpleasant for

you, through me."

"I think so. Yes, you might put it in that way. She evidently knew I was very fond of you. And I suppose she'd got to the stage where she just wasn't worried about herself any longer. Somehow we overlooked that." But her husband wasn't really listening. He was puffing and puzzling over the extraordinariness of women.

"I shall never understand women, never," he grumbled, with some lack of originality. "What possessed you, Mildred, all the time I was talking about this girl, not to say a word about having known her, to behave as if she were a perfect stranger to you? And when she'd hanged herself, into the bargain. But not a peep out of you, except 'yes, dear', and 'no, dear'."

"I didn't think it was going to be necessary," said his wife. "I didn't know quite everything about

it."

John Hall chuckled suddenly. "Well, it all gives me a pretty neat idea for a story. When I retire in a year or two, I fancy I shall turn my hand to a little writing. Not memoirs and that sort of stuff, any retired old fool can try that; no, stories: science fiction, crime and so on, that's what makes the money. More interesting, too. This one would make a dilly of a tale."

"Which one?" asked his wife

uneasily.

"There's this race of people, you see, living side by side on a planet with another race of people, that's so like 'em, they don't even suspect the first lot's different. Hope I've made that clear?"

"Go on."

"Well, I haven't made up my mind yet how the first lot's different-whether they've been dumped on the planet, as criminals, say, or whether they've all grown up together since almost the beginning of the races, but one lot's been bred with something different; all kinds of superior powers, witchcraft, dazzling, hypnotizing, thinking people to death, anything that you like to name. And-now this is the splash!the other race is Woman! Good, eh? Just think how many women have been responsible for wars, or men killing themselves, or enchanting kings and so on, so that they ruined their empires. Most witches were women, and there were mermaids and dryads, and that lot. Right? Nowadays, you see, they're trying to make themselves as ordinary as possible and keep out of the way as much as they can. Because men have got a lot smarter and might start realizing what's going on. And some of the really clever ones can't disguise their brightness, and they want to make capital out of it anyway. So they go into businesslot of brilliant career woman about nowadays! But of course, every generation of women, since they found they could breed with men, has passed down to its children—the female ones, that is—the defense measures they need. Certain secrets must be kept,

and certain things must not be said or done. See?"

"I see. And if you broke the

rules, deliberately-death."

John Hall beamed approvingly. "You've got the idea. And hence. Miss Bowyer, you see. All fits in with the general unpredictability and secrecy of women. Condemnation by her fellows, too-that's quite a habit among you women. Good, eh?"

"I think it's a horrible story," said Mildred. She got up. "I'm sorry, John, but there are one or two phone calls I have to make, before it gets too late. Then I'll

make supper."

She left and closed the door. John Hall was at first a little affronted at the reception of his masterpiece, but, he told himself, it wasn't the kind of story that Mildred would appreciate. He should have known that; after all, they'd lived together for over thirty years now, and if ever a man knew a woman through and through, he knew Mildred. He began to watch television again, taking up the thread of the light comedy without much difficulty.

When Mildred brought in supper on trays, he was surprised

to find how late it was.

"You had one of your marathon phone bees, eh?" he chuckled. "You'll have me bankrupt before I'm dead, love, you know."
"Oh, no," said Mildred, "I

certainly shan't do that, John."

She had very little sense of humor, he remembered.

But she was an excellent cook; and it was a very good supper indeed.

"The best I've ever had," he said, and meant it in all honesty.

"I'm glad of that," said Mildred, and began clearing dishes. Presently she coughed faintly, and said, "I hope you don't mind, dear, but I've told some of the girls they can come round for a little while. It's not very late, and we have some business to attend to."

"Oh, Lord!" said John Hall pettishly. "Not Eva Garnett?" He had never liked Eva Garnett.

"Yes, I'm afraid so. But they won't be here long. It will all be

over quite quickly."

"No, that's all right," he assured her, a little conscience-stricken. "You don't have a very gay time, and if this woman's business is what you want, you carry on, Milly. They won't want to come in here, will they? I suppose I can go on watching the show?"

"You may find you're too interested in what they're doing, to

want to."

"Not very likely," he grumbled, "but never mind—it's certainly too late to stop 'em now."

"Yes, much too late, I'm

afraid."

When the doorbell rang, she left the room, and he heard the

rustle of female whispers in the darkened hall.

It seemed quite a little time before she returned, the other women crowding behind her, filling the doorway and shadowing the room. Mildred's eyes and nose were pink, a sign that she had been crying, or was about to.

He rose with forced politeness

to welcome the late guests.

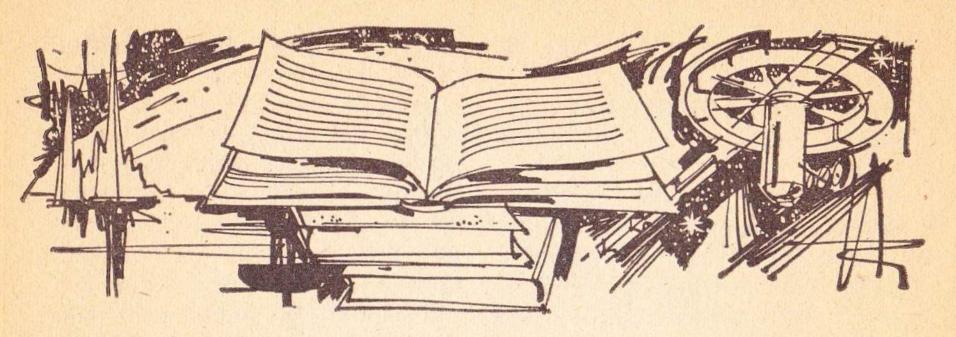
As if from a distance, he heard Mildred's voice, muffled a

little by her sniffing:

"Your story needed a bit more explanation, John-some would be bound to find out the truth, or guess it, or have it betrayed to them. But, of course, every woman would be conditioned from birth to warn all the others the moment discovery threatened—even if it was from a man she had lived with for a long time—a man she was very fond of. Miss Bowyer was a very spiteful woman. It won't hurt at all, I can promise that. Not so much as if it were a coronary. Lots of middle-aged men have died from coronaries. You're always hearing about it."

They were coming towards him, big tall healthy women, all of them. Their faces were grave, and even concerned. All except Eva Garnett. She was smiling secretly. He'd always disliked

Eva Garnett. 🔻



Books

Many People, even Reviewers, apparently feel they must stay with a book until the end, no matter how uninteresting or unpleasant it becomes. You should be able to walk out on a book the way you walk out on a movie or a play. In reviewing the books assigned me by Venture, I intend to get up and leave when the circumstances call for it.

Ian Wallace Berkley, 60¢

The currently popular notion of a central character in drag goes about as far as it can in this book. Croyd, the mystical super spy, is going around with his intellect stuck in the body of a young lady prostitute, and Lurla the gnurl princess is wearing Croyd's real body. Wallace has mixed Ian Fleming with Thorne Smith and produced a modestly readable book about agents, counter-agents and a plot to destroy the galaxy.

Yes, the whole galaxy. Not a bad book, though the narrative comes too frequently to a halt against great mounds of explanation.

A VOYAGE TO ARCTURUS David Lindsay Ballantine, 95¢

An enormous homemade fantasy novel, the kind persevering British authors turn out in the spare time away from their duties as postal inspectors and professors of linguistics. Originally published a half century ago, this is a long and goofy book about a lump of a hero named Maskull and what befalls him while stumbling around on Arcturus. Now and again a thick clumsy fantasy acquires a reputation for doing in a thick clumsy way, usually without humor, what most good fantasies do as a matter of course. A voy-AGE TO ARCTURUS seems to have survived because it is more than adventure; it is allegory. Lindsay smacks you in the face with the allegorical implications and mystical profundities so often that you can't miss his profound intentions. Most any good story can be read as allegory, but Lindsay's allegory can't be read as a good story. I left him on page 54, after experiencing this paragraph: "Maskull picked up one of the fruits and handled it curiously. As he did so another of his newly acquired sense organs came into action. He found that the fleshy knobs beneath his ears were in some novel fashion acquainting him with the inward properties of the fruit. He could not only see, feel and smell it, but could detect its intrinsic nature. This nature was hard, persistent, and melancholy." David Lindsay is said to have been a practicing spiritualist. Perhaps he wrote this novel while in a trance.

THE HEAVEN MAKERS
Frank Herbert
Avon, 60¢

It takes Frank Herbert three whole chapters to get to his premise. "Do these fleas know they're someone's property? Fraffin wondered," is how he puts it. Then the scene switches from the aliens to Dr. Androcles Thurlow, who wears special glasses because of an accident at the Lawrence Radiation lab. Dr. Thurlow, because of his special glasses, is the only

one who can actually see the aliens as they go about the sinister business of using men and women to make movies. Yes, all of us on Earth are mere pawns. Oh, we may think we're free, but we're merely players in an alien movie script. If these notions strike you as fresh and original or if you'd merely like to see them get one more go-round in a sensible journeyman way, go see Mr. Herbert. What, you can't see him? Here, put on these special glasses.

John Creasey Berkley, 60¢

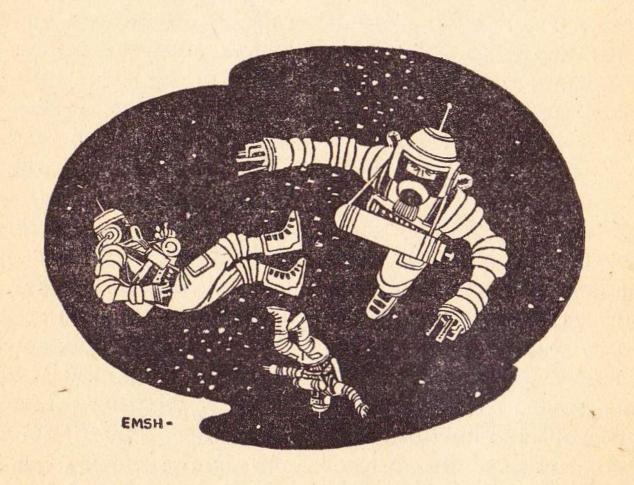
John Creasey, who has written a lot of books, says of himself, "His mammoth total, surely in itself a Herculean achievement, proves also an impressive testament to his penetrating observation and understanding of human nature, as well as to his remarkable command of words, his energy, and his determination." Since I haven't read any of Creasey's 520 other books nor any of the 27 other novels in this Dr. Palfrey series, I don't want to be unfair and completely refute his third person appraisal of his work. This particular science-fantasy adventure, though, doesn't impress me as the work of a man with much penetrating observation or understanding of anything. You could call Creasey heroic

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sticking with it to the end, plodding along with flat prose and thick dialogue through 192 dull pages. But that isn't reason for reading him. Dr. Palfrey, the hero of the story, heads up Z5, "a world secret service, dedicated to the interests of the whole world, not any one or any group of nations." Creasey, putting his remarkable command of language to work, introduces the doctor this way: "Dr. Stanislaus Alexander Palfrey, Sap to his intimates, was alone in his office, two hundred feet below London's seething millions, below the roar of traffic and the bustle of people." While Palfrey answers a phone call Creasey

lets the reader know what he looks like. "As he spoke his left hand went to his forehead and he began to twist a few strands of silky fair hair round his forefinger. His face, good looking in an amiable sort of way, took on an expression of grave anxiety . . . He replaced the receiver, untwisted the strands of hair, and patted them down on his forehead; the effect was a kind of kiss curl. Gravity of expression gave his face a sterner handsomeness." Going through a whole book of prose such as this just to find out why the whole world is burning up, city by city, isn't worth it.

—Ron Goulart



Ronald S. Bonn

NINE P. M., PACIFIC DAYLIGHT TIME

"AND WHY, DO YOU SUPPOSE, throughout all recorded history, that no time traveler has ever appeared out of the future?" The Mad Scientist painfully recrossed his legs in the airliner's narrow seat and swirled his champagne in its plastic glass.

Johnson, far longer-legged and proportionately less comfortable, essayed a constricted shrug. "Simply proves time travel impossible,

I'd say."

"Oh, is that what you'd say, Mr. Science Writer?" The Mad Scientist beamed maliciously at his seat mate. "Well, let me tell you what I would say." He unfocused his eyes in the general direction of the forward john. After a moment he murmured, "I'd say the reason that no time traveler has ever arrived from the future is precisely the same reason that Galileo failed to discover radio astronomy."

For the first time, Johnson began to pay the rumpled little man something like serious attention. "I don't think I get that, Max,"

he said slowly.

Maxwell Scheinst, as the Mad Scientist was known to the evernarrowing body of scholarly journals that continued to accept his papers on theoretical physics, sipped decorously at his fourth bumper of the airline's excellent champagne. The science writer, one of perhaps half a dozen of that breed in the country whose claim to the adjective was as well-founded as to the noun, knew exactly how the reputable scientific community regarded Maxwell Scheinst, M. Sc., Ph. D.: a sort of scientific Dali, an amiable fraud who had done some really good work at the beginning of his career, and had survived and even flourished over the decades since on that reputation—and on the United States government's engaging inability to distinguish the golden from the dross among those burgeoning legions who call themselves by the alchemical title of Scientist.

But Johnson was intrigued by the small problem in logic that the Mad Scientist now posed him, seven miles in the sky and three

dreary flying hours away from San Francisco. Whatever else he might not be, Maxwell Scheinst was always entertaining. And this flight carried no movie.

"All right, Max," Johnson said after a moment, "why didn't Galileo discover radio astron-

omy?"

Like a player holding a trump he knew would be good, Maxwell Scheinst brought his answer down on the board before Johnson had quite finished playing the question.

"Galileo didn't discover radio astronomy for the same reason that Copernicus didn't discover

the phases of Venus!"

Johnson abandoned detachment with an annoyed laugh. "Now, look, Max . . ." he began. But the Mad Scientist held up a commanding pink palm. "You see," he said smugly, "I use upon you the Socratic method. I show you thus why I am a Scientist and you are merely a science writer. Instead of quietly seeking Truth among these little conundra I pose you—and I assure you, Truth lies there—you are piqued because rather than dull answers I give you interesting questions."

Johnson stirred uneasily. The absurd little man was probing unpleasantly close to a nerve. And

he warmed to his subject.

"Always, Mr. science writer, you must have for your devoted readers the answer," the Mad Sci-

entist said pleasantly. "Because you know that if ever, God forbid, you should ask them a question, if ever you should dare try to teach them instead of to tell them—assuming you were capable of teaching, which you are not—you know just how fast you would lose those devoted readers to the baseball page. And so you make of science a magic answer machine, instead of what it is—a magic question machine."

"Oh, come on, Max," the writer began, but the Mad Scientist ignored him.

"So you traffic in answers, and what answers! Why don't you tell me, Mr. science writer, about the atom? Hah? Tell me, Maxwell Scheinst, how the most subtle and mystical construct of the human imagination is really just like a little solar system, with the great big neutrons in the middle like the sun and the tiny little electrons going round and round like the planets? Why don't you dazzle me with some more terrific analogies, Mr. science writer?" the little man jeered.

"Now come on, Max, I never wrote that kind of junk and you know it," Johnson began heatedly. Again the moist, preternaturally

pink palm halted him.

"But I forgive you," the Mad Scientist announced with a compassion that was little short of papal. "And to prove it, I now present you, all free for nothing, the Truth which I, Maxwell Scheinst, had to sweat for." The little man paused portentously. Johnson waited.

"Galileo," the Mad Scientist said at last, "failed to discover radio astronomy because he did not have a proper receiver—a radio. He did discover the phases of Venus, the rings of Saturn and the moons of Jupiter, because he did have a proper receiver for those discoveries—a telescope. Copernicus, a far better astronomer who lived just one century earlier, did not discover the phases of Venus or anything else because he lacked the proper receiver. Because the telescope—the receiver you need to see all those things—was invented just too late for Copernicus, and just in time for Galileo."

The Mad Scientist rewarded himself for this exegesis with a fresh glass of champagne.

Johnson watched him for a moment without speaking. Then he began slowly, "Then you're say-

ing . . ."

"I'm saying," Maxwell Scheinst snapped, "that the failure of a traveler to appear out of time through all of history up to this moment simply proves that, as any dunce might have suspected, travel through time requires a receiver in the era to be visited. Since no receiver has ever been built up to now, obviously no visitor from the future could arrive.

Happily, that situation will change tomorrow night."

Johnson jumped slightly in his seat. "Max," he said uncertainly, "Do you mean to say that all this time the government has been funding you to build a time machine?"

The little man recoiled. "My God, no!" he exclaimed. "All this time, the government has been funding me to develop anti-gravity, which is theoretically possible but will never be achieved. You couldn't get a penny out of the government for time travel, which is theoretically impossible, but which I shall achieve tomorrow night."

The Mad Scientist beamed at a passing stewardess, then amended, "At least, I shall achieve it in collaboration with whatever genius of the distant future shall manage to build a time transmit-

ter."

Johnson chewed mentally. Then he squinted down at his companion.

"Now, let me see if I have this straight. You claim you've built one half of a time machine—the part that receives, like a home

radio. Right?"

"Another hopelessly simplistic analogy, but we will let it pass. Yes, I have built a chronokinetic receiver. Tomorrow night I shall turn it on and leave it on. The electric bill will be enormous, but the Department of Defense will

pay all costs in the sacred name of anti-gravity. Then some time—perhaps months from now, more probably years—my collaborator from time future will discover this, the earliest operating time-receiver on Earth, and will appear in my laboratory . . ."

operator finding another on the

dial," Johnson murmured.

"Oh, really now Johnson!" The Mad Scientist winced. "Do spare me the Walter Sullivan bit."

"But look, Max," Johnson said a moment later. "If you can build a time receiver, you certainly can build a transmitter of your own."

"I certainly can not," the Mad Scientist replied haughtily. "The transmitter is infinitely beyond today's techniques. Receivers are always simpler. Besides," he added after a pause, "why should I build a transmitter? I couldn't go any further back in time than my own receiver, which is now, and I'm here already. I could hardly use the taxpayer's money to get from now to now. It wouldn't be ethical."

"Ethical," the newsman muttered.

"Of course. Now the receiver is a different matter. Once I put my mind to the problem, the mathematics became fairly simple. Half a dozen equations, not devoid of elegance, and the theoretical foundation was laid. Then three or four years of what, in scientific

candor, I must describe as niggardly federal funding, and the hardware was built." He sipped contemplatively at his champagne, then amended, "Is built."

"And gets turned on tomorrow

night," Johnson said.

"And gets turned on tomorrow night," the Mad Scientist agreed complacently. "Nine P.M. Pacific Daylight time. If you've nothing else to do some time in the next couple of weeks, drop in and help me wait for my colleague yet unborn." The Mad Scientist savored the phrase. "My colleague yet unborn."

"Max," Johnson said firmly, "I'd like to do just that, as soon as I clean up this present assignment. I'd really like to sit and watch that receiver with you for a while." Like any successful writer, Johnson could recognize a New Yorker commission when it beamed up at him over a plastic glass of champagne.

"Any time at all," the Mad Scientist said carelessly. "Come and

bring your analogies."

Then the monstrous jet began the interminable business of landing, and Johnson forgot everything else in the perfectly justifiable terror shared at such moments by any air traveler with an adequate understanding of aeronautics.

Johnson's assignment in Berkeley was a thoroughly agreeable

one. L. Z. Chauncey, Nobel laureate in physics, had done something perfectly astonishing inside a particle accelerator, and Johnson was one of the very few journalists alive who could figure out what. And of those wildly competitive few, Chauncey had chosen to tip the story to Johnson. For his editors, Johnson attributed the beat modestly to his own reportage of Chauncey's Nobel Prize-winning feat of several years earlier—a story badly bungled by most of the press. Privately, Johnson suspected that the gray eminence of American theoretical physics simply remembered with the same pleasure as he did an evening trading outrageous lies about fishing over endless glasses of iced white wine.

In either case, the solid gold summons from L. Z. Chauncey had won for Johnson a carte blanche two week assignment, first class air travel included, from Slick magazine. It took him three hours of Chauncey's crystalline explanations to get the story straight in his mind, leaving some thirteen and a half days for him to enjoy the pleasures of San Francisco, at Slick's expense.

"Ellzee," Johnson remarked,
"you are the living proof of the
Johnson theory of scientific obfuscation, to wit: any scientist who
can't tell me what he's doing in
plain English doesn't know what
he's doing in any terms."

The older man laughed, imparting agreeable new disorder to his thatch of startlingly white hair. "The perfect mental defense for the science taster, eh, Johnson? Anyone too smart for me to understand is too dumb to be worth understanding."

"Ellzee, you should have been a science writer," Johnson said. "Let's go find a bottle of gray

riesling."

Three hours later, writer and physicist found themselves in a room of sixteenth century size and grandeur—the common room of the only club in San Francisco worth belonging to, whose sole standard of admission is excellence of achievement in any field whatever. In addition to the magnificent woodwork and engaging frescoes, this room has the advantage of rotating ever so slightly from right to left, if the observer brings to it just the proper level of blood alcohol. Well-primed, scholar and scribe settled back into cavernous leather chairs to enjoy the effect over fresh tumblers-full of white wine-Johnson could not quite determine whether they had just uncorked their eighth or sixteenth bottle, since he remained uncertain in the depths of his intellect whether the expansion had been arithmetic or geometric. He was just attempting to pose the problem in words containing as few revealing sibilants as possible, when the dean of American physics broke into his train of thought.

"Hey Johnson," said L. Z. Chauncey, "How in hell you gonna 'splain my m'nific'nt 'complishmun to those creeps who read you?"

Johnson considered a moment, then grinned. "Ellzee," he said, "It's perfectly simple. I'll just start out by telling them how atoms are really just like little solar systems."

The physicist snorted and hurled a peanut at Johnson. The writer laughed. "Well," he said, "yesterday I flew in with a colleague of yours who claimed that that was the extent of my ability as an interpreter of the wonders of science to the laity who foot the bills for all you shamans. Matter of fact, that reminds me: explaining the Chauncey effect is going to be a cinch compared to my next assignment."

"What's that?" Chauncey asked.

Johnson grinned again. "I've got to explain time travel." Chauncey slowly emerged from the depths of the wing chair. "Time travel, Johnson?" he asked. "Who's doing anything with time travel?"

Johnson recapitulated his flight with the Mad Scientist and briefed, in startlingly accurate detail, the curious theories of his seatmate. When he had finished, there was a silence. Watching L. Z. Chauncey's blue eyes, an

observer might have been reminded, for the first time that afternoon, that behind them lurked one of the three or four most powerful brains currently in circulation. Finally, the scientist spoke.

"Johnson," he said, "are you in any condition at all to drive a car?"

Johnson wasn't. But under Chauncey's goading, he shambled to the parking lot, retrieved his rented Cougar, and pointed it unsteadily toward the East.

As Johnson boobed and weaved across the city, the only explanation he could get from his companion was, "I'd like to be there when Max turns on his receiver tonight. Now concentrate."

But once safely across the Bridge and onto a freeway that did much of the driving by itself, the scientist consented to explain further.

"To tell the truth, Johnson, I myself have never really liked the absence of time travelers. In an infinite universe, as T. H. White put it, anything not forbidden is compulsory. Sooner or later, anything that can happen will happen, if not prohibited by the laws of nature. And I've simply never been able to find anything in the laws of physics that would prevent time travel. It bothers the hell out of me, particularly when I'm half tanked. As now."

Chauncey paused as Johnson

wobbled menacingly across three of the six available lanes, then resumed. "But the trouble is, neither you nor Max has thought this thing through. We—you and I—have an opportunity tonight such as comes along only half a dozen times in the history of the human race. The odds are a thousand to one against us, and it's cheap at twice the odds!"

"What odds, Ellzee?" Johnson asked mushily. "What oppor-

tunity?"

"Don't you see," the scientist asked, "that there are two and only two possibilities here? Either time travel is indeed totally impossible, or else the very instant that Max turns that thing on tonight—not months from now, not years from now, but the very instant—someone is going to come out of that machine. Drive faster."

Johnson shook his head, only partly to singularize his vision. "I don't see that at all," he com-

plained.

L. Z. Chauncey squirmed his narrow backside restlessly in the bucket seat. "Look," he said, "if time travel is possible, then Max has to be right; it's the only explanation for time travelers not showing up some time or other. They need a receiver. Plausible. More than plausible. Ingenious. Damned ingenious. Why the hell didn't I think of it?" The physicist shook himself slightly. "But of course the corollary is that sooner

or later—I really must avoid using chronological terms in discussing a chronological experiment—anyway, somewhere or somewhen, somebody is going to decide to go as far into the past as he possibly can. And we know exactly how far that is. It's . . ."

"Nine o'clock tonight, Pacific Daylight time," breathed Johnson, glancing at the dashboard clock.

"My God."

"And it's seven-thirty now," Chauncey noted. "Can we make it to that Toonerville college of his in an hour and a half?"

"We can try," Johnson said grimly, and pushed the accelerator toward the floor.

But drunk or sober, one can drive only so fast into the mountains of north central California wherein lie the dozens of tax-supported research institutions of which the Mad Scientist's is neither the largest nor the smallest. As the squat vehicle probed further into the darkening and proliferating curves, L. Z. Chauncey began to stir more and more restlessly, and to urge Johnson repeatedly to greater speed. Finally

"Look, Ellzee," he snapped, "do you want to risk getting us both killed, just on the off-chance of meeting a guy from the year zilch?"

the newsman rebelled.

The voice beside him in the darkness replied in a tone Johnson had never before heard from L. Z. Chauncey—a tone that, for some reason, caused small hairs to rise along the nape of Johnson's neck.

"I'm not sure yet," the voice said in the darkness. "I'm still thinking about that. Drive faster, Johnson."

Johnson shivered once. Then he concentrated on the road.

The dash clock showed three minutes to nine, as Johnson swung the car into the unmarked driveway hidden among the conifers that line the night roads of California's mountains. As the Cougar bumped forward along the rutted drive, L. Z. Chauncey spoke for the first time in half an hour.

You know Johnson," he said in that same oddly unsettling voice, "actually, none of us has thought this thing through properly. Not Max, not you, and until the past few minutes, not I. I really do hope we get there before Max throws that switch, or whatever it is he does to turn that thing on. We really ought to discuss that."

"What the hell are you talking about, Ellzee?" Johnson snapped nervously, as he fought the car up the pitted drive.

"A while ago, Johnson, I made a serious scientific error. It's called anthropocentrism, defined roughly as thinking that all creation revolves around the human race, which it doesn't. What I said was that if Max is right, the instant he turns on that machine, someone from the future is going to step out."

"So?" Johnson asked, braking the car at the pathway that led up toward the laboratory.

"So with infinite space and infinite future time for it to come from, you tell me, Johnson, just who or what is likely to slouch from that machine and into our tenuous existence when Max throws that switch in about . . ." the scientist glanced at his watch ". . one minute from now."

Johnson climbed from the car, considering. Then once again, for the last time, he said, "My God." Silently, the two men began to run, side-by-side, up the pathway toward the squat building atop the hill.

They were still twenty yards from the entrance when the screaming began.

In the May issue of THE MAGAZINE OF FANTASY AND SCI-ENCE FICTION Operation Changeling, a new novel by Poul Anderson

Larry Eisenberg

HOLD YOUR FIRE!

II WAS COOL IN DUCKWORTH'S lab but the sharp barking of rifles outside had heated my blood.

"Silly bastards," I said. "I'd like to bend those rifles around their necks."

It was, of course, the day of the great match, a rifle shoot between our university and Picayune U. Earlier, two hundred protesting students holding corkfiring pop guns had circled round the spectators, but the sheriff had ended the demonstration by confiscating the corks.

Duckworth, as always, seemed oblivious to all of the brouhaha that was taking place outside. He shuffled over to one corner of his laboratory where two glass cages sat side by side on a table. There

were several rabbits in each one.

"Remarkable," he said, stroking his unkempt little beard.

"What's remarkable?" I said bitingly.

Duckworth seemed unruffled by

my tone.

"These fellows here," he said.
"Look at how well they're getting on."

I looked, and they were. Inside one cage were four of the plumpest rabbits I'd ever seen. The four in the other cage seemed average in appearance.

"It doesn't make sense," said Duckworth. Patiently he explained the nature of his latest experi-

ment.

"As you know," he said, "my macromolecule is rather unstable. One of the fragmenting submo-

lecular links, which I call Momine, tends to combine with oxygen in a compound so stable that you can't pry the oxygen loose."

He lifted the cover off one of the cages and struck a match, then placed it within the cage. It was

immediately extinguished.

"I get it," I said. "The atmosphere in that cage contains Momine. Therefore the bound oxygen won't support combustion. It is remarkable."

"That's not quite what I meant," said Duckworth. "What I don't understand is how the rabbits can thrive in that same atmosphere. How do they utilize the bound oxygen?"

I shook my head, baffled.

"What concentration of Momine do you maintain in the cage?"

"About one part in a trillion trillion," said Duckworth. "It's un-

cannily effective."

The sound of rifle fire outside intensified as the match began to reach its climax. And for the first time Duckworth seemed to be annoyed. He walked to the window and raised the sash.

"Don't do that, Duckworth," I said testily. "What about the air-

conditioning?"

But Duckworth had rolled the table with the rabbit cages over to the window and had set up a small electric fan behind the first cage. Then he carefully lifted the lid off the cage for just a fraction of a second. The rifle fire stopped abruptly.

"That'll teach them," said Duck-

worth.

"Good God," I said. "Your Momine has kept the rifles from firing!"

"I expected it would," said

Duckworth.

I fished out my pocket handkerchief and mopped a brow that had begun to exude sweat. "Those fellows might not be able to breathe," I cried.

"No such luck," said Duckworth. "You saw what happened with the rabbits. Momine doesn't hurt humans, either. I've already

inhaled some, myself."

I walked to the window and looked out at the two competing rifle teams. There seemed to be a good deal of confusion and several of the rifles were being taken apart.

"How long will the rifles be im-

mobilized?"

Duckworth smiled. "It'll be hours before they can ignite a cartridge," he said.

As I left the Chemistry building, I couldn't resist a gentle jab at Professor Armbruster, mustachioed faculty advisor and coach of our rifle team. He held the rank of lieutenant colonel in the National Guard.

"Hi there, Colonel," I said.
"Going to turn your rifles into ploughshares?"

"The quotation is swords into ploughshares," he muttered.

"Better find some new tridges," I said. "Somebody sold

you a lot of duds."

The expression on Armbruster's face told me I'd overstepped the bounds.

"How did you know our cartridges wouldn't fire?" he said suspiciously. He turned his gaze on the Chemistry building. "I took courses in Science, once. I know Science Fiction, too. Was it a force-field? Or a beam of muon particles?"

I looked at his gaping mouth and I longed to put my first in it.

"It was just Momine," I said. "An offshoot of Duckworth's macromolecule."

"Duckworth," said Armbruster, shaking his head in confirmation. "I knew it would be that damned alchemist."

He insisted on seeing Duckworth straightaway, so I had no choice but to go along with him. Duckworth was quite annoyed with me.

"You're just an old-fashioned garden variety of snitcher," he said to me, sotto voce.

I hung my head. Armbruster, who had caught the drift of Duckworth's remark, defended me.

"He was right to tell the truth," he said. "What the devil did you do to our rifles?"

Duckworth showed admirable restraint and patience. He lit a match and showed how placing it in Momine extinguished the flame. Armbruster was staggered.

"It's a witch's brew," he said. "If enough of it got around, there'd never be another rifle fired."

"I hadn't thought of that," said Duckworth, growing pensive.

Armbruster turned to me for support, but I shook my head at him, and ashen faced, he tottered out of the lab. It was just the beginning of our troubles. From the window, I saw Armbruster trace a wavering path right into the administration building. He emerged several minutes later with two gentlemen behind him. One of them had an awkward stride, as if both legs had been broken below the knee and never properly set.

"Holy Cow, Duckworth," I cried. "Armbruster is coming back with President Hinkle!"

Featherman, a puckish graduate student who had just come into the lab, drew out his harmonica and favored us with a chorus of "Hail to the Chief." Duckworth shushed him with a single bleak look.

"Let them come," said Duckworth. "They can't intimidate me."

As the trio of complainants entered the lab, it was clear that the third, as yet unidentified, member of the group was a VIP of high rank. He was a balding, redfaced man of medium height, wearing lederhosen about his spherical outline, and carrying a piano accordion. President Hinkle was escorting him with all the deference of a temple priest leading a Vestal Virgin. Armbruster stepped forward, closed his eyes in pain and stood there, swaying, unable to speak. The VIP brushed past him.

"Who in blazes is this man?"
he bellowed, cocking his head in

Duckworth's direction.

President Hinkle, in a virtuoso gesture of mixed pride in Duckworth and truckling humility toward the VIP, said, "This is Dr. Duckworth, a Nobel Laureate in Chemistry. Sometimes his zeal for social causes is misplaced."

Duckworth fixed a level, unintimidated gaze on the VIP. "My pleasure, sir," he said, unsmiling.

"And this," added the president, gesturing toward the leder-hosen-encased human sphere, "is Frederick Fuller, originator of the Fuller Foundation."

"A charitable trust?" I offered, concealing my annoyance at be-

ing ignored.

Fuller stiffened. "I'm in ladies undergarments," he said truculently. "I'm also chairman of the University Board of Trustees, and President of Fuller Firearms, Incorporated."

"Ladies underwear and guns?"

I said incredulously.

President Hinkle looked pained.

"It's diversification," he said cold-

Fuller was bristling at all the diversionary chitchat. "Why the hell did you stop our rifles from firing?" he demanded of Duckworth.

"I don't like rifles and I don't like the noise of shooting," said

Duckworth calmly.

Fuller shuddered. Armbruster sat down heavily in Duckworth's personal but battered armchair. President Hinkle edged forward and addressed himself to Duckworth.

"Duckworth," he said, his entire body swaying from side to side as though he were intoning one of his interminable convocation speeches, "don't you know that rifle teams teach our students respect for guns and for human life? All the false ideas they gained as children, looking at television and playing with toy guns, are dispelled once and for all."

"Gun fees," said Fuller, "pay for conservation. Are you against

conservation, Duckworth?"

Armbruster pulled himself together and lifted out of the armchair.

"And what about Nazi Germany?" he cried, his voice shrill and quavering. "The first thing Hitler did was to take guns away from the people."

"I know what you're thinking," added Fuller. "Guns kill people. But anything can kill people." He

lifted his accordion high over his head. "I could maim you with this accordion," said Fuller.

"Just don't play it," said Duck-

worth.

Fuller began to choke, gestured once or twice with the accordion and then stormed out of the lab. He was quickly followed by Professor Armbruster. President Hinkle looked at Duckworth, sadly.

"You can't behave this way, Duckworth," he said. "I don't like guns any more than you do. But they are still needed in this cruel,

imperfect world."

Tears had come into his tiny eyes, and I noticed that Duckworth seemed moved by his eloquence. He started to reply, but before he could say anything, Armbruster staggered back into the lab, gasping for breath. After a couple of false starts, he wheezed, "Mr. President, your office has been seized by a band of students."

Hinkle turned livid. "My office? Why?"

"They demand that you reinstate Duckworth."

"But I haven't suspended him,"

cried the president.

I thought the moment ripe for sound advice. "Why not suspend him so you can reinstate him?" I offered.

But the president had gone, flying to relieve his besieged office.

"That's a hell of a mess you've cooked up, old chum," I said to Duckworth. But he was back at the bench, poring over his recorder readings, totally oblivious to anything I had to say.

The following day the students withdrew from Hinkle's office, and I sighed with relief. But I might well have saved the sigh. At four in the afternoon, a delegation arrived from the Pentagon. There was no doubt what mission they had come upon. An attempt was made to bar me from the proceedings, but Duckworth would have none of it. He insisted that I be present at all discussions.

"After all," he said forthrightly, "neither of us has security clear-

ance."

General Weathershaw, head of the delegation, said that he was empowered to speak for the Joint Chiefs of Staff.

"If everything I hear is true, Duckworth," he said, his sharply angled jaw jutting out like a clenched fist, "you hold the security of our nation in your test tubes."

"I keep Momine in tanks," said Duckworth.

"Test tubes, tanks, what the hell's the difference?" said the general. "What I mean is, you must turn your formula over to us. It's a matter of Life or Death!"

"I'll be glad to," said Duck-

worth.

I couldn't believe my ears.

"Duckworth, are you finking out?" I whispered into his redveined ear. He shook his head and nudged me to the side.

"You'll receive handsome com-

pensation," said the general.

"I don't want any," said Duckworth.

There were exclamations of admiration from the entire delegation.

"What a patriot!" said the general. "But we insist. You deserve every cent you get. Of course, the Pentagon will hold exclusive rights to Momine."

"I've no objection to that," said

Duckworth.

"One other thing," said General Weathershaw. "We'll have to impound your notebook and all other data pertaining to the development and production of Momine."

Duckworth smiled. "There's no need to do that, sir," he said sweetly. "I have an ample supply of reprints of my paper. It includes everything you'll have to know."

"Reprints?" cried the general. "You've published already?"

"About two months ago," said Duckworth. "In the International Journal of Applied Chemistry. I've sent dozens of reprints all over the world, including three to China. But I only mentioned the possible application to firearms once, in a footnote."

Afterwards I shook Duckworth

by the hand.

"I should never have doubted you," I said. "This work will win you the Nobel Peace Prize. You've

ended war for good."

"I doubt it," said Duckworth.
"Momine has no effect on fission or fusion. Still, it should mean some peace and quiet around here and the survival of deer, partridges and liberal politicians."

"Fuller may get you fired," I

warned.

Duckworth shook his head con-

fidently.

"Not with Momine around," he said. "From now on, everyone will have to hold his fire."



