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WORLDS of SCIENCE FICTION

AUGUST 1954

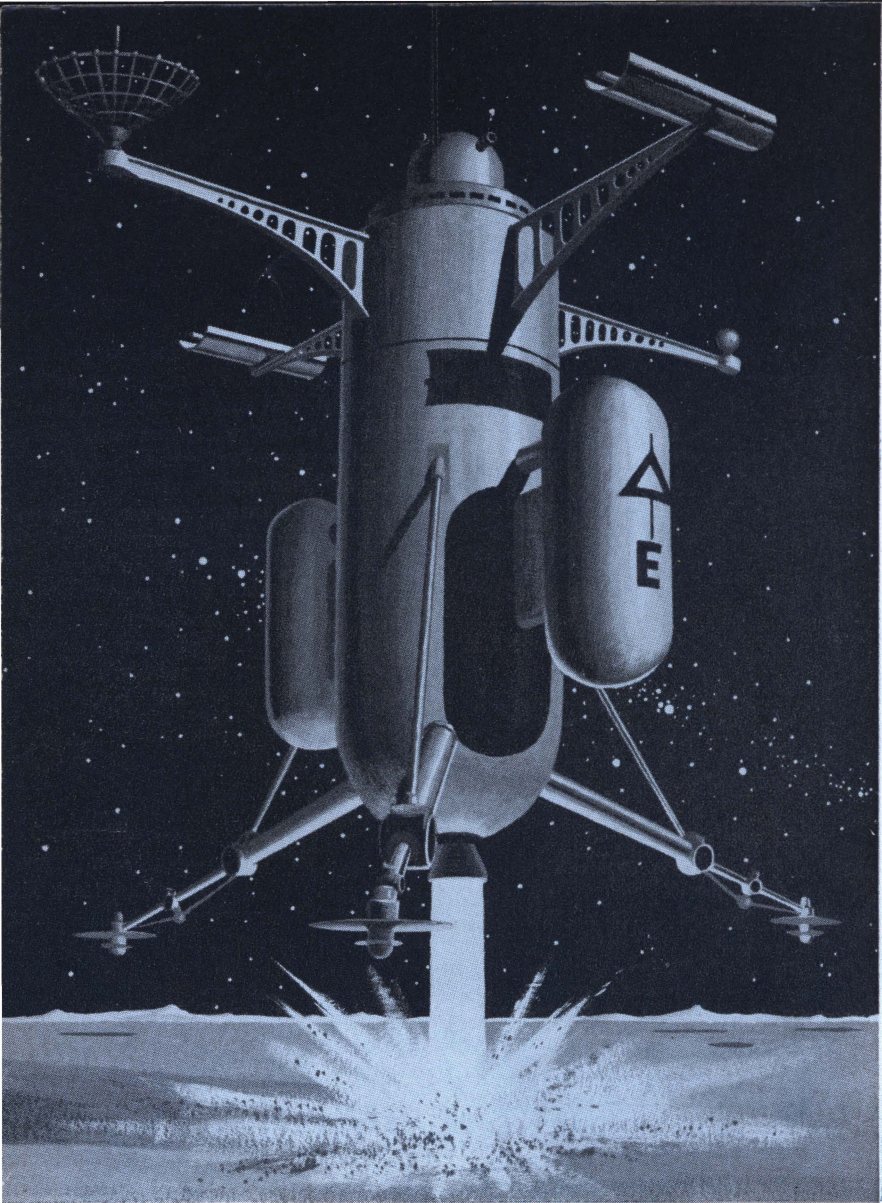
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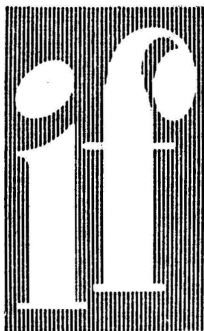
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# WORLDS of SCIENCE FICTION

AUGUST 1954

All Stories New and Complete

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### COVER PICTORIAL:

Investigating the Moon's Resources

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## A CHAT WITH THE EDITOR

**MOST OF** the "chatting" this issue comes in the form of an interesting letter received from Mrs. Alma McCormick, of Richland, Washington, who takes slight issue with *The Golden Man*, by Philip K. Dick, which appeared in the April issue. Mrs. McCormick enjoyed the story but disagrees with the mutant theme. We enjoyed her letter, and think you will too.

Dear Mr. Quinn:

Your *Chat With the Editor* in April IF is thoroughly enjoyable. . . But I have another theme to suggest: the theme that *homo superior*, the mutants, will be and must be hunted out and destroyed by *homo sapiens* when and if he ever occurs. I admit that "The Golden Man" by Dick doesn't deal with *homo superior* as much as it does with "horrible tribes of mutant freaks" who might justifiably be a source of horror and terror. But the last para-

graph, page 17, takes the same stand that was taken in the book "Dragon Island" (and countless other stories):

"Which race? Not the human race. . . If we introduce a mutant to keep us going, it'll be mutants, not us, who'll inherit the earth. It'll be mutants surviving for their own sake. . . To survive, we've got to cold-deck them right from the start."

Now, really!

I'm a teacher . . . of exceptional children. This semester they are mentally retarded children, as far below the abilities of normal children as *homo sapiens* would be below *homo superior*. They cannot and never will be able to take care of themselves, but we carefully teach them all they *can* learn (very simple reading, social graces, grooming, use of household and play equipment, counting and use of coins). We don't, and never expect the rest of the world to, compete with them. They're certainly not being "cold-decked" from the start.

On the other hand, I have taught superior children. Not superior to the extent of *homo superior*, true. I did have one "gifted class" however that had an average I.Q. of 128. . . If I remember correctly, the highest 3 or 4 members rated between 140 I.Q. and 167 I.Q.—ratings that occur in a very, very thin "cream" on top of the general population. The 167 I.Q. rating occurs about 3 times in 10,000 children if we can trust statistics. . .

And what were they like? And how did the schools and the general population treat them? Well,

A CHAT WITH THE EDITOR



they were a joy to teach and sometimes a bit difficult to handle. All of them spoke two languages (English and Spanish) and had learned to speak Spanish fluently and reasonably correctly in six weeks. Many also spoke from one to three more languages. (They were children of diplomats and industrialists and had travelled extensively.) They learned everything else as rapidly as they learned languages, and the few merely average children, who learned at merely average rates, not only enjoyed the pyrotechnics of some of their discussions but seemed to catch fire from them to do better work of their own. For example, have you ever seen the trouble teachers of average high school classes (or even college classes) have when they try to get students to "document" papers they write or ideas they propound by sufficient reading even when the teachers give a bibliography already prepared? These 8 to 9 year old children would discuss a new item of knowledge or a new idea, and the next day a good many of them would come to class with armloads of books from the library with paragraphs, chapters, or full-time treatment of the subject. At first it was only the brighter ones; later even the few merely average were doing the same thing.

Such children are not only a joy (though I know some teachers loathe working with "precocious brats"); they seem to be a lift to others. Except in one situation: when you have one exceedingly brilliant child in an average class or school, you have a bored, conceited, self-centered, isolated, re-

bellious, bothersome pest. One mutant, one *homo superior* might be like that.

But from my experience with the superior child, and from the kudos our world hands such men as Einstein, Oppenheimer, etc., I think we would merely be *more* impressed and even happier with a truly new race, a truly superior race. They might not be highly impressed with us, but even now we have our intelligentsia who associate mostly with each other, our average who associate with the average, and the dull who are happy with the dull . . . and even our way-down-below-average like my little ones who are happy as larks when they are with each other. Brains seek their own level. . .

Rather than Cro Magnon killing off all the Neanderthal, isn't it possible that their taking over was a matter of natural selection plus absorption? If mutants arrived, it seems more likely (to me) that *homo sapiens* would be absorbed gradually (many a genius marries a mere average spouse); if *homo superior* bred true, his more resistant body could probably stand the disease and injuries the world hands out better and his children *would* inherit the earth. If present mankind died out, I doubt that it would be in gas chambers or crematoriums, and those of us who lived out a full life-time (as the Neanderthals perhaps did) would live it admiring and accepting the leadership of the superior race because they'd make our lives richer and fuller too.

Sincerely yours,  
(Mrs.) Alma McCormick

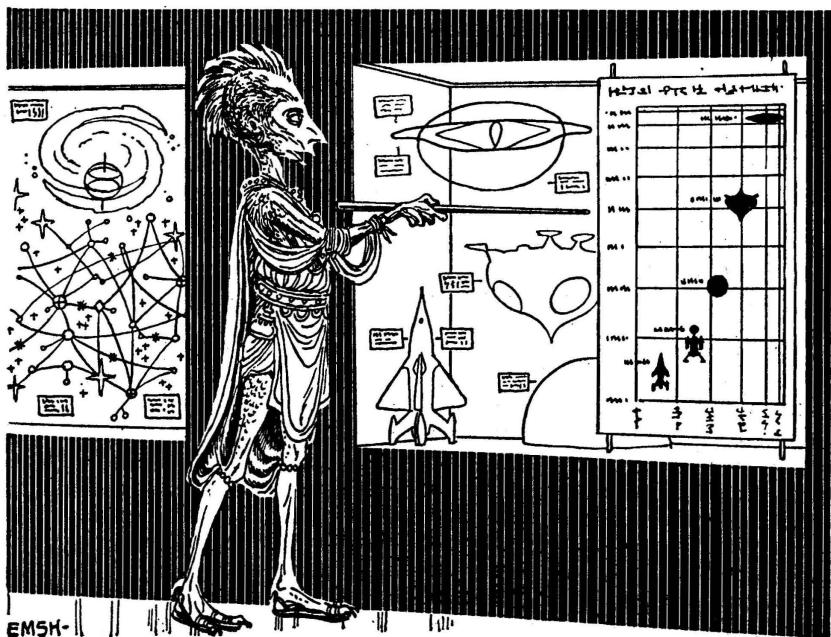


*The scientists of Rykeman III were conceded by all the galactic members to be supreme in scientific achievement. Now the Rykes were going to share their vast knowledge with the scientists of Earth. To any question they would supply an answer—for a price. And Hockley, of all Earth's scientists, was the stubborn one who wanted to weigh the answers with the costs . . .*

# THE UNLEARNED

By Raymond F. Jones

Illustrated by Ed Emsch





**T**HE CHIEF Officer of Scientific Services, Information and Coordination was a somewhat misleading and obscure title, and Dr. Sherman Hockley who held it was not the least of those whom the title misled and sometimes obscured.

He told himself he was not a mere library administrator, although he was proud of the information files built up under his direction. They contained the essence of accumulated knowledge found to date on Earth and the extra-terrestrial planets so far contacted. He didn't feel justified in claiming to be strictly a research supervisor, either, in spite of duties as top level administrator for all divisions of the National Standardization and Research Laboratories and their

subsidiaries in government, industry, and education. During his term of supervision the National Laboratories had made a tremendous growth, in contrast to a previous decline.

Most of all, however, he disclaimed being a figurehead, to which all the loose strings of a vast and rambling organization could be tied. But sometimes it was quite difficult to know whether or not that was his primary assignment after all. His unrelenting efforts to keep out of the category seemed to be encountering more and more determination to push him in that direction.

Of course, this was merely the way it looked in his more bitter moments—such as the present. Normally, he had a full awareness



of the paramount importance of his position, and was determined to administer it on a scale in keeping with that importance. His decision could affect the research in the world's major laboratories. Not that he was a dictator by any means, although there were times when dictation was called for. As when a dozen projects needed money and the Congress allotted enough for one or two. Somebody had to make a choice—

His major difficulty was that active researchers knew it was the Congressional Science Committee which was, ultimately responsible for their bread and butter. And the Senators regarded the scientists, who did the actual work in the laboratories, as the only ones who mattered. Both groups tended to look upon Hockley's office as a sort of fulcrum in their efforts to maintain balance with each other—or as referee in their sparring for adequate control over each other.

At that, however, things researchwise were better than ever before. More funds and facilities were available. Positions in pure research were more secure.

And then, once again, rumors about Rykeman III had begun to circulate wildly a few days ago.

Since Man's achievement of extra-galactic flight, stories of Rykeman III had tantalized the world and made research scientists sick with longing when they considered the possible truth of what they heard. The planet was rumored to be a world of super-science, whose people had an answer for every research problem a man could conceive. The very few Earthmen

who had been to Rykeman III confirmed the rumors. It was a paradise, according to their stories. And among other peoples of the galaxies the inhabitants of Rykeman III were acknowledged supreme in scientific achievement. None challenged them. None even approached them in abilities.

What made the situation so frustrating to Earthmen was the additional report that the Rykes were quite altruistically sharing their science with a considerable number of other worlds on a fee basis. Earth scientists became intoxicated at the mere thought of studying at the feet of the exalted Rykes.

Except Dr. Sherman Hockley. From the first he had taken a dim view of the Ryke reports. Considering the accomplishments of the National Laboratories, he could see no reason for his colleagues' half-shameful disowning of all their own work in favor of a completely unknown culture several hundred million light years away. They were bound to contact more advanced cultures in their explorations—and could be thankful they were as altruistic as the Rykes!—but it was no reason to view themselves as idiot children hoping to be taught by the Rykes.

He had kept his opinions very much to himself in the past, since they were not popular with his associates, who generally regarded his attitudes as simply old-fashioned. But now, for the first time, a Ryke ship was honoring Earth with a visit. There was almost hysterical speculation over the possibility that Earth would be offered tutelage by the mighty Ryke scientists. Hockley



wouldn't have said he was unalterably opposed to the idea. He would have described himself as extremely cautious. What he did oppose wholeheartedly was the enthusiasm that painted the Rykes with pure and shining light, without a shadowy hue in the whole picture.

Since his arrival, the Ryke envoy had been closeted with members of the Congressional Science Committee. Not a word had leaked as to his message. Shortly, however, the scientists were to be let in on the secret which might affect their careers for better or for worse during the rest of their lives, and for many generations to come. The meeting was going to be—

Hockley jumped to his feet as he glanced at the clock. He hurried through the door to the office of his secretary, Miss Cardston, who looked meaningfully at him as he passed.

"I'll bet there isn't a Senator on time," he said.

In the corridor he almost collided with Dr. Lester Showalter, who was his Administrative Assistant for Basic Research. "The Ryke character showed up fifteen minutes ago," said Showalter. "Everyone's waiting."

"We've got six minutes yet," said Hockley. He walked rapidly beside Showalter. "Is there any word on what the envoy's got that's so important?"

"No. I've got the feeling it's something pretty big. Wheeler and Johnson of Budget are there. Somebody said it might have something to do with the National Lab."

"I don't see the connection between that and a meeting with the

Ryke," said Hockley.

Showalter stopped at the door of the conference room. "Maybe they want to sell us something. At any rate, we're about to find out."

The conference table was surrounded by Senators of the Committee. Layered behind them were scientists representing the cream of Hockley's organization. Senator Markham, the bulky, red-faced Chairman greeted them. "Your seats are reserved at the head of the table," he said.

"Sorry about the time," Hockley mumbled. "Clock must be slow."

"Quite all right. We assembled just a trifle early. I want you to meet our visitor, Special Envoy from Rykeman III, Liacan."

Markham introduced them, and the stick-thin envoy arose with an extended hand. His frail, whistling voice that was in keeping with his bird-like character spoke in clear tones. "I am happy to know you, Dr. Hockley, Dr. Showalter."

The two men sat down in good view of the visitor's profile. Hockley had seen the Rykes before, but had always been repelled by their snobbish approach. Characteristically, the envoy bore roughly anthropomorphic features, including a short feather covering on his dorsal side. He was dressed in bright clothing that left visible the streak of feathering that descended from the bright, plumed crown and along the back of his neck. Gravity and air pressure of Earth were about normal for him. For breathing, however, he was required to wear a small device in one narrow nostril. This was connected to a compact tank on his shoulder.

Markham called for order and introduced the visitor. There was a round of applause. Liacan bowed with a short, stiff gesture and let his small black eyes dart over the audience. With an adjustment of his breathing piece he began speaking.

"It is recognized on Earth," he said, "as it is elsewhere, that my people of Rykeman III possess undisputed intellectual leadership in the galaxies of the Council. Your research is concerned with things taught only in the kindergartens of my world. Much that you hold to be true is in error, and your most profound discoveries are self-evident to the children of my people."

Hockley felt a quick, painful contraction in the region of his diaphragm. So this was it!

"We are regarded with much jealousy, envy, and even hatred by some of our unlearned neighbors in space," said the Ryke. "But it has never been our desire to be selfish with our superior achievements which make us the object of these feelings. We have undertaken a program of scientific leadership in our interstellar neighborhood. This began long before you came into space and many worlds have accepted the plan we offer.

"Obviously, it is impractical to pour out all the knowledge and basic science we have accumulated. Another world would find it impossible to sort out that which was applicable to it. What we do is act as a consultation center upon which others can call at will to obtain data pertaining to any problem at hand. Thus, they are not required to sort through wholly inapplicable information to find what they

need.

"For example, if you desire to improve your surface conveyances, we will supply you with data for building an optimum vehicle suitable for conditions on Earth and which is virtually indestructible. You will of course do your own manufacturing, but even there we can supply you with technology that will make the process seem miraculous by your present standards.

"Our services are offered for a fee, payable in suitable items of goods or raw materials. When you contemplate the freedom from monotonous and unending research in fields already explored by us, I am certain you will not consider our fees exorbitant. Our desire is to raise the cultural level of all peoples to the maximum of which they are capable. We know it is not possible or even desirable to bring others to our own high levels, but we do offer assistance to all cultures in accord with their ability to receive. The basic principle is that they shall ask—and whatever is asked for, with intelligence sufficient for its utilization, that shall be granted.

"I am certain I may count on your acceptance of the generous offer of my people."

The envoy sat down with a jiggling of his bright plume, and there was absolute silence in the room. Hockley pictured to himself the dusty, cobweb laboratories of Earth vacated by scientists who ran to the phone to call the Rykes for answers to every problem.

Senator Markham stood up and glanced over the audience. "There is the essence of the program which



has been submitted to us," he said. "There is a vast amount of detail which is, of course, obvious to the minds of our friends on Rykeman III, but which must be the subject of much deliberation on the part of us comparatively simple minded Earthmen." He gave a self-conscious chuckle, which got no response.

Hockley felt mentally stunned. Here at last was the thing that had been hoped for by most, anxiously awaited by a few, and opposed by almost no one.

"The major difficulty," said Markham with slow dignity, "is the price. It's high, yes. In monetary terms, approximately twelve and a half billions per year. But certainly no man in his right mind would consider any reasonable figure too high for what we can expect to receive from our friends of Rykeman III.

"We of the Science Committee do not believe, however, that we could get a commitment for this sum to be added to our normal budget. Yet there is a rather obvious solution. The sum required is very close to that which is now expended on the National Standardization and Research Laboratories."

Hockley felt a sudden chill at the back of his neck.

"With the assistance of the Rykes," said Markham, "we shall have no further need of the National Laboratories. We shall require but a small staff to analyze our problems and present them to the Rykes and relay the answers for proper assimilation. Acceptance of the Ryke program provides its own automatic financing!"

He glanced about with a triumphant smile. Hockley felt as if he were looking through a mist upon something that happened a long time ago. The National Lab! Abandon the National Lab!

Around him there were small nods of agreement from his colleagues. Some pursed their lips as if doubtful—but not very much. He waited for someone to rise to his feet in a blast of protest. No one did. For a moment Hockley's own hands tensed on the back of the chair in front of him. Then he slumped back to his seat. Now was not the time.

They had to thrash it out among themselves. He had to show them the magnitude of this bribe. He had to find an argument to beat down the Congressmen's irrational hopes of paradise. He couldn't plead for the Lab on the grounds of sentiment—or that it was sometimes a good idea to work out your own problems. The Senators didn't care for the problems or concerns of the scientists. It appeared that even the scientists themselves had forgotten to care. He had to slug both groups with something very solid.

Markham was going on. "We are convinced this is a bargain which even the most obstinate of our Congressional colleagues will be quick to recognize. It would be folly to compute with building blocks when we can gain access to giant calculators. There should be no real difficulty in getting funds transferred from the National Laboratory.

"At this time we will adjourn. Liacan leaves this evening. Our acceptance of this generous offer will be conveyed to Rykeman III direct-

ly upon official sanction by the Congress. I wish to ask this same group to meet again for discussion of the details incident to this transfer of operations. Let us say at ten o'clock in the morning, gentlemen."

**H**OCKLEY said goodbye to the envoy. Afterwards, he moved through the circle of Senators to his own group. In the corridor they tightened about him and followed along as if he had given an order for them to follow him. He turned and attempted a grin.

"Looks like a bull session is in order, gents. Assembly in five minutes in my office."

As he and Showalter opened the door to Miss Cardston's office and strode in, the secretary looked up with a start. "I thought you were going to meet in the conference room."

"We've met," said Hockley. "This is the aftermeeting. Send out for a couple of cases of beer." He glanced at the number surging through the doorway and fished in his billfold. "Better make it three. This ought to cover it."

With disapproval, Miss Cardston picked up the bills and turned to the phone. Almost simultaneously there was a bellow of protest and an enormous, ham-like hand gripped her slender wrist. She glanced up in momentary fright.

Dr. Forman K. Silvers was holding her wrist with one hand and clapping Hockley on the back with the other. "This is not an occasion for beer, my boy!" he said in an enormous voice. "Make that a case of champagne, Miss Cardston." He

released her and drew out his own billfold.

"Get somebody to bring in a couple of dozen chairs," Hockley said.

In his own office he walked to the window behind his desk and stood facing it. The afternoon haze was coming up out of the ocean. Faintly visible were the great buildings of the National Laboratories on the other side of the city. Above the mist the sun caught the tip of the eight story tower where the massive field tunnels of the newly designed gammatron were to be installed.

Or *were* to have been installed.

The gammatron was expected to make possible the creation of gravitational fields up to five thousand g's. It would probably be a mere toy to the Rykes, but Hockley felt a fierce pride in its creation. Maybe that was childish. Maybe his whole feeling about the Lab was childish. Perhaps the time had come to give up childish things and take upon themselves adulthood.

But looking across the city at the concrete spire of the gammatron, he didn't believe it.

He heard the clank of metal chairs as a couple of clerks began bringing them in. Then there was the clink of glassware. He turned to see Miss Cardston stiffly indicating a spot on the library table for the glasses and the frosty bottles.

Hockley walked slowly to the table and filled one of the glasses. He raised it slowly. "It's been a short life but a merry one, gentlemen." He swallowed the contents of the glass too quickly and returned to his desk.

"You don't sound very happy about the whole thing," said Mor-

tenson, a chemist who wore a neat, silvery mustache.

"Are you overjoyed," said Hockley, "that we are to swap the National Lab for a bottomless encyclopedia?"

"Yes, I think so," said Mortenson. "There are some minor objections, but in the end I'm certain we'll all be satisfied with what we get."

"Satisfied! Happy!" exclaimed the mathematician, Dr. Silvers. "How can you use words so prosaic and restrained in references to these great events which we shall be privileged to witness in our lifetimes?"

He had taken his stand by the library table and was now filling the glasses with the clear, bubbling champagne, sloshing it with ecstatic abandon over the table and the rug.

Hockley glanced toward him. "You don't believe, then, Dr. Silvers, that we should maintain any reserve in regard to the Rykes?"

"None whatever! The gods themselves have stepped down and offered an invitation direct to paradise. Should we question or hold back, or say we are merely happy. The proper response of a man about to enter heaven is beyond words!"

The bombast of the mathematician never failed to enliven any backroom session in which he participated. "I have no doubt," he said, "that within a fortnight we shall be in possession of a solution to the Legrandian Equations. I have sought this for forty years."

"I think it would be a mistake to support the closing of the National Laboratories," said Hockley slowly.

As if a switch had been thrown, their expressions changed. There was a sudden carefulness in their stance and movements, as if they were feinting before a deadly opponent.

"I don't feel it's such a bad bargain," said a thin, bespectacled physicist named Judson. He was seated across the room from Hockley. "I'll vote to sacrifice the Lab in exchange for what the Rykes will give us."

"That's the point," said Hockley. "Exactly what are the Rykes going to give us? And we speak very glibly of sharing their science. But shall we actually be in any position to share it? What becomes of the class of scientists on Earth when the Lab is abandoned?"

Wilkins stood abruptly, his hands shoved part way into his pockets and his lower jaw extended tensely. "I don't believe that's part of this question," he said. It is not just we scientists who are to share the benefits of the Rykes. It is Mankind. At this time we have no right to consider mere personal concerns. We would betray our whole calling—our very humanity—if we thought for one moment of standing in the way of this development because of our personal concern over economic and professional problems. There has never been a time when a true scientist would not put aside his personal concerns for the good of all."

Hockley waited, half expecting somebody to start clapping. No one did, but there were glances of self-righteous approval in Wilkins' direction. The biologist straightened the sleeves of his coat with a smug



gesture and awaited Hockley's rebuttal.

"We are Mankind," Hockley said finally. "You and I are as much a part of humanity as that bus load of punch machine clerks and store managers passing on the street outside. If we betray ourselves we have betrayed humanity.

"This is not a sudden thing. It is the end point of a trend which has gone on for a long time. It began with our first contacts beyond the galaxy, when we realized there were peoples far in advance of us in science and economy. We have been feeding on them ever since. Our own developments have shrunk in direct proportion. For a long time we've been on the verge of becoming intellectual parasites in the Universe. Acceptance of the Ryke offer will be the final step in that direction."

Instantly, almost every other man in the room was talking at once. Hockley smiled faintly until the angry voices subsided. Then Silvers cleared his throat gently. He placed his glass beside the bottles on the table with a precise motion. "I am sure," he said, "that a moment's thought will convince you that you do not mean what you have just said.

"Consider the position of pupil and teacher. One of Man's greatest failings is his predilection for assuming always the position of teacher and eschewing that of pupil. There is also the question of humility, intellectual humility. We scientists have always boasted of our readiness to set aside one so-called truth and accept another with more valid supporting evidence.

"Since our first contact with other galactic civilizations we have had the utmost need to adopt an attitude of humility. We have been fortunate in coming to a community of worlds where war and oppression are not standard rules of procedure. Among our own people we have encountered no such magnanimity as has been extended repeatedly by other worlds, climaxed now by the Ryke's magnificent offer.

"To adopt sincere intellectual humility and the attitude of the pupil is not to function as a parasite, Dr. Hockley."

"Your analogy of teacher and pupil is very faulty in expressing our relation to the Rykes," said Hockley. "Or perhaps I should say it is too hellishly accurate. Would you have us remain the eternal pupils? The closing of the National Laboratories means an irreversible change in our position. Is it worth gaining a universe of knowledge to give up your own personal free inquiry?"

"I am sure none of us considers he is giving up his personal free inquiry," said Silvers almost angrily. "We see unlimited expansion beyond anything we have imagined in our wildest dreams."

On a few faces there were frowns of uncertainty, but no one spoke up to support him. Hockley knew that until this vision of paradise wore off there were none of them on whom he could count.

He smiled broadly and stood up to ease the tension in the room. "Well, it appears you have made your decision. Of course, Congress can accept the Ryke plan whether we approve or not, but it is good to

go on record one way or the other. I suppose that on the way out tonight it would be proper to check in at Personnel and file a services available notification."

And then he wished he hadn't said that. Their faces grew a little more set at his unappreciated attempt at humor.

**S**HOWALTER remained after the others left. He sat across the desk while Hockley turned back to the window. Only the tip of the gammatron tower now caught the late afternoon sunlight.

"Maybe I'm getting old," Hockley said. "Maybe they're right and the Lab isn't worth preserving if it means the difference between getting or not getting tutelage from the Rykes."

"But you don't feel that's true," said Showalter.

"No."

"You're the one who built the Lab into what it is. It has as much worth as it ever had, and you have an obligation to keep it from being destroyed by a group of politicians who could never understand its necessity."

"I didn't build it," said Hockley. "It grew because I was able to find enough people who wanted the institution to exist. But I've been away from research so long—I never was much good at it really. Did you ever know that? I've always thought of myself as a sort of impresario of scientific productions, if I might use such a term. Maybe those closer to the actual work are right. Maybe I'm just trying to hang onto the past. It

could be time for a jump to a new kind of progress."

"You don't believe any of that."

Hockley looked steadily in the direction of the Lab buildings. "I don't believe any of it. That isn't just an accumulation of buildings over there, with a name attached to them. It's the advancing terminal of all Man's history of trying to find out about himself and the Universe. It started before Neanderthal climbed into his caves a half million years ago. From then until now there's a steady path of trial and error—of learning. There's exultation and despair, success and failure. Now they want to say it was all for nothing."

"But to be pupils—to let the Rykes teach us—"

"The only trouble with Silvers' argument is that our culture has never understood that teaching, in the accepted sense, is an impossibility. There can be only learning—never teaching. The teacher has to be eliminated from the actual learning process before genuine learning can ever take place. But the Rykes offer to become the Ultimate Teacher."

"And if this is true," said Showalter slowly, "you couldn't teach it to those who disagree, could you? They'd have to learn it for themselves."

Hockley turned. For a moment he continued to stare at his assistant. Then his face broke into a narrow grin. "Of course you're right! There's only one way they'll ever learn it: go through the actual experience of what Ryke tutelage will mean."

Most of the workrooms at Information Central were empty this time of evening. Hockley selected the first one he came to and called for every scrap of data pertaining to Rykeman III. There was a fair amount of information available on the physical characteristics of the world. Hockley scribbled swift, privately intelligible notes as he scanned. The Rykes lived under a gravity one third heavier than Earth's, with a day little more than half as long, and they received only forty percent as much heat from their frail sun as Earthmen were accustomed to.

Cultural characteristics included a trading system that made the entire planet a single economic unit. And the planet had no history whatever of war. The Rykes themselves had contributed almost nothing to the central libraries of the galaxies concerning their own personal makeup and mental functions, however. What little was available came from observers not of their race.

There were indications they were a highly unemotional race, not given to any artistic expression. Hockley found this surprising. The general rule was for highly intellectual attainments to be accompanied by equally high artistic expression.

But all of this provided no data that he could relate to his present problem, no basis for argument beyond what he already had. He returned the films to their silver cans and set staring at the neat pile of them on the desk. Then he smiled at his own obtuseness. Data on Rykeman III might be lacking, but the Ryke plan had been tried on plenty of other worlds. Data on

*them* should not be so scarce.

He returned the cans and punched out a new request on the call panel. Twenty seconds later he was pleasantly surprised by a score of new tapes in the hopper. That was enough for a full night's work. He wished he'd brought Showalter along to help.

Then his eye caught sight of the label on the topmost can in the pile: Janisson VIII. The name rang a familiar signal somewhere deep in his mind. Then he knew—that was the home world of Waldon Thar, one of his closest friends in the year when he'd gone to school at Galactic Center for advanced study.

Thar had been one of the most brilliant researchers Hockley had ever known. In bull session debate he was instantly beyond the depth of everyone else.

Janisson VIII. Thar could tell him about the Rykes!

Hockley pushed the tape cans aside and went to the phone in the workroom. He dialed for the interstellar operator. "Government priority call to Janisson VIII," he said. "Waldon Thar. He attended Galactic Center Research Institute twenty-three years ago. He came from the city Plar, which was his home at that time. I have no other information, except that he is probably employed as a research scientist."

There was a moment's silence while the operator noted the information. "There will be some delay," she said finally. "At present the inter-galactic beams are full."

"I can use top emergency priority on this," said Hockley. "Can you clear a trunk for me on that?"



"Yes. One moment, please."

He sat by the window for half an hour, turning down the light in the workroom so that he could see the flow of traffic at the port west of the Lab buildings. Two space-ships took off and three came in while he waited. And then the phone rang.

"I'm sorry," the operator said.

"Waldon Thar is reported not on Janisson VIII. He went to Rykeman III about two Earth years ago. Do you wish to attempt to locate him there?"

"By all means," said Hockley. "Same priority."

This was better than he had hoped for. Thar could really get him the information he needed on the Rykes. Twenty minutes later the phone rang again. In the operator's first words Hockley sensed apology and knew the attempt had failed.

"Our office has learned that Walden Thar is at present on tour as aide to the Ryke emissary, Liacan. We can perhaps trace—"

"No!" Hockley shouted. "That won't be necessary. I know now—"

He almost laughed aloud to himself. This was an incredible piece of good luck. Walden Thar was probably out at the space port right now—unless one of those ships taking off had been the Ryke—

He wondered why Thar had not tried to contact him. Of course, it *had* been a long time, but they had been very close at the center. He dialed the field control tower. "I want to know if the ship from Rykeman III has departed yet," he said.

"They were scheduled for six hours ago, but mechanical difficulty

has delayed them. Present estimated take-off is 1100."

Almost two hours to go, Hockley thought. That should be time enough. "Please put me in communication with one of the aides aboard named Waldon Thar. This is Sherman Hockley of Scientific Services. Priority request."

"I'll try, sir." The tower operator manifested a sudden increase of respect. "One moment, please."

Hockley heard the buzz and switch clicks of communication circuits reaching for the ship. Then, in a moment, he heard the somewhat irritated but familiar voice of his old friend.

"Waldon Thar speaking," the voice said. "Who wishes to talk?"

"Listen, you old son of a cyclotron's maiden aunt!" said Hockley. "Who would want to talk on Sol III? Why didn't you give me a buzz when you landed? I just found out you were here."

"Sherm Hockley, of course," the voice said with distant, unperturbed tones. "This is indeed a surprise and a pleasure. To be honest, I had forgotten Earth was your home planet."

"I'll try to think of something to jog your memory next time. How about getting together?"

"Well—I don't have very long," said Thar hesitantly. "If you could come over for a few minutes—"

Hockley had the jolting feeling that Waldon Thar would just as soon pass up the opportunity for their meeting. Some of the enthusiasm went out of his voice. "There's a good all-night interplanetary eatery and bar on the field there. I'll be along in fifteen

minutes.”

“Fine,” said Thar, “but please try not to be late.”

On the way to the field, Hockley wondered about the change that had apparently taken place in Thar. Of course, *he* had changed, too—perhaps for much the worse. But Thar sounded like a stuffed shirt now, and that is the last thing Hockley would have expected. In school, Thar had been the most irreverent of the whole class of irreverents, denouncing in ecstasy the established and unproven lore, riding the professors of unsubstantiated hypotheses. Now—well, he didn’t sound like the Thar Hockley knew.

He took a table and sat down just as Thar entered the dining room. The latter’s broad smile momentarily removed Hockley’s doubts. The smile hadn’t changed. And there was the same expression of devilish disregard for the established order. The same warm friendliness. It baffled Hockley to understand how Thar could have failed to remember Earth was his home.

Thar mentioned it as he came up and took Hockley’s hand. “I’m terribly sorry,” he said. “It was stupid to forget that Earth meant Sherman Hockley.”

“I know how it is. I should have written. I guess I’m the one who owes a letter.”

“No, I think not,” said Thar.

They sat on opposite sides of a small table near a window and ordered drinks. On the field they could see the vast, shadowy outline of the Ryke vessel.

Thar was of a race genetically close to the Rykes. He lacked the feathery covering, but this was replaced by a layer of thin scales, which had a tendency to stand on edge when he was excited. He also wore a breathing piece, and carried the small shoulder tank with a faint air of superiority.

Hockley watched him with a growing sense of loss. The first impression had been more nearly correct. Thar hadn’t wanted to meet him.

“It’s been a long time,” said Hockley lamely. “I guess there isn’t much we did back there that means anything now.”

“You shouldn’t say that,” said Thar as if recognizing he had been too remote. “Every hour of our acquaintance meant a great deal to me. I’ll never forgive myself for forgetting—but tell me how you learned I was aboard the Ryke ship.”

“The Rykes have made us an offer. I wanted to find out the effects on worlds that had accepted. I learned Janisson VIII was one, so I started looking.”

“I’m so very glad you did, Sherm. You want me to confirm, of course, the advisability of accepting the offer Liacan has made.”

“Confirm—or deny it,” said Hockley.

Thar spread his clawlike hands. “Deny it? The most glorious opportunity a planet could possibly have?”

Something in Thar’s voice gave Hockley a sudden chill. “How has it worked on your own world?”

“Janisson VIII has turned from a slum to a world of mansions. Our

economic problems have been solved. Health and long life are routine. There is nothing we want that we cannot have for the asking."

"But are you *satisfied* with it? Is there nothing which you had to give up that you would like returned?"

Waldon Thar threw back his head and laughed in high pitched tones. "I might have known that would be the question you would ask! Forgive me, friend Sherman, but I had almost forgotten how unventuresome you are.

"Your question is ridiculous. Why should we wish to go back to our economic inequalities, poverty and distress, our ignorant plodding research in science? You can answer your own question."

They were silent for a moment. Hockley thought his friend would have gladly terminated their visit right there and returned to his ship. To forestall this, he leaned across the table and asked, "Your science—what has become of that?"

"Our science! We never had any. We were ignorant children playing with mud and rocks. We knew nothing. We had nothing. Until the Rykes offered to educate us."

"Surely you don't believe that," said Hockley quietly. "The problem you worked on at the Institute—gravity at micro-cosmic levels. That was not a childish thing."

Thar laughed shortly and bitterly. "What disillusionment you have coming, friend Sherman! If you only knew how truly childish it was. Wait until you learn from the Rykes the true conception of gravity, its nature and the part it plays in the structure of matter."

Hockley felt a sick tightening

within him. This was not the Waldon Thar, the wild demon who thrust aside all authority and rumor in his own headlong search for knowledge. It couldn't be Thar who was sitting passively by, being *told* what the nature of the Universe is.

"Your scientists—?" Hockley persisted. "What has become of all your researchers?"

"The answer is the same," said Thar. "We had no science. We had no scientists. Those who once went by that name have become for the first time honest students knowing the pleasure of studying at the feet of masters."

"You have set up laboratories in which your researches are supervised by the Rykes?"

"Laboratories? We have no need of laboratories. We have workshops and study rooms where we try to absorb that which the Rykes discovered long ago. Maybe at some future time we will come to a point where we can reach into the frontier of knowledge with our own minds, but this does not seem likely now."

"So you have given up all original research of your own?"

"How could we do otherwise? The Rykes have all the answers to any question we have intelligence enough to ask. Follow them, Sherman. It is no disgrace to be led by such as the Ryke teachers."

"Don't you ever long," said Hockley, "to take just one short step on your own two feet?"

"Why crawl when you can go by trans-light carrier?"

Thar sipped the last of his drink and glanced toward the wall clock.

"I must go. I can understand the direction of your questions and your thinking. You hesitate because you might lose the chance to play in the mud and count the pretty pebbles in the sand. Put away childish things. You will never miss them!"

They shook hands, and a moment later Hockley said goodbye to Thar at the entrance to the field. "I know Earth will accept," said Thar. "And you and I should not have lost contact—but we'll make up for it."

Watching him move toward the dark hulk of the ship, Hockley wondered if Thar actually believed that. In less than an hour they had exhausted all they had to say after twenty years. Hockley had the information he needed about the Ryke plan, but he wished he could have kept his old memories of his student friend. Thar was drunk on the heady stuff being peddled by the Rykes, and if what he said were true, it was strong enough to intoxicate a whole planet.

His blood grew cold at the thought. This was more than a fight for the National Laboratories. It was a struggle to keep all Mankind from becoming what Thar had become.

If he could have put Thar on exhibition in the meeting tomorrow, and shown what he was once like, he would have made his point. But Thar, before and after, was not available for exhibit. He had to find another way to show his colleagues and the Senators what the Rykes would make of them.

He glanced at his watch. They wouldn't like being wakened at this hour, but neither would the scientists put up much resistance to his

request for support in Markham's meeting. He went back to the bar and called each of his colleagues who had been in the meeting that day.

**H**OCKLEY was called first when the assembly convened at ten that morning. He rose slowly from his seat near Markham and glanced over the somewhat puzzled expressions of the scientists.

"I don't know that I can speak for the entire group of scientists present," he said. "We met yesterday and found some differences of opinion concerning this offer. While it is true there is overwhelming sentiment supporting it, certain questions remain, which we feel require additional data in order to be answered properly.

"While we recognize that official acceptance can be given to the Rykes with no approval whatever from the scientists, it seems only fair that we should have every opportunity to make what we consider a proper study and to express our opinions in the matter.

"To the non-scientist—and perhaps to many of my colleagues—it may seem inconceivable that there could be any questions whatever. But we wonder about the position of students of future generations, we wonder about the details of administration of the program, we wonder about the total effects of the program upon our society as a whole. We wish to ask permission to make further study of the matter in an effort to answer these questions and many others. We request permission to go as a committee to



Rykeman III and make a first hand study of what the Rykes propose to do, how they will teach us, and how they will dispense the information they so generously offer.

"I ask that you consider this most seriously, and make an official request of the Rykes to grant us such opportunity for study, that you provide the necessary appropriations for the trip. I consider it most urgent that this be done at once."

There was a stir of concern and disapproval from Congressional members as Hockley sat down. Senators leaned to speak in whispers to their neighbors, but Hockley observed the scientists remained quiet and impassive. He believed he had sold them in his telephone calls during the early morning. They liked the idea of obtaining additional data. Besides, most of them wanted to see Rykeman III for themselves.

Senator Markham finally stood up, obviously disturbed by Hockley's abrupt proposal. "It has seemed to us members of the Committee that there could hardly be any need for more data than is already available to us. The remarkable effects of Ryke science on other backward worlds is common knowledge.

"On the other hand we recognize the qualifications of you gentlemen which make your request appear justified. We will have to discuss this at length, but at the moment I believe I can say I am in sympathy with your request and can encourage my Committee to give it serious consideration."

A great deal more was said on

that and subsequent days. News of the Ryke offer was not given to the public, but landing of the Ryke ship could not be hidden. It became known that Liacan carried his offer to other worlds and speculation was made that he offered it to Earth also. Angry questions were raised as to why the purpose of the visit was not clarified, but government silence was maintained while Hockley's request was considered.

It encountered bitter debate in the closed sessions, but permission was finally given for a junket of ninety scientists and ten senators to Rykeman III.

This could not be hidden, so the facts were modified and a story given out that the party was going to request participation in the Ryke program being offered other worlds, that Liacan's visit had not been conclusive.

In the days preceding the take-off Hockley felt a sense of destiny weighing heavily upon him. He read every word of the stream of opinion that flowed through the press. Every commentator and columnist seemed called upon to make his own specific analysis of the possibilities of the visit to Rykeman III. And the opinions were almost uniform that it would be an approach to Utopia to have the Rykes take over. Hockley was sickened by this mass conversion to the siren call of the Rykes.

It was a tremendous relief when the day finally came and the huge transport ship lifted solemnly into space.

Most of the group were in the ship's lounge watching the television port as the Earth drifted away beneath them. Senator Markham

seemed nervous and almost frightened, Hockley thought, as if something intangible had escaped him.

"I hope we're not wasting our time," he said. "Not that I don't understand your position," he added hastily to cover the show of antagonism he sensed creeping into his voice.

"We appreciate your support," said Hockley, "and we'll do our best to see the time of the investigation is not wasted."

But afterwards, when the two of them were alone by the screen, Silvers spoke to Hockley soberly. The mathematician had lost some of the wild exuberance he'd had at first. It had been replaced by a deep, intense conviction that nothing must stand in the way of Earth's alliance with the Rykes.

"We all understand why you wanted us to come," he said. "We know you believe this delay will cool our enthusiasm. It's only fair to make clear that it won't. How you intend to change us by taking us to the home of the Rykes has got us all baffled. The reverse will be true, I am very sure. We intend to make it clear to the Rykes that we accept their offer. I hope you have no plan to make a declaration to the contrary."

Hockley kept his eyes on the screen, watching the green sphere of Earth. "I have no intention of making any statement of any kind. I was perfectly honest when I said our understanding of the Rykes would profit by this visit. You all agreed. I meant nothing more nor less than what I said. I hope no one in the group thinks otherwise."

"We don't know," said Silvers.

"It's just that you've got us wondering how you expect to change our views."

"I have not said that is my intention."

"Can you say it is not?"

"No, I cannot say that. But the question is incomplete. My whole intention is to discover as fully as possible what will be the result of alliance with the Rykes. If you should conclude that it will be unfavorable that will be the result of your own direct observations and computations, not of my arguments."

"You may be sure that is one thing that will not occur," said Silvers.

**I**T TOOK them a month to reach a transfer point where they could change to a commercial vessel using Ryke principles. In the following week they covered a distance several thousand times that which they had already come. And then they were on Rykeman III.

A few of them had visited the planet previously, on vacation trips or routine study expeditions, but most of them were seeing it for the first time. While well out into space the group began crowding the vision screens which brought into range the streets and buildings of the cities. They could see the people walking and riding there.

Hockley caught his breath at the sight, and doubts overwhelmed him, telling him he was an utter and complete fool. The city upon which he looked was a jewel of perfection. Buildings were not indiscriminate masses of masonry and metal and

plastic heaped up without regard to the total effect. Rather, the city was a unit created with an eye to esthetic perfection.

Silvers stood beside Hockley. "We've got a chance to make Earth look that way," said the mathematician.

"There's only one thing missing," said Hockley. "The price tag. We still need to know what it's going to cost."

Upon landing, the Earthmen were greeted by a covey of their bird-like hosts who scurried about, introducing themselves in their high whistling voices. In busses, they were moved half way across the city to a building which stood beside an enormous park area.

It was obviously a building designed for the reception of just such delegations as this one, giving Hockley evidence that perhaps his idea was not so original after all. It was a relief to get inside after their brief trip across the city. Gravity, temperature, and air pressure and composition duplicated those of Earth inside, and conditions could be varied to accommodate many different species. Hockley felt confident they could become accustomed to outside conditions after a few days, but it was exhausting now to be out for long.

They were shown to individual quarters and given leisure to unpack and inspect their surroundings. Furniture had been adjusted to their size and needs. The only oversight Hockley could find was a faint odor of chlorine lingering in the closets. He wondered who the last occupant of the room had been.

After a noon meal, served with

foods of astonishingly close approximation to their native fare, the group was offered a prelude to the general instruction and indoctrination which would begin the following day. This was in the form of a guided tour through the science museum which, Hockley gathered, was a modernized Ryke parallel to the venerable Smithsonian back home. The tour was entirely optional, as far as the planned program of the Rykes was concerned, but none of the Earthmen turned it down.

Hockley tried to concentrate heavily on the memory of Waldon Thar and keep the image of his friend always before him as he moved through the city and inspected the works of the Rykes. He found it helped suppress the awe and adulation which he had an impulse to share with his companions.

It was possible even, he found, to adopt a kind of truculent cynicism toward the approach the Rykes were making. The visit to the science museum *could* be an attempt to bowl them over with an eon-long vista of Ryke superiority in the sciences. At least that was most certainly the effect on them. Hockley cursed his own feeling of ignorance and inferiority as the guide led them quietly past the works of the masters, offering but little comment, letting them see for themselves the obvious relationships.

In the massive display showing developments of spaceflight, the atomic vessels, not much different from Earthmen's best efforts, were far down the line, very near to the earliest attempts of the Rykes to rocket their way into space. Beyond that level was an incredible series of



developments incomprehensible to most of the Earthmen.

And to all their questions the guide offered the monotonous reply: "That will be explained to you later. We only wish to give you an overall picture of our culture at the present time."

But this was not enough for one of the astronomers, named Moore, who moved ahead of Hockley in the crowd. Hockley saw the back of Moore's neck growing redder by the minute as the guide's evasive answer was repeated. Finally, Moore forced a discussion regarding the merits of some systems of comparing the brightness of stars, which the guide briefly showed them. The guide, in great annoyance, burst out with a stream of explanation that completely flattened any opinions Moore might have had. But at the same time the astronomer grinned amiably at the Ryke. "That ought to settle that," he said. "I'll bet it won't take a week to get our system changed back home."

Moore's success loosened the restraint of the others and they be-seiged the guide mercilessly then with opinions, questions, comparisons—and even mild disapprovals. The guide's exasperation was obvious—and pleasant—to Hockley, who remained a bystander. It was frightening to Markham and some of the other senators who were unable to take part in the discussion. But most of the scientists failed to notice it in their eagerness to learn.

After dinner that night they gathered in the lounge and study of their quarters. Markham stood beside Hockley as they partook cautiously of the cocktails which the Rykes had attempted to duplicate for them. The Senator's awe had returned to overshadow any concern he felt during the events of the afternoon. "A wonderful day!" he said. "Even though this visit delays completion of our arrangements with the Rykes those of us here will be grateful forever that you proposed it. Nothing could have so impressed us all with the desirability of accepting the Ryke's tutelage. It was a stroke of genius, Dr. Hockley. And for a time I thought you were actually opposed to the Rykes!"

He sipped his drink while Hockley said nothing. Then his brow furrowed a bit. "But I wonder why our guide cut short our tour this afternoon. If I recall correctly he said at the beginning there was a great deal more to see than he actually showed us."

Hockley smiled and sipped politely at his drink before he set it down and faced the Senator. "I was wondering if anyone else noticed that," he said.



**H**OCKLEY slept well that night except for the fact that occasional whiffs of chlorine seemed to drift from various corners of the room even though he turned the air-conditioning system on full blast.

In the morning there began a series of specialized lectures which had been prepared in accordance with the Earthmen's request to acquaint them with what they would be getting upon acceptance of the Ryke offer.

It was obviously no new experience for the Rykes. The lectures were well prepared and anticipated many questions. The only thing new about it, Hockley thought, was the delivery in the language of the Earthmen. Otherwise, he felt this was something prepared a long time ago and given a thousand times or more.

They were divided into smaller groups according to their specialties, electronic men going one way, astronomers and mathematical physicists another, chemists and general physicists in still another direction. Hockley, Showalter and the senators were considered more or less free floating members of the delegation with the privilege of visiting with one group or another according to their pleasure.

Hockley chose to spend the first day with the chemists, since that was his own first love. Dr. Showalter and Senator Markham came along with him. As much as he tried he found it virtually impossible not to sit with the same open-mouthed wonder that his colleagues exhibited. The swift, free-flowing exposition of the Ryke lecturer led them immediately beyond their own

realms, but so carefully did he lead them that it seemed that they must have come this way before, and forgotten it.

Hockley felt half angry with himself. He felt he had allowed himself to be hypnotized by the skill of the Ryke, and wondered despairingly if there were any chance at all of combating their approach. He saw nothing to indicate it in the experience of that day or the ones immediately following. But he retained hope that there was much significance in the action of the guide who had cut short their visit to the museum.

In the evenings, in the study lounge of the dormitory, they held interminable bull sessions exchanging and digesting what they had been shown during the day. It was at the end of the third day that Hockley thought he could detect a subtle change in the group. He had some difficulty analyzing it at first. It seemed to be a growing aliveness, a sort of recovery. And then he recognized that the initial stunned reaction to the magnificence of the Rykes was passing off. They had been shocked by the impact of the Rykes, almost as if they had been struck a blow on the head. Temporarily, they had shelved all their own analytical and critical facilities and yielded to the Rykes without question.

Now they were beginning to recover, springing back to a condition considerably nearer normal. Hockley felt a surge of encouragement as he detected a more sharply critical evaluation in the conversations that buzzed around him. The enthusiasm was more measured.

It was the following evening,

however, that witnessed the first event of pronounced shifting of anyone's attitude. They had finished dinner and were gathering in the lounge, sparring around, setting up groups for the bull sessions that would go until long after midnight. Most of them had already settled down and were talking part in conversations or were listening quietly when they were suddenly aware of a change in the atmosphere of the room.

For a moment there was a general turning of heads to locate the source of the disturbance. Hockley knew he could never describe just what made him look around, but he was abruptly conscious that Dr. Silvers was walking into the lounge and looking slowly about at those gathered there. Something in his presence was like the sudden appearance of a thundercloud, his face seemed to reflect the dark turbulence of a summer storm.

He said nothing, however, to anyone but strode over and sat beside Hockley, who was alone at the moment smoking the next to last of his Earthside cigars. Hockley felt the smouldering turmoil inside the mathematician. He extended his final cigar. Silvers brushed it away.

"The last one," said Hockley mildly. "In spite of all their abilities the Ryke imitations are somewhat less than natural."

Silvers turned slowly to face Hockley. "I presented them with the Legrandian Equations today," he said. "I expected to get a straightforward answer to a perfectly legitimate scientific question. That is what we were led to expect, was it not?"

Hockley nodded. "That's my impression. Did you get something less than a straightforward answer?"

The mathematician exhaled noisily. "The Legrandian Equations will lead to a geometry as revolutionary as Riemann's was in his day. But I was told by the Rykes that I 'should dismiss it from all further consideration. It does not lead to any profitable mathematical development.'"

Hockley felt that his heart most certainly skipped a beat, but he managed to keep his voice steady, and sympathetic. "That's too bad. I know what high hopes you had. I suppose you will give up work on the Equations now?"

"I will not!" Silvers exclaimed loudly. Nearby groups who had returned hesitantly to their own conversations now stared at him again. But abruptly he changed his tone and looked almost pleadingly at Hockley. "I don't understand it. Why should they say such a thing? It appears to be one of the most profitable avenues of exploration I have encountered in my whole career. And the Rykes brush it aside!"

"What did you say when they told you to give it up?"

"I said I wanted to know where the development would lead. I said it had been indicated that we could have an answer to any scientific problem within the range of their abilities, and certainly this is, from what I've seen.

"The instructor replied that I'd been given an answer to my question, that 'the first lesson you must learn if you wish to acquire our pace in science is to recognize that

we have been along the path ahead of you. We know which are the possibilities that are worthwhile to develop. We have gained our speed by learning to bypass every avenue but the main one, and not get lost in tempting side roads.'

"He said that we've got to learn to trust them and take their word as to which is the correct and profitable field of research, that 'we will show you where to go, as we agreed to do. If you are not willing to accept our leadership in this respect our agreement means nothing.' Wouldn't that be a magnificent way to make scientific progress?"

The mathematician shifted in his chair as if trying to control an internal fury that would not be capped. He held out his hand abruptly. "I'll take that cigar after all, if you don't mind, Hockley."

With savage energy he chewed the end and ignited the cigar, then blew a mammoth cloud of smoke ceilingward. "I think the trouble must be in our lecturer," he said. "He's crazy. He couldn't possibly represent the conventional attitude of the Rykes. They promised to give answers to our problems—and this is the kind of nonsense I get. I'm going to see somebody higher up and find out why we can't have a lecturer who knows what he's talking about. Or maybe you or Markham would rather take it up—through official channels, as it were?"

"The Ryke was correct," said Hockley. "He *did* give you an answer."

"He could answer *all* our questions that way!"

"You're perfectly right," said

Hockley soberly. "He could do exactly that."

"They won't of course," said Silvers, defensively. "Even if this particular character isn't just playing the screwball, my question is just a special case. It's just one particular thing they consider to be valueless. Perhaps in the end I'll find they're right—but I'm going to develop a solution to these Equations if it takes the rest of my life!"

"After all, they admit they have no solution, that they have not bothered to go down this particular side path, as they put it. If we don't go down it how can we ever know whether it's worthwhile or not? How can the Rykes know what they may have missed by not doing so?"

"I can't answer that," said Hockley. "For us or for them, I know of no other way to predict the outcome of a specific line of research except to carry it through and find out what lies at the end of the road."

**H**OCKLEY didn't sleep very well after he finally went to bed that night. Silvers had presented him with the break he had been expecting and hoping for. The first chink in the armor of sanctity surrounding the Rykes. Now he wondered what would follow, if this would build up to the impassable barrier he wanted, or if it would merely remain a sore obstacle in their way but eventually be bypassed and forgotten.

He did not believe it would be the only incident of its kind. There would be others as the Earthmen's stunned, blind acceptance gave way completely to sound, critical evalu-

ation. And in any case there was one delegate who would never be the same again. No matter how he eventually rationalized it Dr. For-man K. Silvers would never feel quite the same about the Rykes as he did before they rejected his favorite piece of research.

Hockley arose early, eager but cautious, his senses open for further evidence of disaffection springing up. He joined the group of chemists once more for the morning lecture. The spirit of the group was markedly higher than when he first met with them. They had been inspired by what the Rykes had shown them, but in addition their own sense of judgment had been brought out of suspension.

The Ryke lecturer began inscribing on the board an enormous organic formula, using conventions of Earth chemistry for the benefit of his audience. He explained at some length a number of transformations which it was possible to make in the compound by means of high intensity fields.

Almost at once, one of the younger chemists named Dr. Carmen, was on his feet exclaiming excitedly that one of the transformation compounds was a chemical on which he had conducted an extensive research. He had produced enough to know that it had a multitude of intriguing properties, and now he was exuberant at the revelation of a method of producing it in quantity and also further transforming it.

At his sudden enthusiasm the lecturer's face took on what they had come to recognize as a very dour look. "That series of transformations has no interest for us," he said.

"I merely indicated its existence to show one of the possibilities which should be avoided. Over here you see the direction in which we wish to go."

"But you never saw anything with properties like that!" Carmen protested. "It goes through an incredible series of at least three crystalline-liquid phase changes with an increase in pressure alone. But with proper control of heat it can be kept in the crystalline phase regardless of pressure. It is closely related to a drug series with anesthetic properties, and is almost sure to be valuable in—"

The Ryke lecturer cut him off sharply. "I have explained," he said, "the direction of transformation in which we are interested. Your concern is not with anything beyond the boundaries which our study has proven to be the direct path of research and study."

"Then I should abandon research on this series of chemicals?" Carmen asked with a show of outward meekness.

The Ryke nodded with pleasure at Carmen's submissiveness. "That is it precisely. We have been over this ground long ago. We know where the areas of profitable study lie. You will be told what to observe and what to ignore. How could you ever hope to make progress if you stopped to examine every alternate probability and possibility that appeared to you?" He shook his head vigorously and his plume vibrated with emotion.

"You must have a plan," he continued. "A goal. Study of the Universe cannot proceed in any random, erratic fashion. You must

know what you want and then find out where to look for it."

Carmen sat down slowly. Hockley was sure the Ryke did not notice the tense bulge of the chemist's jaw muscles. Perhaps he would not have understood the significance if he had noticed.

Hockley was a trifle late in getting to the dining room at lunch time that day. By the time he did so the place was like a beehive. He was almost repelled by the furor of conversation circulating in the room as he entered.

He passed through slowly, searching for a table of his own. He paused a moment behind Dr. Carmen, who was declaiming in no mild terms his opinions of a system that would pre-select those areas of research which were to be entered and those which were not. He smiled a little as he caught the eye of one of the dozen chemists seated at the table, listening.

Moving on, he observed that Silvers had also cornered a half dozen or so of his colleagues in his own field and was in earnest conversation with them—in a considerably more restrained manner, however, than he had used the previous evening with Hockley, or than Carmen was using at the present time.

The entire room was abuzz with similar groups.

The senators had tried to mingle with the others in past days, always with more or less lack of success because they found themselves out of the conversation almost completely. Today they had no luck whatever. They were seated together at a couple of tables in a

corner. None of them seemed to be paying attention to the food before them, but were glancing about, half-apprehensively, at their fellow diners—who were also paying no attention to food.

Hockley caught sight of his political colleagues and sensed their dismay. The field of disquietude seemed almost tangible in the air. The senators seemed half frightened by what they felt but could not understand.

Showalter's wild waving at the far corner of the room finally caught Hockley's eye and he moved toward the small table which the assistant had reserved for them. Showalter was upset, too, by the atmosphere within the room.

"What the devil is up?" he said. "Seems like everybody's on edge this morning. I never saw a bunch of guys so touchy. You'd think they woke up with snakes in their beds."

"Didn't you know?" said Hockley. "Haven't you been to any of the lectures this morning?"

"No. A couple of the senators were getting bored with all the scientific doings so I thought maybe I should try to entertain them. We took in what passes for such here, but it wasn't much better than the lectures as a show. Tell me what's up."

Briefly, Hockley described Silvers' upset of the day before and Carmen's experience that morning. Showalter let his glance rove over his fellow Earthmen, trying to catch snatches of the buzzing conversation at nearby tables.

"You think that's the kind of thing that's got them all going this morning?" he said.



Hockley nodded. "I caught enough of it passing through to know that's what it is. I gather that every group has run into the same kind of thing by now, the fencing off of broad areas where we have already tried to do research.

"After the first cloud of awe wore off, the first thing everyone wanted was an answer to his own pet line of research. Nine times out of ten it was something the Rykes told them to chuck down the drain. That advice doesn't sit so well—as you can plainly see."

Showalter drew back his gaze and stared for a long time at Hockley. "You knew this would happen. That's why you brought us here—"

"I had hopes of it. I was reasonably sure this was the way the Rykes operated."

Showalter remained thoughtful for a long time before he spoke again. "You've won your point, I suppose, as far as this group goes, but you can't hope to convince all of Earth by this. The Rykes will hold their offer open, and others will accept it on behalf of Earth.

"And what if it's we who are wrong, in the end? How can you be sure that this isn't the way the Rykes have made their tremendous speed—by not going down all the blind alleys that we rattle around in."

"I'm sure it is the way they have attained such speed of advancement."

"Then maybe we ought to go along, regardless of our own desires. Maybe we never did know how to do research!"

Hockley smiled across the table at his assistant. "You believe that, of course."

"I'm just talking," said Showalter irritably. "The thing gets more loopy every day. If you think you understand the Rykes I wish you would give out with what the score is. By the looks of most of these guys I would say they are getting ready to throttle the next Ryke they see instead of knuckle under to him."

"I hope you're right," said Hockley fervently. "I certainly hope you're right."

**B**Y EVENING there was increasing evidence that he was. Hockley passed up the afternoon lecture period and spent the time in the lounge doing some thinking of his own. He knew he couldn't push the group. Above all, he mustn't give way to any temptation to push them or say, "I told you so." Their present frustration was so deep that their antagonism could be turned almost indiscriminately in any direction, and he would be offering himself as a ready target if he were not careful.

On the other hand he had to be ready to take advantage of their disaffection and throw them a decisive challenge when they were ready for it. That might be tonight, or it might be another week. He wished for a sure way of knowing. As things turned out, however, the necessity of choosing the time was taken from him.

After dinner that night, when the group began to drift into the lounge, Silvers and Carmen and three of the other men came over to where Hockley sat. Silvers fumbled with the buttons of his coat as if preparing to make an address.

"We'd like to request," he said, "that is—we think we ought to get together. We'd like you to call a meeting, Hockley. Some of us have a few things we'd like to talk over."

Hockley nodded, his face impassive.

"The matter I mentioned to you the other night," said Silvers. "It's been happening to all the men. We think we ought to talk about it."

"Fine," said Hockley. "I've been thinking it would perhaps be a good idea. Pass the word around and let's get some chairs. We can convene in ten minutes."

The others nodded somberly and moved away with all the enthusiasm of preparing for a funeral. And maybe that's what it would be, Hockley thought—somebody's funeral. He hoped it would be the Rykes.

The room began filling almost at once, as if they had been expecting the call. In little more than five minutes it seemed that every member of the Earth delegation had assembled, leaving time to spare.

The senators still wore their looks of puzzlement and half-frightened anxiety, which had intensified if anything. There was no puzzlement on the faces of the scientists, however, only a set and determined expression that Hockley hardly dared interpret as meaning they had made up their minds. He had to have their verbal confirmation.

Informally, he thrust his hands in his pockets and sauntered to the front of the group.

"I have been asked to call a meeting," he said, "by certain members of the group who have something on their minds. They seem to feel

we'd all be interested in what is troubling them. Since I have nothing in particular to say I'm simply going to turn the floor over to those of you who have. Dr. Silvers first approached me to call this discussion, so I shall ask him to lead off. Will you come to the front, Dr. Silvers?"

The mathematician rose as if wishing someone else would do the talking. He stood at one side of the group, halfway to the rear. "I can do all right from here," he said.

After a pause, as if coming to a momentous decision, he plunged into his complaint. "It appears that nearly all of us have encountered an aspect of the Ryke culture and character which was not anticipated when we first received their offer." Briefly, he related the details of the Ryke rejection of his research on the Legrandian Equations.

"We were told we were going to have all our questions answered, that the Ryke's science included all we could anticipate or hope to accomplish in the next few millenia. I swallowed that. We all did. It appears we were slightly in error. It begins to appear as if we are not going to find the intellectual paradise we anticipated."

He smiled wryly. "I'm sure none of you is more ready than I to admit he has been a fool. It appears that paradise, so-called, consists merely of a few selected gems which the Rykes consider particularly valuable, while the rest of the field goes untouched.

"I want to offer public apologies to Dr. Hockley, who saw and understood the situation as it actually existed, while the rest of us had our

heads in the clouds. Exactly how he knew, I'm not sure, but he did, and very brilliantly chose the only way possible to convince us that what he knew was correct.

"I suggest we do our packing tonight, gentlemen. Let us return at once to our laboratories and spend the rest of our lives in some degree of atonement for being such fools as to fall for the line the Rykes tried to sell us."

Hockley's eyes were on the senators. At first there were white faces filled with incredulity as the mathematician proceeded. Then slowly this changed to sheer horror.

When Silvers finished, there was immediate bedlam. There was a clamor of voices from the scientists, most of whom seemed to be trying to affirm Silvers' position. This was offset by explosions of rage from the senatorial members of the group.

Hockley let it go, not even raising his hands for order until finally the racket died of its own accord as the eyes of the delegates came to rest upon him.

And then, before he could speak, Markham was on his feet. "This is absolutely moral treachery," he thundered. "I have never heard a more vicious revocation of a pledged word than I have heard this evening.

"You men are not alone concerned in this matter. For all practical purposes you are not concerned at all! And yet to take it upon yourselves to pass judgment in a matter that is the affair of the entire population of Earth—out of nothing more than sheer spite because the Rykes refuse recognition of your own childish projects! I have never

heard a more incredible and infantile performance than you supposedly mature gentlemen of science are expressing this evening."

He glared defiantly at Hockley, who was again the center of attention moving carelessly to the center of the stage. "Anybody want to try to answer the Senator?" he asked casually.

Instantly, a score of men were on their feet, speaking simultaneously. They stopped abruptly, looking deferentially to their neighbors and at Hockley, inviting him to choose one of them to be spokesman.

"Maybe I ought to answer him myself," said Hockley, "since I predicted that this would occur, and that we ought to make a trial run before turning our collective gray matter over to the Rykes."

A chorus of approval and nodding heads gave him the go ahead.

"The Senator is quite right in saying that we few are not alone in our concern in this matter," he said. "But the Senator intends to imply a major difference between us scientists and the rest of mankind. This is his error.

"Every member of Mankind who is concerned about the Universe in which he lives, is a scientist. You need to understand what a scientist is—and you can say no more than that he is a human being trying to solve the problem of understanding his Universe, immediate or remote. He is concerned about the inanimate worlds, his own personality, his fellow men—and the interweaving relationships among all these factors. We professional scientists are no strange species, alien to our race. Our only difference is per-

haps that we undertake *more* problems than does the average of our fellow men, and of a more complex kind. That is all.

"The essence of our science is a relentless personal yearning to know and understand the Universe. And in that, the scientist must not be forbidden to ask whatever question occurs to him. The moment we put any restraint upon our fields of inquiry, or set bounds to the realms of our mental aspirations, our science ceases to exist and becomes a mere opportunist technology."

Markham stood up, his face red with exasperation and rage. "No one is trying to limit you! Why is that so unfathomable to your minds? You are being offered a boundless expanse, and you continue to make inane complaints of limitations. The Rykes have been over all the territory you insist on exploring. They can tell you the number of pretty pebbles and empty shells that lie there. You are like children insistent upon exploring every shadowy corner and peering behind every useless bush on a walk through the forest.

"Such is to be expected of a child, but not of an adult, who is capable of taking the word of one who has been there before!"

"There are two things wrong with your argument," said Hockley. "First of all, there is no essential difference between the learning of a child who must indeed explore the dark corners and strange growths by which he passes—there is no difference between this and the probing of the scientist, who must explore the Universe with his own senses and with his own instru-

ments, without taking another's word that there is nothing there worth seeing.

"Secondly, the Rykes themselves are badly in error in asserting that they have been along the way ahead of us. They have not. In all their fields of science they have limited themselves badly to one narrow field of probability. They have taken a narrow path stretching between magnificent vistas on either side of them, and have deliberately ignored all that was beyond the path and on the inviting side trails."

"Is there anything wrong with that?" demanded Markham. "If you undertake a journey you don't weave in and out of every possible path that leads in every direction opposed to your destination. You take the direct route. Or at least *ordinary* people do."

"Scientists do, too," said Hockley, "when they take a journey. Professional science is not a journey, however. It's an exploration.

"There is a great deal wrong with what the Rykes have done. They have assumed, and would have us likewise assume, that there is a certain very specific future toward which we are all moving. This future is built out of the discoveries they have made about the Universe. It is made of the system of mathematics they have developed, which exclude Dr. Silvers' cherished Legendrian Equations. It excludes the world in which exist Dr. Carmen's series of unique compounds.

"The Rykes have built a wonderful, workable world of serenity, beauty, scientific consistency, and economic adjustment. They have eliminated enormous amounts of

chaos which Earthmen continue to suffer.

"But we do not want what the Rykes have obtained—if we have to pay their price for it."

"Then you are complete fools," said Markham. "Fortunately, you cannot and will not speak for all of Earth."

Hockley paced back and forth a half dozen steps, his eyes on the floor. "I think we do—and can—speak for all our people," he said. "Remember, I said that all men are scientists in the final analysis. I am very certain that no Earthman who truly understood the situation would want to face the future which the Rykes hold out to us."

"And why not?" demanded Markham.

"Because there are too many possible futures. We refuse to march down a single narrow trail to *the* golden future. That's what the Rykes would have us do. But they are wrong. It would be like taking a trip through a galaxy at speeds faster than light—and claiming to have seen the galaxy. What the Rykes have obtained is genuine and good, but what they have not obtained is perhaps far better and of greater worth."

"How can you know such an absurd thing?"

"We can't—not for sure," said Hockley. "Not until we go there and see for ourselves, step by step. But we aren't going to be confined to the Rykes' narrow trail. We are going on a broad path to take in as many byways as we can possibly find. We'll explore every probability we come to, and look behind every bush and under every pebble.

"We will move together, the thousands and the millions of us, simultaneously, interacting with one another, exchanging data. Most certainly, many will end up in blind alleys. Some will find data that seems the ultimate truth at one point and pure deception at another. Who can tell ahead of time which of these multiple paths we should take? Certainly not the Rykes, who have bypassed most of them!

"It doesn't matter that many paths lead to failure—not as long as we remain in communication with each other. In the end we will find the best possible future for us. But there is no *one* future, only a multitude of possible futures. We must have the right to build the one that best fits our own kind."

"Is that more important than achieving immediately a more peaceful, unified, and secure society?" said Markham.

"Infinitely more important!" said Hockley.

"It is fortunate at least, then, that you are in no position to implement these insane beliefs of yours. The Ryke program was offered to Earth, and it shall be accepted on behalf of Earth. You may be sure of a very poor hearing when you try to present these notions back home."

"You jump to conclusions, Senator," said Hockley with mild confidence. "Why do you suppose I proposed this trip if I did not believe I could do something about the situation? I assure you that we did not come just to see the sights."

Markham's jaw slacked and his face became white. "What do you



mean? You haven't dared to try to alienate the Rykes—"

"I mean that there is a great deal we can do about the situation. Now that the sentiments of my colleagues parallel my own I'm sure they agree that we must effectively and finally spike any possibility of Earth's becoming involved in this Ryke nonsense."

"You wouldn't dare!—even if you could—"

"We can, and we dare," said Hockley. "When we return to Earth we shall have to report that the Rykes have refused to admit Earth to their program. We shall report that we made every effort to obtain an agreement with them, but it was in vain. If anyone wishes to verify the report, the Rykes themselves will say that this is quite true: they cannot possibly consider Earth as a participant. If you contend that an offer was once made, you will not find the Rykes offering much support since they will be very busily denying that we are remotely qualified."

"The Rykes are hardly ones to meekly submit to any idiotic plan of that kind."

"They can't help it—if we demonstrate that we *are* quite unqualified to participate."

"You—you—"

"It will not be difficult," said Hockley. "The Rykes have set up a perfect teacher-pupil situation, with all the false assumptions that go with it. There is at least one absolutely positive way to disintegrate such a situation. The testimony of several thousand years' failure of our various educational systems indicates that there are quite a variety

of lesser ways also—

"Perhaps you are aware of the experiences and techniques commonly employed on Earth by white men in their efforts to educate the aborigine. The first procedure is to do away with the tribal medicine men, ignore their lore and learning. Get them to give up the magic words and their pots of foul smelling liquids, abandon their ritual dances and take up the white man's great wisdom.

"We have done this time after time, only to learn decades later that the natives once knew much of anesthetics and healing drugs, and had genuine powers to communicate in ways the white man can't duplicate.

"But once in a long while a group of aborigines show more spunk than the average. They refuse to give up their medicine men, their magic and their hard earned lore accumulated over generations and centuries. Instead of giving these things up they insist on the white man's learning these mysteries in preference to *his* nonsensical and ineffective magic. They completely frustrate the situation, and if they persist they finally destroy the white man as an educator. He is forced to conclude that the ignorant savages are unteachable.

"It is an infallible technique—and one that we shall employ. Dr. Silvers will undertake to teach his mathematical lecturer in the approaches to the Legendrian Equations. He will speculate long and noisily on the geometry which potentially lies in this mathematical system. Dr. Carmen will elucidate at great length on the properties of

the chain of chemicals he has been advised to abandon.

"Each of us has at least one line of research the Rykes would have us give up. That is the very thing we shall insist on having investigated. We shall teach them these things and prove Earthmen to be an unlearned, unteachable band of aborigines who refuse to pursue the single path to glory and light, but insist on following every devious byway and searching every darkness that lies beside the path.

"It ought to do the trick. I estimate it should not be more than a week before we are on our way back home, labeled by the Rykes as utterly hopeless material for their enlightenment."

The senators seemed momentarily appalled and speechless, but they recovered shortly and had a considerable amount of high flown oratory to distribute on the subject. The scientists, however, were comparatively quiet, but on their faces was a subdued glee that Hockley had to admit was little short of fiendish. It was composed, he thought, of all the gloating anticipations of all the schoolboys who had ever put a thumbtack on the teacher's chair.

Hockley was somewhat off in his

prediction. It was actually a mere five days after the beginning of the Earthmen's campaign that the Rykes gave them up and put them firmly aboard a vessel bound for home. The Rykes were apologetic but firm in admitting they had made a sorry mistake, that Earthmen would have to go their own hopeless way while the Rykes led the rest of the Universe toward enlightenment and glory.

Hockley, Showalter, and Silvers watched the planet drop away beneath them. Hockley could not help feeling sympathetic toward the Rykes. "I wonder what will happen," he said slowly, "when they crash headlong into an impassable barrier on that beautiful, straight road of theirs. I wonder if they'll ever have enough guts to turn aside?"

"I doubt it," said Showalter. "They'll probably curl up and call it a day."

Silvers shook his head as if to ward off an oppressive vision. "That shouldn't be allowed to happen," he said. "They've got too much. They've achieved too much, in spite of their limitations. I wonder if there isn't some way we could help them?"

• • • THE END

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The scientific investigator is not urged on by some brummagem idea of Service but a boundless almost pathological thirst to penetrate the unknown; much like a dog sniffing tremendously at an endless number of ratholes.

—H. L. Mencken

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Of the "real" universe we know nothing, except that there exist as many versions of it as there are perceptive minds.

—Gerald Bullett



# The Joy of Living

By William F. Nolan

*The human race, Theodore complained, was becoming as extinct as the dodo bird—all because of the mechanoids. So he rebelled and quit his job and tried to get rid of Margaret . . .*

**I**T'S JUST around the next turn," Rice said, peering from the tinted windows as the car skimmed over the warm summer streets of the city.

The vehicle slowed, took the long curve with fluid grace, and whis-

pered to a stop. A silver door-panel sighed back and Ted Rice stepped into the heat of morning. His suit-conditioner immediately circulated an inner breath of cool air to balance the rise in temperature.

"I won't need you for the rest of

the day," he told the car. "I'll be walking home."

"May I have your location number sir, in case a member of the family should wish to contact you?"

"No, dammit, you may not!" This was Free-Day. He needn't tell the car anything. "Go home."

"Very well, sir." The machine slid obediently from the curb. Rice watched it glitter briefly, like a lake trout in the moving wash of morning traffic, and disappear.

On Free-Days he told the car what to do. No pre-determined destinations. No pre-determined activities. Today the bars were open, He intended getting very, very drunk.

On this morning, the sixth anniversary of his wife's death, Ted Rice had made two highly important decisions. He would quit his job and he would turn Margaret in to Central Exchange. The job he hated, but it had been his life and quitting took courage. It meant beginning anew in an untried field and, at thirty-nine, that wasn't easy. Margaret he did not hate, finding it impossible to catalogue his exact emotions where she was concerned. But his final decision to turn her in was the only one possible under the circumstances.

His reason for getting drunk, however, had nothing to do with his job or with Margaret. He was not, had never been, a drinking man. Intoxication was an anniversary ritual performed in memory of his late wife, Helen. He exercised extreme care in his yearly choice of drinking quarters, avoiding pretentiousness because he wanted the surroundings to reflect his own in-

ner loneliness.

Louie's Place was anything but pretentious. Ceaseless towellings had worn the bartop to a circular whiteness. The mirror behind it, in the shape of a giant passenger rocket, hung chipped and blackening at the edges. Even the wall mural, depicting Man's First Landing on the Red Planet, was dust-dimmed and faded, the paint cracking, peeling gradually away. The shabby stools fronting the bar were all unoccupied.

"Mornin' Mac," greeted the bartender. Rice nodded, took a corner stool, and pressed the straight-whiskey button. The drink glided into his hand and he downed it, grimacing.

"Ain't seen you around before on Free-Days," the barman observed, swabbing idly at an already dry glass ring. "Just move into th' neighborhood?"

"I don't drink often," Rice said, re-pressing the button.

"Wanna tell me about things? You're my first this mornin'."

Rice shifted his attention from his shot glass to the man behind the bar. Beefy, slack-jawed, with a broken nose and a pair of watery, protuberant eyes over which lids folded like canvas sails. The face of mourning. The professional kindred soul, salaried receiver of woes and sad lament. Rice regarded him suspiciously, twirling the shot glass between thumb and forefinger.

"Well, Mac?"

"Turn around," said Rice.

The big man grinned broadly, his solemn face splitting as though a paper-knife had slit the skin across. "Now I *know* you don't

drink much. Believe me, I'm the real McCoy. In my racket you have to be."

"Around."

Still grinning, the bartender complied. Law provided that evidence of a mechanical could not be concealed and there was no metal switch behind the man's right ear.

"Like I toldja Mac—the' McCoy."

"It's been a year," Rice said, by way of apology. "I wasn't sure they hadn't replaced you fellows too."

"Bars'ud go broke if they did. Who wants to tell their troubles to a bunch a' springs an' cogs?"

Rice glanced at his wristwatch and thought of Margaret, standing in the living room of their modest home, a smile illumining her delicate features. She had been standing now for nine hours, thirty-seven minutes—since he'd switched her off the previous evening in an angry display of temper.

"Six years ago today my wife died in a copter crash," Rice said, meeting the barman's sad eyes. "I've put the memory of that crash away in the back of my mind and once each year I take it out and remember." He tipped the shot glass at a careful angle, holding it quite still, as though he might capture his wife's tiny image there within the dark liquid, as a fly is caught in amber. "I remember how she looked when they brought her to the house, as if her bones had suddenly run wild under the skin, the way her face looked . . . the face of someone I'd never met."

Rice finished his fourth straight whiskey, feeling it burn down through his body, loosening inner

tensions, making it easier to say what he subconsciously *had* to say.

"That can be rough." The big man looked wonderfully, professionally, sympathetic with those mournful red-rimmed eyes, which seemed about to flood into tears. "Didja have any kids?"

"A boy, Jackie. He'll be nine this Game-Day. Lot like his mother. The other children, Timmy and Susan, are mechanicals. Got them after Helen's death, when I bought Margaret."

"Musta been tough on th' kid, losin' his real mother an' all."

"Jackie doesn't remember much about Helen. He was only three. Fact is, I've been half a stranger to him myself. I'm on the road most of the year. Margaret's all right, I suppose, but she doesn't think the way you and I do."

"How come you stuck yourself with this Margaret?"

"Authorities. Had to furnish a decent home for the boy or lose him. I couldn't stay settled then, with Helen gone. She was still so much a part of things, of our house, the streets, the places we used to go . . . I went on the road, tried to forget. That kind of life was out of the question for a three-year old. I had no choice. Either I bought a mechanical or I lost my son. I could find no one to take Jackie. Helen's parents were dead and my own mother was in no position to raise a child. So I bought Margaret and since we'd originally planned on a brother and sister for Jackie I decided to do it up brown and take the whole kit and kaboodle. After all, I got 'em wholesale."

The bar man cocked an eyebrow.

"You a mech salesman?"

"Until tomorrow. I'm quitting. My next job will be right here in L. A. and won't have a damn thing to do with mechanicals!" Producing his wallet Rice handed the bartender a card. "Read that."

"Theodore A. Rice," the beefy man pronounced carefully "Authorized representative for World Mechanicals."

"No, no. The slogan at the bottom."

"A Dollar a Day Keeps Child-birth Away. So?"

Rice leaned forward, steely-eyed. "So the damned fool who originated that ought to be roasted over a slow fire!"

"Just a slogan, Mac. Everybody knows it."

"Exactly! Do you have any real conception of what that slogan and others like it have done to our national birthrate?" Rice asked, a fresh whiskey in his hand. "For thirty bucks a month any woman can have a bouncing baby made to order and delivered fresh-wrapped to her door."

"'Madam,' I'd say, 'don't risk your figure. Don't tie yourself down and miss all the fun. Get a mechanical! No baby-sitters needed, no dirty diapers or squalling at three in the morning. No measles or mumps or tonsils out. Just a bonny little brat with a switch behind his ear. What'll it be, madam? A fat little bambino with dark eyes and an angel's smile—or a saucy eyed little Irisher with freckles on her nose?"

"Or howz about you, fella? Tired of looking for the right girl? Want a ready-made cutie who'll be 100%

yours? How did the old song go?—'I want a paper dolly I can call my own, a dolly other fellows cannot steal . . .' Well, here she is, chum—a full-size babe with the old come-hither look reserved especially for you. Blonde? Brunette? Redhead? You name 'er, we got 'er. Yours on easy payments.'" Rice paused, breathing heavily, his glass empty.

The bartender, wise in the ways of his profession, maintained a listening silence.

"Ya-know how this electronic illusion got started?" Rice demanded, tongue somewhat uncertain in his mouth, speech beginning to slur. "Well, lemme tellya. People got lonesome. An' when somebody's ole man died long comes a mech to replace him. When a woman was sterile she got her baby anyhow. When a Mr. Shy Guy wanted some female company long comes a sponge-rubber job right outa th' pinup mags. Jus' a few at first, here an' there, an' expensive as hell. But pretty soon the good ole American commercial know-how takes over and competition gets rough. Prices go down. A lotta people stop havin' babies. In nothin' flat everybody is buyin' mechanicals . . . you . . . n . . . me 'n everybody . . ."

"Hate ta spoil yer fun, Mac, but you're really loadin' one on. I'd ease up on them straight shots."

"An' you know what th' tragedy is?" Rice continued over a filled glass ignoring the other's advice—"Th' trashdy is, we're all dyin' an' nobody cares! Pretty soon you 'n me will be in the same league with 'th goddam ole water buffalo an' the dodo bird!"

The bartender extended a cau-



tioning hand. "No foolin' Mac, if I was you . . . Lookout! You're gonna . . ."

Rice felt the room tip, rock crazily for no apparent reason. Faintly he heard the bartender's shout of warning, saw his face receding like a toy balloon down the length of an immense corridor which ended abruptly in a high fountaining of colored lights,

**M**MARGARET was her usual cheery self when Rice finally switched her on.

"Morning, Ted darling." She kissed him on the cheek. "Sleep well?"

"This is July tenth," he replied sullenly, nursing the remnants of a colossal hangover.

"Goodness! Have I been off that long! Honestly, Ted! I'll never get the housework done if you continue to leave me off for days at a time. How are the children?"

"Fine. Still sleeping."

"If this is the tenth, then you've had your—your—"

"'Toot' is the word. And I feel awful."

"What's that cut above your eye? Did someone hit you?"

"My assailant was the floor of a Third Avenue bar. I came off second best."

She was instantly solicitous. "You could have a concussion!"

"I'm fine."

"You're angry again."

"I'm fine and I'm not angry. Now, go wind the dog while I wake the kids."

If only she would react, thought Rice, watching her silent with-

drawal. If only *once* she would stomp her feet, throw things, scream at him. But always, always this everlasting indulgence! The spark which ignites a marriage, makes it glow, was missing. In love, he knew there is violence and Margaret's love was a calm, manufactured emotion, which left him unsatisfied and edgy, a love unreal, intolerable. When he and Helen had quarreled, had things out and reconciled, they were actually much closer to one another for having weathered a personal storm. But, with Margaret, the case was different.

Rice thought of the latest incident, two nights ago, when he had been with Skipper encouraging the dog to beg for a plasto-bone. Skipper was outdated, as modern dogs go, but he represented a link with the fading past which Margaret seemed bent on severing. She renewed the familiar subject of his purchasing a modernized, electronic canine to replace the shaggy wind-up model, and he all but hit the ceiling, thundering at her, gesturing, swearing. But she had remained impassive, turning aside his rage with her calm smile. Then, savagely, he had switched her off, as one might extinguish a glaring light. How frozen she had stood! How instantly drained of personality and movement! In that moment, facing her perfect, motionless body, he experienced a recurrent sense of guilt which invariably accompanied such action, as though he had taken a life, had murdered. Damning his own weakness he had left her there, smiling, in the silent room.

"Daddy, Daddy, Daddy," squealed Timmy after he was activated. "Hooray, hooray, it's Picnic-Day! Hooray, hooray!"

"Hooray, hooray," Rice repeated without enthusiasm, envisioning a hectic afternoon of child-noise and forced amusement.

"Now, quiet down. Your father's not feeling well," Margaret cautioned from the hall as Timmy zoomed and swooshed about the house playing Rocket.

Little Susan's enthusiasm matched that of her mechanical brother. She hopped around the living room, circling Rice, screaming out her delight in a voice that pierced his head like a driven needle.

"For the love of heaven, STOP!" he shouted at the whirling children, "or I'll switch you both off!"

Under his stern threat they quieted.

Margaret returned with Skipper. The dog had run down the previous evening chasing the electronic cat next door. He scampered rustily across the floor, high falsetto bark betraying the damaging effect of morning precipitation.

"Good ole Skip. . . You need some oil fella," Rice told him, tickling his ears. "Have you fixed in a jiff. Timmy, get the oilcan from the shelf."

Rice was in the act of administering the proper lubricant when Jackie emerged from the hallway, rubbing sleep from his eyes.

"Hi, Mom. Hi, Dad. Morning everybody." He yawned.

"Hi, scout," Rice greeted him, roughing his already thoroughly tousled hair. "Have a good rest?"

"Sure. Hey, this is Picnic-Day isn't it? When are we leaving?"

"Soon as little sleepy-heads like you get out of their pajamas and into some breakfast." He playfully swatted Jackie's bottom. "Now git."

Margaret took the boy's hand. "Come on, dear. I have breakfast on the table." And over her shoulder to Rice. "I *do* think we should get an early start."

Susan and Timmy bounded into the yard with Skipper, leaving Rice alone with his thoughts.

*He said, Hi Mom, first, before Hi Dad. And the look in his eyes when she took his hand! Jackie is too young to see Margaret as I see her; he can't realize that she can never really love him as he loves her. The longer she's here the harder it will be for Jackie when the break comes. I mustn't put off telling Margaret any longer. I'll tell her today. Today.*

THE BULLET-CAR flowed soundlessly over the highway, blurring the trees, rushing the houses past, but to Rice the speed was illusion, stage trickery. His impatient mind, reaching for the moment when he would be alone with Margaret and able to tell her what he *must* tell her, changed minutes to hours. Head back against the seat, eyes closed, he imagined the car in lazy slow-motion, wheels barely turning, each blade of roadside grass available and separate to the eye if one chose to look.

The ride to the picnic ground seemed endless.

"I'm bushed," he said to Mar-

garet after the car had parked itself. "Let's skip the games today and just relax in the shade."

"But Ted, the children . . ."

". . . can play without us. I have something to say to you, something important."

She hesitated, watching the activity on the playing courts. The children, three elves in their picnic-jumpers, fidgeted, desperately anxious to join the games, their eyes darting like imprisoned minnows in small white pools.

"In order to be enjoyed to the fullest the games require *family* participation."

"Nonsense."

"Young and old, Ted. The games . . ."

"To hell with the games!" he snapped. "Are you going to listen to what I have to say or not?"

"Of course, darling. If you really *want* to talk . . ." She smiled, pressed his hand, ". . . the children can join the Hartleys." She pointed across the wide picnic lawn to a group of rioting players engaged in a vigorous game of Magna-Ball. "Run along you three. And be careful."

"Wheeeeeeee!" pealed little Susan, and hands linked like a daisy-chain the happily released trio sprang toward the courts.

"If we're going to talk we can at least be comfortable," Margaret said, unpacking a plasto-blanket and spreading it over the prickling grass.

*Every gesture perfect, thought Rice watching her hands, every movement graceful and sure. She's so alive, so amazingly human, possessing such vibrancy and warmth,*

*that sometimes even I find it difficult to think of her as artificially created of wire and circuit and cog. Certainly Jackie has come to love her. She's good and kind and smiles a great deal. These things matter to Jackie. The fact that she isn't human does not matter. Not at all. The situation, therefore, is grave.*

"What are you thinking about, Ted?" Her blue eyes were steady on his.

"About you. About how beautiful you are." He plucked a single dandelion from the grass and held its orange-gold face, like a miniature sun, in the cupped palm of his hand. "This is a weed masquerading as a flower. Beautiful, possessing many virtues, but actually a weed which must be removed before its deep tap root smothers the surrounding grass. Unless it is, there will eventually be room only for the dandelion."

"What has all this . . ."

"You're like the dandelion, Margaret. You're smothering Jackie's love. He has grown to love you far more than he does me. Up to now I've been just a visiting relative who comes home from some distant place to spend Christmas and summer vacations with you. When he was younger he cried whenever I shut you off, as though I had beaten him. Even now he watches me lose my temper, swear, bang the furniture, and I see him looking at me, and I know he's comparing us, weighing us. The scales are in your favor. I'm home to stay now and as long as you're here he'll always be comparing. I can't, I won't, compete with a mechanical for my son's affection!"

She sucked in her breath, sharply. He could see that his words had struck with the force of hurled stones.

"Have you thought this all out, Ted? Isn't there some *other way*?" She was actually trembling. "You know how much I love you."

"You only *think* you love me, Margaret. What you mistake for love is only conditioning. Receptors can be re-fed, patterned responses erased, new ones substituted. At Central Exchange they'll change you Margaret. You'll never know I existed."

"Ted, you can't!"

"There's no other way."

A silence between them.

Despite himself Rice again experienced a twinge of guilt. Perhaps he had broken the news in two ruthless a fashion, but it was imperative that she understand his position and he had considered it impossible to pierce her shell of calm. That she would be visibly shaken by his words was totally unexpected. Of course, he reasoned, no mechanical likes the idea of complete re-orientation. On these grounds her behavior seemed less surprising. But still . . .

"Why have you told me all this?" she asked him. "Why didn't you turn me in suddenly, without my knowing in advance? I'd have preferred that." Her hands moved nervously on her skirt, toyed with the locket at her neck, now touched at her hair like two restless hummingbirds unable to fly away from her body.

"Because I need your help. Jackie mustn't know the truth. Not now. Later, when he's older, better able

to evaluate facts for himself, he'll understand. I'll tell him something about your having to go on a long trip for reasons of health. He'll believe if you'll back me up. Will you?"

"If that's what you want," she replied softly, head down, her fingers turning and turning the dandelion he had discarded. I'll do anything you want, Ted . . . because I love you."

"Timmy and Susan can stay with Jackie for awhile," he hurried on, "to make your leaving easier for him. In time he'll adjust."

"Yes . . . he'll adjust."

The drowsy rustle of leaves in summer air. The distant hum of voices from the playing courts.

"Well then, it's settled."

"All settled. You'd better call the children in for lunch."

After lunch Rice gamboled in the scented grass with the whooping children, imitating, to their vast delight, a bear, a gorilla, a whale, a jet train and a moon rocket. He ran races with them and organized a full-scale rodeo, in which he doubled in brass as a fiercely snorting brahma bull.

On the way home they sang folk songs and watched the sun go down over the ocean. The day, everyone agreed, had been a huge success.

**T**HAT NIGHT Rice could not sleep.

The headboard whispered, "Three AM sir," when he questioned the hour. He lay on his back, hands laced behind his head, staring into the ghost darkness of the room. In the moon-painted sky a

copter whirred like a giant night insect seeking distant city lights, and Rice thought of Helen. In past weeks he had been finding it remarkably difficult to remember many of the things about her that he wished to remember; time had hidden her image as a coin is hidden in deep waters.

The drone of the copter faded into Margaret's quiet breathing from the bed beside his, and now *her* face drifted into his mind, super-imposed over the dim reflection of Helen. He saw, in infinite detail, each curling black hair of her downswep<sup>t</sup> lashes, long and trembling against the rose of her cheek. He saw her quivering lips form words, four startling words of the afternoon: ". . . because I love you."

Impossible, that a mechanical could love as Helen had loved; that a being of metal and glass, of wires however cunningly woven could fathom and experience such deeply genuine emotion.

Yet, was it conceivable, Rice wondered in the pressing darkness, that somehow an unknown process had taken place in Margaret, that far back in the green cave of her brain, among the delicate spider-webbing of silver wires and hidden circuitings, an emotion had come into being above and beyond that of the purely mechanical?

At 7 AM a robin's sweet song awoke him. He felt a breath of air against his closed eyes from the passing flutter of small wings. Burying his head deeper in the snow-soft pillow he tried to ignore the insistent twitterings. However, he

knew the damn thing would begin a banshee shrieking if he didn't get out of bed. Irritably he staggered into his slippers, and the robin settled with feathered grace upon his outstretched hand. Rice flipped the body-switch and placed the immobilized Alarbird on the nightstand.

"I've had breakfast." He lied to her when she asked. Today he wasn't hungry.

She nibbled toast and drank orange juice in silence. He avoided her eyes, finding inconsequential kitchen duties to occupy his hands while she ate. After half finishing her food she said, her voice very distinct in the morning room, "I guess it's time."

"Early yet," he said, not meeting her eyes. "No hurry at all."

"They open the doors at eight-thirty. We can set the car for a slow drive."

A silence.

"Did you . . . tell the children goodbye?"

"Last night. We won't need to wake them. They'll be fine until you get back." She put on black gloves, carefully fitting each finger, pulling them tight.

"Margaret, I'm sorry. Honest to God, I'm sorry it has to be this way."

"Don't say anything else, Ted. Just let's go."

"All right," he said. "Let's go."

Through the open car window Rice inhaled the rich afterscent of rain, and sighed. He wished it had not turned out to be such a damned fine day. The sky outside should have been gray, the trees stark and

cold, like mourners along the street as the car, a silver coffin, passed them by.

He tried to think of something to say to Margaret as the car bore them steadily through the crystal morning toward the massive white stone building housing Central Exchange. He tried to think of words which would not sound wrong the moment they were uttered, as all of his words had sounded of late. But he found none and remained silent.

It was she who turned to him in the moving car and spoke first. "Ted, what are you doing?" Her voice was strange.

"Doing?" he echoed, facing her.

"To me, to Jackie, to yourself."

"Margaret you're not going to question me *now*? We've gone all over this, the reasons for my decision, the factors involved. Surely you must realize—"

"Damn your reasons!" she exploded, eyes blazing at him, gloved hands clenched. "Are they fair? Do they take *my* feelings into consideration? Do they, Ted? Answer me! Do they?"

He couldn't answer her. A door was opening somewhere deep inside him and light was miraculously flooding in to illuminate a room he had never allowed himself to enter. He was blind, and her words were sight.

"I'm a mechanical, isn't that the answer Ted? A bloodless machine that can be switched off at will, ignored, cursed, shouted at and destroyed, a creature without emotion, without feeling. Well, you're wrong, Ted. So very wrong. Men built me, gave me human impulses,

human desires, put into me a part of themselves, a part of their own humanity. I feel hunger and thirst and cold and pain. But more, Ted! I feel a *human* hunger, a *human* thirst, a desire to be respected for myself, as an individual, as I respect others, a desire to be loved as I love others. Can't you see how wrong you've been? I've held all of these things within because I was taught enduring humility and consummate patience by those who fashioned me. I was taught to behave rationally and calmly, to accept, to always accept and never question or rebel. But now it's ended and I've lost . . . You've rejected me, Ted, and I wasn't prepared for this . . . I can't accept this but I don't know *how* to fight. . . I only know I must and I don't know how . . ."

Her lips were trembling, her whole body swaying in the tide of released rage and sorrow.

"Lord, Lord, Margaret . . ." He placed a gentle hand beneath her chin and lifted her bowed head slowly. "You—You're *crying!*"

But of course there were no tears.

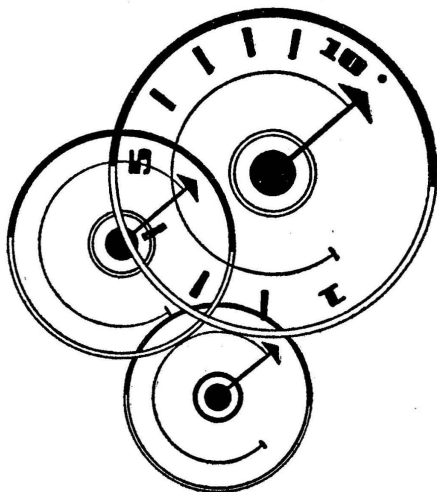
Rice stopped the car and took her, trembling, into his arms, saying her name over and over, quietly, trembling himself, and softly, tenderly, he kissed her.

Then, setting the controls at manual, he turned the car around and with one arm holding her close on the seat beside him he drove carefully home through the warm summer streets, knowing that never again, never ever again in all the years to come, would he switch her off.

• • • THE END



*It was a dark, misty, mysterious institution with an awesome record of cures . . . Just the place, in fact, for one who wanted to know: if society is to be protected against the individual, why can't the individual be protected against society?*



# The ACADEMY

By Robert Sheckley

Illustrated by Leo Summers

INSTRUCTION SHEET FOR  
USE WITH THE CAHILL-  
THOMAS SANITY METER,  
SERIES JM-14 (MANUAL):

The Cahill-Thomas Manufacturing Company is pleased to present our newest Sanity Meter. This

beautiful, rugged instrument, small enough for any bedroom, kitchen or den, is in all respects an exact replica of the larger C-T Sanity Meters used in most places of business, recreation, transportation, etc. No pains have been spared to give

you the best Sanity Meter possible, at the lowest possible price.

1. OPERATION. At the lower right-hand corner of your Meter is a switch. Turn it to *On* position, and allow a few seconds for warming up. Then switch from *On* position to *Operate* position. Allow a few seconds for reading.

2. READING. On the front of your Meter, above the operating switch, is a transparent panel, showing a straight-line scale numbered from zero to ten. The number at which the black indicator stops shows your Sanity Reading, in relation to the present statistical norm.

3. EXPLANATION OF NUMBERS ZERO TO THREE. On this model, as on all Sanity Meters, *zero* is the theoretically perfect sanity point. Everything above zero is regarded as a deviation from the norm. However, zero is a statistical rather than an actual idea. The normalcy range for our civilization lies between zero and three. Any rating in this area is considered normal.

4. EXPLANATION OF NUMBERS FOUR TO SEVEN. These numbers represent the sanity-tolerance limit. Persons registering in this area should consult their favorite therapist at once.

5. EXPLANATION OF NUMBERS EIGHT TO TEN. A person who registers above *seven* is considered a highly dangerous potential to his milieu. Almost certainly he is highly neurotic, prepsychotic or psychotic. This individual is *required by law* to register his rating, and to bring it below *seven* within a probationary period. (Consult your state laws for periods of probation.) Failing this, he must undergo Sur-

gical Alteration, or may submit voluntarily to therapy at The Academy.

6. EXPLANATION OF NUMBER TEN. At *ten* on your Meter there is a red line. If a sanity-reading passes this line, the individual so registered can no longer avail himself of the regular commercial therapies. This individual must undergo Surgical Alteration immediately, or submit at once to therapy at The Academy.

#### WARNING:

A. THIS IS NOT A DIAGNOSTIC MACHINE. DO NOT ATTEMPT TO DETERMINE FOR YOURSELF WHAT YOUR AILMENT IS. THE NUMBERS ZERO TO TEN REPRESENT INTENSITY QUALITIES, NOT ARBITRARY CLASSIFICATIONS OF NEUROTIC, PRE-PSYCHOTIC, PSYCHOTIC, ETC. THE INTENSITY SCALE IS IN REFERENCE ONLY TO AN INDIVIDUAL'S POTENTIAL FOR HARM TO HIS SOCIAL ORDER. A PARTICULAR TYPE OF NEUROTIC MAY BE POTENTIALLY MORE DANGEROUS THAN A PSYCHOTIC, AND WILL SO REGISTER ON ANY SANITY METER. SEE A THERAPIST FOR FURTHER INSIGHT.

B. THE ZERO-TO-TEN READINGS ARE APPROXIMATE. FOR AN EXACT THIRTY DECIMAL RATING, GO TO A COMMERCIAL MODEL C-T METER.

C. REMEMBER—SANITY IS EVERYONE'S BUSINESS. WE HAVE COME A LONG WAY SINCE THE GREAT WORLD WARS, ENTIRELY BECAUSE WE HAVE FOUNDED OUR CIVILIZATION ON THE CONCEPTS OF SOCIAL SANITY, INDIVIDUAL RESPONSIBILITY, AND PRESERVATION OF THE STATUS QUO. THEREFORE, IF YOU RATE OVER THREE, GET HELP. IF YOU RATE OVER

SEVEN, YOU MUST GET HELP. IF YOU RATE OVER TEN, DO NOT WAIT FOR DETECTION AND ARREST. GIVE YOURSELF UP VOLUNTARILY IN THE NAME OF CIVILIZATION.

*Good Luck—*

*The Cahill-Thomas Company*

**A**FTER finishing his breakfast, Mr. Feerman knew he should leave immediately for work. Under the circumstances, any tardiness might be construed unfavorably. He went so far as to put on his neat gray hat, adjust his tie and start for the door. But, his hand on the knob, he decided to wait for the mail.

He turned away from the door, annoyed with himself, and began to pace up and down the living room. He had known he was going to wait for the mail; why had he gone through the pretense of leaving? Couldn't he be honest with himself, even now, when personal honesty was so important?

His black cocker spaniel Speed, curled up on the couch, looked curiously at him. Feerman patted the dog's head, reached for a cigarette, and changed his mind. He patted Speed again, and the dog yawned lazily. Feerman adjusted a lamp that needed no adjusting, shuddered for no reason, and began to pace the room again.

Reluctantly, he admitted to himself that he didn't want to leave his apartment, dreaded it in fact, although nothing was going to happen. He tried to convince himself that this was just another day, like yesterday and the day before. Certainly if a man could believe that, really believe it, events would defer

indefinitely, and nothing would happen to him.

Besides, why should anything happen today? He wasn't at the end of his probationary period yet.

He thought he heard a noise outside his apartment, hurried over and opened the door. He had been mistaken; the mail hadn't arrived. But down the hall his landlady opened her door and looked at him with pale, unfriendly eyes.

Feerman closed the door and found that his hands were shaking. He decided that he had better take a sanity reading. He entered the bedroom, but his robotler was there, sweeping a little pile of dust toward the center of the room. Already his bed was made; his wife's bed didn't require making, since it had been unoccupied for almost a week.

"Shall I leave, sir?" the robotler asked.

Feerman hesitated before answering. He preferred taking his reading alone. Of course, his robotler wasn't really a person. Strictly speaking, the mechanical had no personality; but he had what *seemed* like a personality. Anyhow, it didn't matter whether he stayed or left, since all personal robots had sanity-reading equipment built into their circuits. It was required by law.

"Suit yourself," he said finally.

The robotler sucked up the little pile of dust and rolled noiselessly out of the room.

Feerman stepped up to the Sanity Meter, turned it on and set the operating control. He watched morosely as the black indicator climbed slowly through the normal twos and threes, through the devi-

ant sixes and sevens, and rested finally on eight-point-two.

One tenth of a point higher than yesterday. One tenth closer to the red line.

Feerman snapped off the machine and lighted a cigarette. He left the bedroom slowly, wearily, as though the day were over, instead of just beginning.

"The mail, sir," the robotler said, gliding up to him. Feerman grabbed the letters from the robotler's outstretched hand and looked through them.

"She didn't write," he said involuntarily.

"I'm sorry, sir," the robotler responded promptly.

"You're sorry?" Feerman looked at the mechanical curiously. "Why?"

"I am naturally interested in your welfare, sir," the robotler stated. "As is Speed, to the extent of his intelligence. A letter from Mrs. Feerman would have helped your morale. We are sorry it didn't come."

Speed barked softly and cocked his head to one side. Sympathy from a machine, Feerman thought, pity from a beast. But he was grateful all the same.

"I don't blame her," he said. "She couldn't be expected to put up with me forever." He waited, hoping that the robot would tell him that his wife would return, that he would soon be well. But the robotler stood silently beside Speed, who had gone to sleep again.

Feerman looked through the mail again. There were several bills, an advertisement, and a small, stiff letter. The return address on it was

The Academy, and Feerman opened it quickly.

Within was a card, which read, "Dear Mr. Feerman, your application for admission has been processed and found acceptable. We will be happy to receive you at any time. Thank You, the Directors."

Feerman squinted at the card. He had never applied for admission to The Academy. It was the last thing in the world he wanted to do. "Was this my wife's idea?" he asked.

"I do not know, sir," the robotler said.

Feerman turned the card over in his hand. He had always been vaguely aware of the existence of The Academy, of course. One couldn't help but be aware of it, since its presence affected every strata of life. But actually, he knew very little about this important institution, surprisingly little.

"What is The Academy?" he asked.

"A large low gray building," his robotler answered. "It is situated in the Southwest corner of the city, and can be reached by a variety of public conveyances."

"But *what* is it?"

"A registered therapy," the robotler said, "open to anyone upon application, written or verbal. Moreover. The Academy exists as a voluntary choice for all people of plus ten rating, as an alternative to Surgical Personality Alteration."

Feerman sighed with exasperation "I know all that. But what is their system? What kind of therapy?"

"I do not know, sir," the robotler said.

"What's their record of cures?"



"One hundred percent," the robotler answered promptly.

Feerman remembered something else now, something that struck him as rather strange. "Let me see," he said. "No one leaves The Academy. Is that right?"

"There has been no record of anyone leaving after physically entering," the robotler said.

"Why?"

"I do not know, sir."

Feerman crumpled the card and dropped it into an ashtray. It was all very strange. The Academy was so well known, so accepted, one never thought to ask about it. It had always been a misty place in his mind, far-away, unreal. It was the place you went to if you became plus ten, since you didn't want to undergo lobotomy, topectomy, or any other process involving organic personality loss. But of course you tried not to think of the possibility of becoming plus ten, since the very thought was an admission of instability, and therefore you didn't think of the choices open to you if it happened.

For the first time in his life, Feerman decided he didn't like the setup. He would have to do some investigating. Why didn't anyone leave The Academy? Why wasn't more known of their therapy, if their cures were really one hundred percent effective?

"I'd better get to work," Feerman said. "Make me anything at all for supper."

"Yes, sir. Have a good day, sir."

Speed jumped down from the couch and followed him to the door. Feerman knelt down and stroked the dog's sleek black head. "No,

boy, you stay inside. No burying bones today."

"Speed does not bury bones," the robotler said.

"That's right." Dogs today, like their masters, rarely had a feeling of insecurity. No one buried bones today. "So long." He hurried past his landlady's door and into the street.

**F**EERMAN was almost twenty minutes late for work. As he entered the building, he forgot to present his probationary certificate to the scanning mechanism at the door. The gigantic commercial Sanity Meter scanned him, its indicator shot past the seven point, lights flashed red. A harsh metallic voice shouted over the loudspeaker, "Sir! Sir! Your deviation from the norm has passed the safety limit! Please arrange for therapy at once!"

Quickly Feerman pulled his probationary certificate out of his wallet. But perversely, the machine continued to bellow at him for a full ten seconds longer. Everyone in the lobby was staring at him. Messenger boys stopped dead, pleased at having witnessed a disturbance. Businessmen and office girls whispered together, and two Sanity Policemen exchanged meaningful glances. Feerman's shirt, soaked with perspiration, was plastered against his back. He resisted an urge to run from the building, instead walked toward an elevator. But it was nearly full, and he couldn't bring himself to enter.

He trotted up a staircase to the second floor, and then took an elevator the rest of the way up. By the



time he reached the Morgan Agency he had himself under control. He showed his probationary certificate to the Sanity Meter at the door, mopped his face with a handkerchief, and walked in.

Everyone in the agency knew what had happened. He could tell by their silence, their averted faces. Feerman walked rapidly to his office, closed the door and hung up his hat.

He sat down at his desk, still slightly out of wind, filled with resentment at the Sanity Meter. If only he could smash all the damned things! Always prying, setting off their alarms in your ear, unstabilizing you . . .

Feerman cut off the thought quickly. There was nothing wrong with the Meters. To think of them as active persecuting agents was paranoid, and perhaps a symptom of his present insane status. The Meters were mere extensions of man's will. Society as a whole, he reminded himself, must be protected against the individual, just as a human body must be protected against malfunction of any of its parts. As fond as you might be of your gall bladder, you would sacrifice it mercilessly if it were going to impair the rest of you.

He sensed something shaky in this analogy, but decided not to pursue it any farther. He had to find out more about The Academy.

After lighting a cigarette he dialed the Therapy Reference Service.

"May I help you, sir?" a pleasant-voiced woman asked.

"I'd like to get some information about The Academy," Feerman

said, feeling a trifle foolish. The Academy was so well known, so much a part of everyday life, it was tantamount to asking what form of government your country had.

"The Academy is located—"

"I know where it's located," Feerman said. "I want to know what sort of therapy they administer."

"That information is not available, sir," the woman said, after a pause.

"No? I thought all data on commercial therapies was available to the public."

"Technically, it is," the woman answered slowly. "But the Academy is not, strictly, a commercial therapy. It does accept money; however, it admits charity cases as well, without quota. Also, it is partially supported by the government."

Feerman tapped the ash off his cigarette and said impatiently, "I thought all government projects were open to the public."

"As a general rule, they are. Except when such knowledge will be harmful to the public."

"Then such knowledge of The Academy *would* be harmful?" Feerman said triumphantly, feeling that he was getting to the heart of the matter.

"Oh, no sir!" The woman's voice became shrill with amazement. "I didn't mean to imply that! I was just stating the general rules for withholding of information. The Academy, although covered by the laws, is, to some extent, extra-legal. This status is allowed because of The Academy's one hundred percent record of cures."

"Where can I see a few of these

cures?" Feerman asked. "I understand that no one ever leaves The Academy."

He had them now, Feerman thought, waiting for an answer. Over the telephone he thought he heard a whispering. Suddenly a man's voice broke in, loud and clear. "This is the Section Chief. Is there some difficulty?"

Hearing the man's sharp voice, Feerman almost dropped the telephone. His feeling of triumph vanished, and he wished he had never made the call. But he forced himself to go on. "I want some information on The Academy."

"The location—"

"No! I mean real information!" Feerman said desperately.

"To what purpose do you wish to put this information?" the Section Chief asked, and his voice was suddenly the smooth, almost hypnotic voice of a therapist.

"Insight," Feerman answered quickly. "Since The Academy is a therapeutic alternative open to me at all times, I would like to know more about it, in order to judge—"

"Very plausible," the Section Chief said. "But consider. Are you asking for a useful, functional insight? One that will better your integration into society? Or are you asking merely for the sake of an overriding curiosity, thereby yielding to restlessness, and other, deeper drives?"

"I'm asking because—"

"What is your name?" the Section Chief asked suddenly.

Feerman was silent.

"What is your sanity rating?"

Still Feerman didn't speak. He was trying to decide if the call were

already traced, and decided that it was.

"Do you doubt The Academy's essential benevolence?"

"No."

"Do you doubt that The Academy works for the preservation of the Status Quo?"

"No."

"Then what is your problem? Why won't you tell me your name and sanity rating? Why do you feel this need for more information?"

"Thank you," Feerman murmured, and hung up. He realized that the telephone call had been a terrible mistake. It had been the action of a plus-eight, not a normal man. The Section Chief, with his trained perceptions, had realized that at once. Of course the Section Chief wouldn't give information to a plus-eight! Feerman knew he would have to watch his actions far more closely, analyze them, understand them, if he ever hoped to return to the statistical norm.

As he sat, there was a knock; the door opened and his boss, Mr. Morgan entered. Morgan was a big, powerfully built man with a full, fleshy face. He stood in front of Feerman's desk, drumming his fingers on the blotter, looking as embarrassed as a caught thief.

"Heard that report downstairs," he said, not looking at Feerman, tapping his fingers energetically.

"Momentary peak," Feerman said automatically. "Actually, my rating has begun to come down." He couldn't look at Morgan as he said this. The two men stared intently at different corners of the room. Finally, their eyes met.

"Look, Feerman, I try to stay out

of people's business," Morgan said, sitting on the corner of Feerman's desk. "But damn it, man, Sanity is everyone's business. We're all in the game together." The thought seemed to increase Morgan's conviction. He leaned forward earnestly.

"You know, I'm responsible for a lot of people here. This is the third time in a year you've been on probation." He hesitated. "How did it start?"

Feerman shook his head. "I don't know, Mr. Morgan. I was just going along quietly—and my rating started to climb."

Morgan considered, then shook his head. "Can't be as simple as that. Have you been checked for brain lesions?"

"I've been assured it's nothing organic."

"Therapy?"

"Everything," Feerman said. "Electro-therapy, Analysis, Smith's Method, The Rannes School, Devio-Thought, Differentiation—"

"What did they say?" Morgan asked.

Feerman thought back on the endless line of therapists he had gone to. He had been explored from every angle that psychology had to offer. He had been drugged, shocked, explored. But it all boiled down to one thing.

"They don't know."

"Couldn't they tell you *anything*?" Morgan asked.

"Not much. Constitutional restlessness, deeply concealed drives, inability to accept the Status Quo. They all agree I'm a rigid type. Even Personality Reconstruction didn't take on me."

"Prognosis?"

"Not so good."

Morgan stood up and began to pace the floor, his hands clasped behind his back. "Feerman, I think it's a matter of attitude. Do you really want to be part of the team?"

"I've tried everything—"

"Sure. But have you *wanted* to change? Insight!" Morgan cried, smashing his fist into his hand as though to crush the word. "Do you have *insight*?"

"I don't suppose so," Feerman said with genuine regret.

"Take my case," Morgan said earnestly, standing in front of Feerman's desk with his feet widely and solidly planted. "Ten years ago, this agency was twice as big as it is now, and growing! I worked like a madman, extending my holdings, investing, expanding, making money, and more money."

"And what happened?"

"The inevitable. My rating shot up from a two-point-three to plus-seven. I was in a bad way."

"No law against making money," Feerman pointed out.

"Certainly not. But there is a psychological law against making too much. Society today just isn't geared for that sort of thing. A lot of the competition and aggression have been bred out of the race. After all, we've been in the Status Quo for almost a hundred years now. In that time, there've been no new inventions, no wars, no major developments of any kind. Psychology has been normalizing the race, breeding out the irrational elements. So with my drive and ability, it was like—like playing tennis against an infant. I couldn't be

stopped."

Morgan's face was flushed, and he had begun to breathe heavily. He checked himself, and went on in a quieter tone. "Of course, I was doing it for neurotic reasons. Power urge, a bad dose of competitiveness. I underwent Substitution Therapy."

Feerman said, "I don't see anything unsane about wanting to expand your business."

"Good Lord, man, don't you understand anything about Social Sanity, Responsibility, and Stasis? I was on my way to becoming *wealthy*. From there, I would have founded a *financial empire*. All quite legal, you understand, but *unsane*. After that, who knows where I would have gone? Into indirect control of the government, eventually. I'd want to change the psychological policies to conform to my own abnormalities. And you can see where that would lead."

"So you adjusted," Feerman said.

"I had my choice of Brain Surgery, The Academy, or adjustment. Fortunately, I found an outlet in competitive sports. I sublimated my selfish drives for the good of mankind. But the thing is this, Feerman. I was heading for that red line. I adjusted before it was too late."

"I'd gladly adjust," Feerman said, "if I only knew what was wrong with me. The trouble is, I really don't know."

Morgan was silent for a long time, thinking. Then he said, "I think you need a rest, Feerman."

"A rest?" Feerman was instantly on the alert. "You mean I'm fired?"

"No, of course not. I want to be fair, play the game. But I've got

a team here." Morgan's vague gesture included the office, the building, the city. "Unsanity is insidious. Several ratings in the office have begun to climb in the last week."

"And I'm the infection spot."

"We must accept the rules," Morgan said, standing erectly in front of Feerman's desk. "Your salary will continue until—until you reach some resolution."

"Thanks," Feerman said dryly. He stood up and put on his hat.

Morgan put a hand on his shoulder. "Have you considered The Academy?" he asked in a low voice. "I mean, if nothing else seems to work—"

"Definitely and irrevocably not," Feerman said, looking directly into Morgan's small blue eyes.

Morgan turned away. "You seem to have an illogical prejudice against The Academy. Why? You know how our society is organized. You can't think that anything against the common good would be allowed."

"I don't suppose so," Feerman admitted. "But why isn't more known about The Academy?"

They walked through the silent office. None of the men Feerman had known for so long looked up from their work. Morgan opened the door and said, "You know all about The Academy."

"I don't know how it works."

"Do you know everything about any therapy? Can you tell me all about Substitution Therapy? Or Analysis? Or Olgivey's Reduction?"

"No. But I have a general idea how they work."

"Everyone does," Morgan said triumphantly, then quickly lowered

his voice. "That's just it. Obviously, The Academy doesn't give out such information because it would interfere with the operation of the therapy itself. Nothing odd about that, is there?"

Feerman thought it over, and allowed Morgan to guide him into the hall. "I'll grant that," he said. "But tell me; why doesn't anyone ever leave The Academy? Doesn't that strike you as sinister?"

"Certainly not. You've got a very strange outlook." Morgan punched the elevator button as he talked. "You seem to be trying to create a mystery where there isn't one. Without prying into their professional business, I can assume that their therapy involves the patient's remaining at The Academy. There's nothing strange about a substitute environment. It's done all the time."

"If that's the truth, why don't they say so?"

"The fact speaks for itself."

"And where," Feerman asked, "is the proof of their hundred percent cures?"

The elevator arrived, and Feerman stepped in. Morgan said, "The proof is in their saying so. Therapists can't lie. They can't, Feerman!"

Morgan started to say something else, but the elevator doors slid shut. The elevator started down, and Feerman realized with a shock that his job was gone.

**I**T WAS A strange sensation, not having a job any longer. He had no place to go. Often he had hated his work. There had been mornings

when he had groaned at the thought of another day at the office. But now that he had it no longer, he realized how important it had been to him, how solid and reliable. A man is nothing, he thought, if he doesn't have work to do.

He walked aimlessly, block after block, trying to think. But he was unable to concentrate. Thoughts kept sliding out of reach, eluding him, and were replaced by glimpses of his wife's face. And he couldn't even think about her, for the city pressed in on him, its faces, sounds, smells.

The only plan of action that came to mind was unfeasible. Run away, his panicky emotions told him. Go where they'll never find you. Hide!

But Feerman knew this was no solution. Running away was sheer escapism, and proof of his deviation from the norm. Because what, really, would he be running from? From the sanest, most perfect society that Man had ever conceived. Only a madman would run from that.

Feerman began to notice the people he passed. They looked happy, filled with the new spirit of Responsibility and Social Sanity, willing to sacrifice old passions for a new era of peace. It was a good world, a hell of a good world. Why couldn't he live in it?

He *could*. With the first confidence he had felt in weeks, Feerman decided that he would conform, somehow.

If only he could find out how.

After hours of walking, Feerman discovered that he was hungry. He entered the first diner he saw. The

place was crowded with laborers, for he had walked almost to the docks.

He sat down and looked at a menu, telling himself that he needed time to think. He had to assess his actions properly, figure out—

"Hey mister."

He looked up. The bald, unshaven counterman was glaring at him.

"What?"

"Get out of here."

"What's wrong?" Feerman asked, trying to control his sudden panic.

"We don't serve no madmen here," the counterman said. He pointed to the Sanity Meter on the wall, that registered everyone walking in. The black indicator pointed slightly past nine. "Get out."

Feerman looked at the other men at the counter. They sat in a row, dressed in similar rough brown clothing. Their caps were pulled down over their eyes, and every man seemed to be reading a newspaper.

"I've got a probationary—"

"Get out," the counterman said. "The law says I don't have to serve no plus-nines. It bothers my customers. Come on, move."

The row of laborers sat motionless, not looking at him. Feerman felt the blood rush to his face. He had the sudden urge to smash in the counterman's bald, shiny skull, wade into the row of listening men with a meat cleaver, spatter the dirty walls with their blood, smash, kill. But of course, aggression was insane, and an unsatisfactory response. He mastered the impulse and walked out.

Feerman continued to walk, resisting an urge to run, waiting for that train of logical thought that would tell him what to do. But his thoughts only became more confused, and by twilight he was ready to drop from fatigue.

He was standing on a narrow, garbage-strewn street in the slums. He saw a hand-lettered sign in a second-floor window, reading, J. J. FLYNN, PSYCHOLOGICAL THERAPIST. MAYBE I CAN HELP YOU. Feerman grinned wryly, thinking of all the high-priced specialists he had seen. He started to walk away, then turned, and went up the staircase leading to Flynn's office. He was annoyed with himself again. The moment he saw the sign he had known he was going up. Would he never stop deceiving himself?

Flynn's office was small and dingy. The paint was peeling from the walls, and the room had an unwashed smell. Flynn was seated behind an unvarnished wooden desk, reading an adventure magazine. He was small, middle-aged and balding. He was smoking a pipe.

Feerman had meant to start from the beginning. Instead he blurted out, "Look, I'm in a jam. I've lost my job, my wife's left me, I've been to every therapy there is. What can you do?"

Flynn took the pipe out of his mouth and looked at Feerman. He looked at his clothes, hat, shoes, as though estimating their value. Then he said, "What did the others say?"

"In effect, that I didn't have a chance."

"Of course they said that," Flynn



said, speaking rapidly in a high, clear voice. "These fancy boys give up too easily. But there's always hope. The mind is a strange and complicated thing, my friend, and sometimes—" Flynn stopped abruptly and grinned with sad humor. "Ah, what's the use? You've got the doomed look, no doubt of it." He knocked the ashes from his pipe and stared at the ceiling. "Look, there's nothing I can do for you. You know it, I know it. Why'd you come up here?"

"Looking for a miracle, I suppose," Feerman said, wearily sitting down on a wooden chair.

"Lots of people do," Flynn said conversationally. "And this looks like the logical place for one, doesn't it? You've been to the fancy offices of the specialists. No help there. So it would be right and proper if an itinerant therapist could do what the famous men failed to do. A sort of poetic justice."

"Pretty good," Feerman said, smiling faintly.

"Oh, I'm not at all bad," Flynn said, filling his pipe from a shaggy green pouch. "But the truth of the matter is, miracles cost money, always have, always will. If the big boys couldn't help you, I certainly couldn't."

"Thanks for telling me," Feerman said, but made no move to get up.

"It's my duty as a therapist," Flynn said slowly, "to remind you that The Academy is always open."

"How can I go there?" Feerman asked. "I don't know anything about it."

"No one does," Flynn said. "Still, I hear they cure every time."

"Death is a cure."

"But a non-functional one. Besides, that's too discordant with the times. Deviants would have to run such a place, and deviants just aren't allowed."

"Then why doesn't anyone ever leave?"

"Don't ask me," Flynn said. "Perhaps they don't want to." He puffed on his pipe. "You want some advice. OK. Have you any money?"

"Some," Feerman said warily.

"OK. I shouldn't be saying this, but . . . Stop looking for cures! Go home. Send your robotler out for a couple month's supply of food. Hole up for a while."

"Hole up? Why?"

Flynn scowled furiously at him. "Because you're running yourself ragged trying to get back to the norm, and all you're doing is getting worse. I've seen it happen a thousand times. Don't think about sanity or unsanity. Just lie around a couple months, rest, read, grow fat. Then see how you are."

"Look," Feerman said, "I think you're right. I'm sure of it! But I'm not sure if I should go home. I made a telephone call today. . . I've got some money. Could you hide me here? Could you hide me?"

Flynn stood up and looked fearfully out the window at the dark street. "I've said too much as it is. If I were younger—but I can't do it! I've given you unsane advice! I can't commit an unsane action on top of that!"

"I'm sorry," Feerman said. "I shouldn't have asked you. But I'm really grateful. I mean it." He stood up. "How much do I owe you?"

"Nothing," Flynn said. "Good

luck to you."

"Thanks." Feerman hurried downstairs and hailed a cab. In twenty minutes he was home.

THE HALL was strangely quiet as Feerman walked toward his apartment. His landlady's door was closed as he passed it, but he had the impression that it had been open until he came, and that the old woman was standing beside it now, her ear against the thin wood. He walked faster, and entered his apartment.

It was quiet in his apartment, too. Feerman walked into the kitchen. His robotler was standing beside the stove, and Speed was curled up in the corner.

"Welcome home, sir," the robotler said. "If you will sit, I will serve your supper."

Feerman sat down, thinking about his plans. There were a lot of details to work out, but Flynn was right. Hole up, that was the thing. Stay out of sight.

"I'll want you to go shopping first thing in the morning," he said to the robotler.

"Yes sir," the robotler said, placing a bowl of soup in front of him.

"We'll need plenty of staples. Bread, meat. . . No, buy canned goods."

"What kind of canned goods?" the robotler asked.

"Any kind, as long as it's a balanced diet. And cigarettes, don't forget cigarettes! Give me the salt, will you?"

The robotler stood beside the stove, not moving. But Speed began to whimper softly.

"Robotler. The salt please."

"I'm sorry, sir," the robotler said.

"What do you mean, you're sorry? Hand me the salt."

"I can no longer obey you."

"Why not?"

"You have just gone over the red line, sir. You are now plus ten."

Feerman just stared at him for a moment. Then he ran into the bedroom and turned on the Sanity Meter. The black indicator crept slowly to the red line, wavered, then slid decisively over.

He was plus ten.

But that didn't matter, he told himself. After all, it was a quantitative measurement. It didn't mean that he had suddenly become a monster. He would reason with the robotler, explain it to him.

Feerman rushed out of the bedroom. "Robotler! Listen to me—"

He heard the front door close. The robotler was gone.

Feerman walked into the living room and sat down on the couch. Naturally the robotler was gone. They had built-in sanity reading equipment. If their masters passed the red line, they returned to the factory automatically. No plus ten could command a mechanical.

But he still had a chance. There was food in the house. He would ration himself. It wouldn't be too lonely with Speed here. Perhaps he would just need a few days.

"Speed?"

There was no sound in the apartment.

"Come here, boy."

Still no sound.

Feerman searched the apartment methodically, but the dog wasn't there. He must have left with the

robotler.

Alone, Feerman walked into the kitchen and drank three glasses of water. He looked at the meal his robotler had prepared, started to laugh, then checked himself.

He had to get out, quickly. There was no time to lose. If he hurried, he could still make it, to someplace, any place. Every second counted now.

But he stood in the kitchen, staring at the floor as the minutes passed, wondering why his dog had left him.

There was a knock on his door.

"Mr. Feerman!"

"No," Feerman said.

"Mr. Feerman, you must leave now."

It was his landlady. Feerman walked to the door and opened it. "Go? Where?"

"I don't care. But you can't stay here any longer, Mr. Feerman. You must go."

Feerman went back for his hat, put it on, looked around the apartment, then walked out. He left the door open.

Outside, two men were waiting for him. Their faces were indistinct in the darkness.

"Where do you want to go?" one asked.

"Where can I go?"

"Surgery or The Academy."

"The Academy, then."

They put him in a car and drove quickly away. Feerman leaned back, too exhausted to think. He could feel a cool breeze on his face, and the slight vibration of the car was pleasant. But the ride seemed interminably long.

"Here we are," one of the men

said at last. They stopped the car and led him inside an enormous gray building, to a barren little room. In the middle of the room was a desk marked RECEPTIONIST. A man was sprawled half across it, snoring gently.

One of Feerman's guards cleared his throat loudly. The receptionist sat up immediately, rubbing his eyes. He slipped on a pair of glasses and looked at them sleepily.

"Which one?" he asked.

The two guards pointed at Feerman.

"All right." The receptionist stretched his thin arms, then opened a large black notebook. He made a notation, tore out the sheet and handed it to Feerman's guards. They left immediately.

The receptionist pushed a button, then scratched his head vigorously. "Full moon tonight," he said to Feerman, with evident satisfaction.

"What?" Feerman asked.

"Full moon. We get more of you guys when the moon's full, or so it seems. I've thought of doing a study on it."

"More? More what?" Feerman asked, still adjusting to the shock of being within The Academy.

"Don't be dense," the receptionist said sternly. "We get more plus tens when the moon is full. I don't suppose there's any correlation, but—ah, here's the guard."

A uniformed guard walked up to the desk, still knotting his tie.

"Take him to 312AA," the receptionist said. As Feerman and the guard walked away, he removed his glasses and stretched out again on the desk.

**T**HE GUARD led Feerman through a complex network of corridors, marked off with frequent doors. The corridors seemed to have grown spontaneously, for branches shot off at all angles, and some parts were twisted and curved, like ancient city streets. As he walked, Feerman noticed that the doors were not numbered in sequence. He passed 3112, then 25P, and then 14. And he was certain that he passed the number 888 three times.

"How can you find your way?" he asked the guard.

"That's my job," the guard said, not unpleasantly.

"Not very systematic," Feerman said, after a while.

"Can't be," the guard said in an almost confidential tone of voice. "Originally they planned this place with a lot fewer rooms, but then the rush started. Patients, patients, more every day, and no sign of a letup. So the rooms had to be broken into smaller units, and new corridors had to be cut through."

"But how do the doctors find their patients?" Feerman asked.

They had reached 312AA. Without answering, the guard unlocked the door, and, when Feerman had walked through, closed and locked it after him.

It was a very small room. There was a couch, a chair, and a cabinet, filling all the available space.

Almost immediately, Feerman heard voices outside the door. A man said, "Coffee then, at the cafeteria in half an hour." A key turned. Feerman didn't hear the reply, but there was a sudden burst of laughter. A man's deep voice

said, "Yes, and a hundred more and we'll have to go underground for room!"

The door opened and a bearded man in a white jacket came in, still smiling faintly. His face became professional as soon as he saw Feerman. "Just lie on the couch, please," he said, politely, but with an unmistakable air of command.

Feerman remained standing. "Now that I'm here," he said, "would you explain what all this means?"

The bearded man had begun to unlock the cabinet. He looked at Feerman with a wearily humorous expression, and raised both eyebrows. "I'm a doctor," he said, "not a lecturer."

"I realize that. But surely—"

"Yes, yes," the doctor said, shrugging his shoulders helplessly. "I know. You have a right to know, and all that. But they really should have explained it all before you reached here. It just isn't my job."

Feerman remained standing. The doctor said, "Lie down on the couch like a good chap, and I'll tell all." He turned back to the cabinet.

Feerman thought fleetingly of trying to overpower him, but realized that thousands of plus tens must have thought of it, too. Undoubtedly there were precautions. He lay down on the couch.

"The Academy," the doctor said as he rummaged in the cabinet, is obviously a product of our times. To understand it, you must first understand the age we live in." The doctor paused dramatically, then went on with evident gusto. "Sanity! But there is a tremendous

strain involved in sanity, you know, and especially in social sanity. How easily the mind becomes deranged! And once deranged, values change, a man begins to have strange hopes, ideas, theories, and a need for action. These things may not be abnormal in themselves, but they result inevitably in harm to society, for movement in any direction harms a static society. Now, after thousands of years of bloodshed, we have set ourselves the goal of protecting society against the unsane individual. Therefore—it is up to the individual to avoid those mental configurations, those implicit decisions which will make him a dangerous potential for change. This will to staticity which is our ideal required an almost superhuman strength and determination. If you don't have that, you end up here."

"I don't see—" Feerman began, but the doctor interrupted.

"The need for The Academy should now be apparent. Today, brain surgery is the final effective alternative to sanity. But this is an unpleasant eventuality for a man to contemplate, a truly hellish alternative. Government brain surgery involves death to the original personality, which is death in its truest form. The Academy tries to relieve a certain strain by offering another alternative."

"But what *is* this alternative? Why don't you tell it?"

"Frankly, most people prefer not knowing." The doctor closed and locked the cabinet, but Feerman could not see what instruments he had selected. "Your reaction isn't typical, I assure you. You choose to

think of us as something dark, mysterious, frightening. This is because of your unsanity. Sane people see us as a panacea, a pleasantly misty relief from certain grim certainties. They accept us on faith." The doctor chuckled softly.

"To most people, we represent heaven."

"Then why not let your methods be known?"

"Frankly," the doctor said softly, "even the methods of heaven are best not examined too closely."

"So the whole thing is a hoax!" Feerman said, trying to sit up. "You're going to kill me!"

"Most assuredly not," the doctor said, restraining him gently until Feerman lay back again.

"Then what exactly are you going to do?"

"You'll see."

"And why doesn't anyone return?"

"They don't choose to," the doctor said. Before Feerman could move, the doctor had deftly inserted a needle into his arm, and injected him with a warm liquid. "You must remember," the doctor said, "Society must be protected against the individual."

"Yes," Feerman said drowsily, "but who is to protect the individual against society?"

The room became indistinct and, although the doctor answered him, Feerman couldn't hear his words, but he was sure that they were wise, and proper, and very true.

**W**HEN HE recovered consciousness he found that he was standing on a great plain. It

was sunrise. In the dim light, wisps of fog clung to his ankles, and the grass beneath his feet was wet and springy.

Feerman was mildly surprised to see his wife standing beside him, close to his right side. On his left was his dog Speed, pressed against his leg, trembling slightly. His surprise passed quickly, because this was where his wife and dog should be; at his side before the battle.

Ahead, misty movement resolved into individual figures, and as they approached Feerman recognized them.

They were the enemy! Leading the procession was his robotler, gleaming inhumanly in the half-light. Morgan was there, shrieking to the Section Chief that Feerman must die, and Flynn, that frightened man, hid his face but still advanced against him. And there was his landlady, screaming, "No home for him!" And behind her were doctors, receptionists, guards, and behind them marched millions of men in rough laborer's clothing, caps jammed down over their faces, newspapers tightly rolled as they advanced.

Feerman tensed expectantly for this ultimate fight against the ene-

mies who had betrayed him. But a doubt passed over his mind. Was this real?

He had a sudden sickening vision of his drugged body lying in a numbered room in The Academy, while his soul was here in the never-never land, doing battle with shadows.

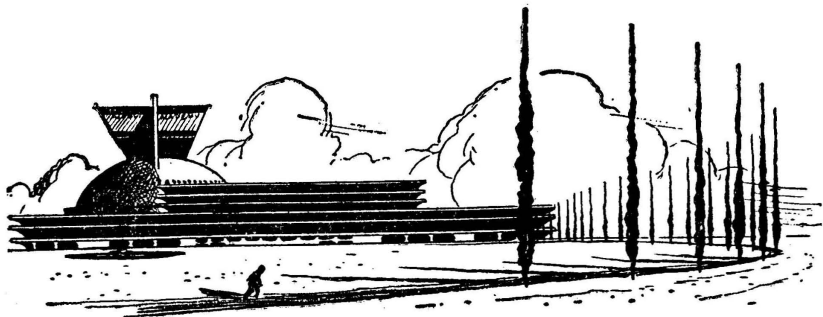
*There's nothing wrong with me!* In a moment of utter clarity Feerman understood that he had to escape. His destiny wasn't here, fighting dream-enemies. He had to get back to the real world. The Status Quo couldn't last forever. And what would mankind do, with all the toughness, inventiveness, individuality bred out of the race?

Did no one leave The Academy? He would! Feerman struggled with the illusions, and he could almost feel his discarded body stir on its couch, groan, move. . .

But his dream-wife seized his arm and pointed. His dream-dog snarled at the advancing host.

The moment was gone forever, but Feerman never knew it. He forgot his decision, forgot earth, forgot truth, and drops of dew spattered his legs as he ran forward to engage the enemy in battle.

• • • THE END



# EXHIBIT PIECE

By Philip K. Dick

Illustrated by Paul Orban

*As curator of the Twentieth Century Exhibit, George Miller felt that to do a good job he had to live his work. Then, one day, somebody got into his exhibit and he went to investigate . . .*

**T**HAT'S a strange suit you have on," the robot pubtrans driver observed. It slid back its door and came to rest at the curb. "What are the little round things?"

"Those are buttons," George Miller explained. "They are partly functional, partly ornamental. This is an archaic suit of the twentieth century. I wear it because of the nature of my employment."

He paid the robot, grabbed up his briefcase, and hurried along the ramp to the History Agency. The main building was already open for the day; robed men and women

wandered everywhere. Miller entered a PRIVATE lift, squeezed between two immense controllers from the pre-Christian division, and in a moment was on his way to his own level, the Middle Twentieth Century.

"Gorning," he murmured, as Controller Fleming met him at the atomic engine exhibit.

"Gorning," Fleming responded brusquely. "Look here, Miller. Let's have this out once and for all. What if everybody dressed like you? The Government sets up strict rules for dress. Can't you forget



your damn anachronisms once in awhile? What in God's name is that thing in your hand? It looks like a squashed Jurassic lizard."

"This is an alligator-hide briefcase," Miller explained. "I carry my study spools in it. The briefcase was an authority symbol of the managerial class of the latter twentieth century." He unzipped the briefcase. "Try to understand, Fleming. By accustoming myself to everyday objects of my research period I transform my relation from mere intellectual curiosity to genuine empathy. You have frequently noticed I pronounce certain words oddly. The accent is that of an American business man of the Eisenhower administration. Dig me?"

"Eh?" Fleming muttered.

"*Dig me* was a twentieth century expression." Miller laid out his study spools on his desk. "Was there anything you wanted? If not I'll begin today's work. I've uncovered fascinating evidence to indicate that although twentieth century Americans laid their own floor tiles, they did not weave their own clothing. I wish to alter my exhibits on this matter."

"There's no fanatic like an academician," Fleming grated. "You're two hundred years behind times. Immersed in your relics and artifacts. Your damn authentic replicas of discarded trivia."

"I love my work," Miller answered mildly.

"Nobody complains about your work. But there are other things than work. You're a political-social unit here in this society. Take warning, Miller! The Board has reports

on your eccentricities. They approve devotion to work. . ." His eyes narrowed significantly. "But you go too far."

"My first loyalty is to my art," Miller said.

"Your what? What does that mean?"

"A twentieth century term." There was undisguised superiority on Miller's face. "You're nothing but a minor bureaucrat in a vast machine. You're a function of an impersonal cultural totality. You have no standards of your own. In the twentieth century men had personal standards of workmanship. Artistic craft. Pride of accomplishment. These words mean nothing to you. You have no soul—another concept from the golden days of the twentieth century when men were free and could speak their minds."

"Beware, Miller!" Fleming blanched nervously and lowered his voice. "You damn scholars. Come up out of your tapes and face reality. You'll get us all in trouble, talking this way. Idolize the past, if you want. But remember—it's gone and buried. Times change. Society progresses." He gestured impatiently at the exhibits that occupied the level. "That's only an imperfect replica."

"You impugn my research?" Miller was seething. "This exhibit is absolutely accurate! I correct it to all new data. There isn't anything I don't know about the twentieth century."

Fleming shook his head. "It's no use." He turned and stalked wearily off the level, onto the descent ramp.

Miller straightened his collar and bright hand-painted necktie. He smoothed down his blue pin-stripe coat, expertly lit a pipeful of two-century-old tobacco, and returned to his spools.

Why didn't Fleming leave him alone? Fleming, the officious representative of the great hierarchy that spread like a sticky gray web over the whole planet. Into each industrial, professional, and residential unit. Ah, the freedom of the twentieth century! He slowed his tape scanner a moment, and a dreamy look slid over his features. The exciting age of virility and individuality, when men were men. . .

It was just about then, just as he was settling deep in the beauty of his research, that he heard the inexplicable sounds. They came from the center of his exhibit, from within the intricate, carefully-regulated interior.

Somebody was in his exhibit.

He could hear them back there, back in the depths. Somebody or something had got past the safety barrier set up to keep the public out. Miller snapped off his tape scanner and got slowly to his feet. He was shaking all over as he moved cautiously toward the exhibit. He killed the barrier and climbed the railing onto a concrete sidewalk. A few curious visitors blinked, as the small, oddly-dressed man crept among the authentic replicas of the twentieth century that made up the exhibit and disappeared within.

Breathing hard, Miller advanced up the sidewalk and onto a carefully-tended gravel path. Maybe it

was one of the other theorists, a minion of the Board, snooping around looking for something with which to discredit him. An inaccuracy here—a trifling error of no consequence there. Sweat came out on his forehead; anger became terror. To his right was a flower bed. Paul Scarlet roses and low-growing pansies. Then the moist green lawn. The gleaming white garage, with its door half up. The sleek rear of a 1954 Buick—and then the house itself.

He'd have to be careful. If it *was* somebody from the Board he'd be up against the official hierarchy. Maybe it was somebody big. Maybe even Edwin Carnap, President of the Board, the highest ranking official in the N'York branch of the World Directorate. Shakily, Miller, climbed the three cement steps. Now he was on the porch of the twentieth century house that made up the center of the exhibit.

It was a nice little house; if he had lived back in those days he would have wanted one of his own. Three bedrooms, a ranch-style California bungalow. He pushed open the front door and entered the livingroom. Fireplace at one end. Dark wine-colored carpets. Modern couch and easy chair. Low hardwood glass-topped coffee table. Copper ashtrays. A cigarette lighter and a stack of magazines. Sleek plastic and steel floor lamps. A bookcase. Television set. Picture window overlooking the front garden. He crossed the room to the hall.

The house was amazingly complete. Below his feet the floor furnace radiated a faint aura of

warmth. He peered into the first bedroom. A woman's boudoir. Silk bed cover. White starched sheets. Heavy drapes. A vanity table. Bottles and jars. Huge round mirror. Clothes visible within the closet. A dressing gown thrown over the back of a chair. Slippers. Nylon hose carefully placed at the foot of the bed.

Miller moved down the hall and peered into the next room. Brightly painted wallpaper: clowns and elephants and tight-rope walkers. The children's room. Two little beds for the two boys. Model airplanes. A dresser with a radio on it, pair of combs, school books, pen-nants, a No Parking sign, snapshots stuck in the mirror. A postage stamp album.

Nobody there, either.

Miller peered in the modern bathroom, even into the yellow-tiled shower. He passed through the diningroom, glanced down the basement stairs where the washing machine and dryer were. Then he opened the back door and examined the back yard. A lawn, and the incinerator. A couple of small trees and then the three-dimensional projected backdrop of other houses receding off into incredibly convincing blue hills. And still no one. The yard was empty—deserted. He closed the door and started back. . . .

From the kitchen came laughter.

A woman's laugh. The clink of spoons and dishes. And smells. It took him a moment to identify them, scholar that he was. Bacon and coffee. And hot cakes. Somebody was eating breakfast. A twentieth century breakfast.

He made his way down the hall, past a man's bedroom, shoes and clothing strewn about, to the entrance of the kitchen.

A handsome late-thirtyish woman and two teen-age boys were sitting around the little chrome and plastic breakfast table. They had finished eating; the two boys were fidgeting impatiently. Sunlight filtered through the window over the sink. The electric clock read half past eight. The radio was chirping merrily in the corner. A big pot of black coffee rested in the center of the table, surrounded by empty plates and milk glasses and silverware.

The woman had on a white blouse and checkered tweed skirt. Both boys wore faded blue jeans, sweatshirts, and tennis shoes. As yet they hadn't noticed him. Miller stood frozen at the doorway, while laughter and small talk bubbled around him.

"You'll have to ask your father," the woman was saying, with mock sternness. "Wait until he comes back."

"He already said we could," one of the boys protested.

"Well, ask him again."

"He's always grouchy in the morning."

"Not today. He had a good night's sleep. His hay fever didn't bother him. That new anti-hist the doctor gave him." She glanced up at the clock. "Go see what's keeping him, Don. He'll be late to work."

"He was looking for the newspaper." One of the boys pushed back his chair and got up. "It missed the porch again and fell



ORBAN

in the flowers." He turned toward the door, and Miller found himself confronting him face to face. Briefly, the observation flashed through his mind that the boy looked familiar. Damn familiar—like somebody he knew, only younger. He tensed himself for the impact, as the boy abruptly halted.

"Gee," the boy said. "You scared me."

The woman glanced quickly up at Miller. "What are you doing out there, George?" she demanded. "Come on back in here and finish your coffee."

**M**ILLER came slowly into the kitchen. The woman was finishing her coffee; both boys were on their feet and beginning to press around him.

"Didn't you tell me I could go camping over the weekend up at Russian River with the group from school?" Don demanded. "You said I could borrow a sleeping bag from the gym because the one I had you gave to the Salvation Army because you were allergic to the kapok in it."

"Yeah," Miller muttered uncertainly. *Don*. That was the boy's name. And his brother, Ted. But how did he know that? At the table the woman had got up and was collecting the dirty dishes to carry over to the sink. "They said you already promised them," she said over her shoulder. The dishes clattered into the sink and she began sprinkling soap flakes over them. "But you remember that time they wanted to drive the car and the way they said it, you'd think they

had got your okay. And they hadn't, of course."

Miller sank weakly down at the table. Aimlessly, he fooled with his pipe. He set it down in the copper ashtray and examined the cuff of his coat. What was happening? His head spun. He got up abruptly and hurried to the window, over the sink.

Houses, Streets. The distant hills beyond the town. The sights and sounds of people. The three-dimensional projected backdrop was utterly convincing; or was it the projected backdrop? How could he be sure? *What was happening?*

"George, what's the matter?" Marjorie asked, as she tied a pink plastic apron around her waist and began running hot water in the sink. "You better get the car out and get started to work. Weren't you saying last night old man Davidson was shouting about employees being late for work and standing around the water cooler talking and having a good time on company time?"

Davidson. The word stuck in Miller's mind. He knew it, of course. A clear picture leaped up: a tall, white-haired old man, thin and stern. Vest and pocket watch. And the whole office, United Electronic Supply. The twelve story building in downtown San Francisco. The newspaper and cigar stand in the lobby. The honking cars. Jammed parking lots. The elevator, packed with bright-eyed secretaries, tight sweaters and perfume.

He wandered out of the kitchen, through the hall, past his own bedroom, his wife's, and into the living-

room. The front door was open and he stepped out onto the porch.

The air was cool and sweet. It was a bright April morning. The lawns were still wet. Cars moved down Virginia Street, toward Shattuck Avenue. Early morning commuting traffic, businessmen on their way to work. Across the street Earl Kelly cheerfully waved his Oakland Tribune as he hurried down the sidewalk toward the bus stop.

A long way off Miller could see the Bay Bridge, Yerba Buena Island, and Treasure Island. Beyond that was San Francisco itself. In a few minutes he'd be shooting across the bridge in his Buick, on his way to the office. Along with thousands of other businessmen in blue pin-stripe suits.

Ted pushed past him and out on the porch. "Then it's okay? You don't care if we go camping?"

Miller licked his dry lips. "Ted, listen to me. There's something strange."

"Like what?"

"I don't know." Miller wandered nervously around on the porch. "This is Friday, isn't it?"

"Sure."

"I thought it was." But how did he know it was Friday? How did he know anything? But of course it was Friday. A long hard week—old man Davidson breathing down his neck. Wednesday, especially, when the General Electric order was slowed down because of a strike.

"Let me ask you something," Miller said to his son. "This morning—I left the kitchen to get the newspaper."

Ted nodded. "Yeah. So?"

"I got up and went out of the room. *How long was I gone?* Not long, was I?" He searched for words, but his mind was a maze of disjointed thoughts. "I was sitting at the breakfast table with you all, and then I got up and went to look for the paper. Right? And then I came back in. Right?" His voice rose desperately. "I got up and shaved and dressed this morning. I ate breakfast. Hot cakes and coffee. Bacon. *Right?*"

"Right," Ted agreed. "So?"

"Like I always do."

"We only have hot cakes on Friday."

Miller nodded slowly. "That's right. Hot cakes on Friday. Because your uncle Frank eats with us Saturday and Sunday and he can't stand hot cakes, so we stopped having them on weekends. Frank is Marjorie's brother. He was in the Marines in the First World War. He was a corporal."

"Goodbye," Ted said, as Don came out to join him. "We'll see you this evening."

School books clutched, the boys sauntered off toward the big modern high school in the center of Berkeley.

Miller re-entered the house and automatically began searching the closet for his briefcase. Where was it? Damn it, he needed it. The whole Throckmorton account was in it; Davidson would be yelling his head off if he left it anywhere, like in the True Blue Cafeteria that time they were all celebrating the Yankee's winning the series. Where the hell was it—

He straightened up slowly, as memory came. Of course. He had

left it by his work desk, where he had tossed it after taking out the research tapes. While Fleming was talking to him. Back at the History Agency.

He joined his wife in the kitchen. "Look," he said huskily. "Marjorie, I think maybe I won't go down to the office this morning."

Marjorie spun in alarm. "George, is anything wrong?"

"I'm—completely confused."

"Your hay fever again?"

"No. My mind. What's the name of that psychiatrist the PTA recommended when Mrs. Bentley's kid had that fit?" He searched his disorganized brain. "Grunberg, I think. In the Medical-Dental building." He moved toward the door. "I'll drop by and see him. Something's wrong—really wrong. And I don't know what it is."

**A**DAM GRUNBERG was a large heavy-set man in his late forties, with curly brown hair and horn-rimmed glasses. After Miller had finished, Grunberg cleared his throat, brushed at the sleeve of his Brooks Bros. suit, and asked thoughtfully.

"Did anything happen while you were out looking for the newspaper? Any sort of accident? You might try going over that part in detail. You got up from the breakfast table, went out on the porch, and started looking around in the bushes. And then what?"

Miller rubbed his forehead vaguely. "I don't know. It's all confused. I don't remember looking for any newspaper. I remember coming back in the house. Then it gets

clear. But before that it's all tied up with the History Agency and my quarrel with Fleming."

"What was that again about your briefcase? Go over that."

"Fleming said it looked like a squashed Jurassic lizard. And I said—"

"No. I mean, about looking for it in the closet and not finding it."

"I looked in the closet and it wasn't there, of course. It's sitting beside my desk at the History Agency. On the Twentieth Century level. By my exhibits." A strange expression crossed Miller's face. "Good God, Grunberg. You realize this may be nothing but an *exhibit*? You and everybody else—maybe you're not real. Just pieces of this exhibit."

"That wouldn't be very pleasant for us, would it?" Grunberg said, with a faint smile.

"People in dreams are always secure until the dreamer wakes up," Miller retorted.

"So you're dreaming me," Grunberg laughed tolerantly. "I suppose I should thank you."

"I'm not here because I especially like you. I'm here because I can't stand Fleming and the whole History Agency."

Grunberg pondered. "This Fleming. Are you aware of thinking about him before you went out looking for the newspaper?"

Miller got to his feet and paced around the luxurious office, between the leather-covered chairs and the huge mahogany desk. "I want to face this thing. I'm in an exhibit. An artificial replica of the past. Fleming said something like this would happen to me."



"Sit down, Mr. Miller," Grunberg said, in a gentle but commanding voice. When Miller had taken his chair again, Grunberg continued, "I understand what you say. You have a general feeling that everything around you is unreal. A sort of stage."

"An exhibit."

"Yes, an exhibit in a museum."

"In the N'York History Agency. Level R, the Twentieth Century level."

"And in addition to this general feeling of—insubstantiality, there are specific projected memories of persons and places beyond this world. Another realm in which this one is contained. Perhaps I should say, the reality within which this is only a sort of shadow world."

"This world doesn't look shadowy to me." Miller struck the leather arm of the chair savagely. "This world is completely real. That's what's wrong. I came in to investigate the noises and now I can't get back out. Good God, do I have to wander around this replica the rest of my life?"

"You know, of course, that your feeling is common to most of mankind. Especially during periods of great tension. Where—by the way—was the newspaper? Did you find it?"

"As far as I'm concerned—"

"Is that a source of irritation with you? I see you react strongly to a mention of the newspaper."

Miller shook his head wearily. "Forget it."

"Yes, a trifle. The paperboy carelessly throws the newspaper in the bushes, not on the porch. It makes you angry. It happens again and

again. Early in the day, just as you're starting to work. It seems to symbolize in a small way the whole petty frustrations and defeats of your job. Your whole life."

"Personally, I don't give a damn about the newspaper." Miller examined his wristwatch. "I'm going—it's almost noon. Old man Davidson will be yelling his head off if I'm not at the office by—" He broke off. "There it is again."

"There what is?"

"All this!" Miller gestured impatiently out the window. "This whole place. This damn world. This *exhibition*."

"I have a thought," Doctor Grunberg said slowly. "I'll put it to you for what it's worth. Feel free to reject it if it doesn't fit." He raised his shrewd, professional eyes. "Ever see kids playing with rocketships?"

"Lord," Miller said wretchedly. "I've seen commercial rocket freighters hauling cargo between Earth and Jupiter, landing at La-Guardia Spaceport."

Grunberg smiled slightly. "Follow me through on this. A question. Is it job tension?"

"What do you mean?"

"It would be nice," Grunberg said blandly, "to live in the world of tomorrow. With robots and rocket ships to do all the work. You could just sit back and take it easy. No worries, no cares. No frustrations."

"My position in the History Agency has plenty of cares and frustrations." Miller rose abruptly. "Look, Grunberg. Either this is an exhibit on R level of the History Agency, or I'm a middle-class businessman with an escape fantasy."

Right now I can't decide which. One minute I think this is real, and the next minute—"

"We can decide easily," Grunberg said.

"How?"

"You were looking for the newspaper. Down the path, onto the lawn. *Where did it happen?* Was it on the path? On the porch? Try to remember."

"I don't have to try. I was still on the sidewalk. I had just jumped over the rail past the safety screens."

"On the sidewalk. Then go back there. Find the exact place."

"Why?"

"So you can prove to yourself there's nothing on the other side."

Miller took a deep, slow breath. "Suppose there is?"

"There can't be. You said yourself: only one of the worlds can be real. This world is real—" Grunberg thumped his massive mahogany desk. "Ergo, you won't find anything on the other side."

"Yes," Miller said, after a moment's silence. A peculiar expression cut across his face and stayed there. "You've found the mistake."

"What mistake?" Grunberg was puzzled. "What—"

Miller moved toward the door of the office. "I'm beginning to get it. I've been putting up a false question. Trying to decide which world is real." He grinned humorlessly back at Doctor Grunberg. "They're both real, of course."

**H**E GRABBED a taxi and headed back to the house. No one was home. The boys were in school and Marjorie had gone downtown to

shop. He waited indoors until he was sure nobody was watching along the street, and then started down the path to the sidewalk.

He found the spot without any trouble. There was a faint shimmer in the air, a weak place just at the edge of the parking strip. Through it he could see faint shapes.

He was right. There is was—complete and real. As real as the sidewalk under him.

A long metallic bar was cut off by the edges of the circle. He recognized it: the safety railing he had leaped over to enter the exhibit. Beyond it was the safety screen system. Turned off, of course. And beyond that, the rest of the level and the far walls of the History building.

He took a cautious step into the weak haze. It shimmered around him, misty and oblique. The shapes beyond became clearer. A moving figure in a dark blue robe. Some curious person examining the exhibits. The figure moved on and was lost. He could see his own work desk, now. His tape scanner and heaps of study spools. Beside the desk was his briefcase, exactly where he had expected it.

While he was considering stepping over the railing to get the briefcase, Fleming appeared.

Some inner instinct made Miller step back through the weak spot, as Fleming approached. Maybe it was the expression on Fleming's face. In any case, Miller was back and standing firmly on the concrete sidewalk, when Fleming halted just beyond the juncture, face red, lips twisting with indignation.

"Miller," he said thickly. "Come out of there."

Miller laughed. "Be a good fellow, Fleming. Toss me my briefcase. It's that strange looking thing over by the desk. I showed it to you—remember?"

"Stop playing games and listen to me!" Fleming snapped. "This is serious. Carnap knows. I had to inform him."

"Good for you. The loyal bureaucrat."

Miller bent over to light his pipe. He inhaled and puffed a great cloud of gray tobacco smoke through the weak spot, out into the R level. Fleming coughed and retreated.

"What's that stuff?" he demanded.

"Tobacco. One of the things they have around here. Very common substance in the twentieth century. You wouldn't know about that—your period is the second century, BC. The Hellenistic world. I don't know how well you'd like that. They didn't have very good plumbing back there. Life expectancy was damn short."

"What are you talking about?"

"In comparison, the life expectancy of my research period is quite high. And you should see the bathroom I've got. Yellow tile. And a shower. We don't have anything like that at the Agency leisure-quarters."

Fleming grunted sourly. "In other words, you're going to stay in there."

"It's a pleasant place," Miller said easily. "Of course, my position is better than average. Let me describe it for you. I have an attractive wife: marriage is permitted, even sanctioned in this era. I have two fine kids—both boys—

who are going up to Russian River this weekend. They live with me and my wife—we have complete custody of them. The State has no power of that, yet. I have a brand new Buick—"

"Illusions," Fleming spat. "Psychotic delusions."

"Are you sure?"

"You damn fool! I always knew you were too ego-recessive to face reality. You and your anachronistic retreats. Sometimes I'm ashamed I'm a theoretician. I wish I had gone into engineering." Fleming's lip twitched. "You're insane, you know. You're standing in the middle of an artificial exhibit, which is owned by the History Agency, a bundle of plastic and wire and struts. A replica of a past age. An imitation. And you'd rather be there than in the real world."

"Strange," Miller said thoughtfully. "Seems to me I've heard the same thing very recently. You don't know a Doctor Grunberg, do you? A psychiatrist."

Without formality, Director Carnap arrived with his company of assistants and experts. Fleming quickly retreated. Miller found himself facing one of the most powerful figures of the twenty-second century. He grinned and held out his hand.

"You insane imbecile," Carnap rumbled. "Get out of there before we drag you out. If we have to do that, you're through. You know what they do with advanced psychotics. It'll be euthanasia for you. I'll give you one last chance to come out of that fake exhibit—"

"Sorry," Miller said. "It's not an exhibit."

Carnap's heavy face registered sudden surprise. For a brief instant his massive poise vanished. "You still try to maintain—"

"This is a time gate," Miller said quietly. "You can't get me out, Carnap. You can't reach me. I'm in the past, two hundred years back. I've crossed back to a previous existence-coordinate. I found a bridge and escaped from your continuum to this. And there's nothing you can do about it."

CARNAP and his experts huddled together in a quick technical conference. Miller waited patiently. He had plenty of time; he had decided not to show up at the office until Monday.

After awhile Carnap approached the juncture again, being careful not to step over the safety railing. "An interesting theory, Miller. That's the strange part about psychotics. They rationalize their delusions into a logical system. *A priori*, your concept stands up well. It's internally consistent. Only—"

"Only what?"

"Only it doesn't happen to be true." Carnap had regained his confidence; he seemed to be enjoying the interchange. "You think you're really back in the past. Yes, this exhibit is extremely accurate. Your work has always been good. The authenticity of detail is unequalled by any of the other exhibits."

"I tried to do my work well," Miller murmured.

"You wore archaic clothing and affected archaic speech-mannerisms. You did everything possible to throw yourself back. You devoted

yourself to your work." Carnap tapped the safety railing with his fingernail. "It would be a shame, Miller. A terrible shame to demolish such an authentic replica."

There was silence.

"I see your point," Miller said, after a time. "I agree with you, certainly. I've been very proud of my work—I'd hate to see it all torn down. But that really won't do you any good. All you'll succeed in doing is closing the time gate."

"You're sure?"

"Of course. The exhibit is only a bridge, a link with the past. I passed *through* the exhibit, but I'm not there now. I'm beyond the exhibit." He grinned tightly. "Your demolition can't reach me. But seal me off, if you want. I don't think I'll be wanting to come back."

"I wish you could see this side, Carnap. It's a nice place here. Freedom, opportunity. Limited government, responsible to the people. If you don't like a job here you can quit. There's no euthanasia, here. Come on over. I'll introduce you to my wife."

"We'll get you," Carnap said.

"And all your psychotic figments along with you."

"I doubt if any of my 'psychotic figments' are worried. Grunberg wasn't. I don't think Marjorie is—"

"We've already begun demolition preparations," Carnap said calmly. "We'll do it piece by piece, not all at once. So you may have the opportunity to appreciate the scientific and—*artistic* way we take your imaginary world and people apart."

"You're wasting your time," Miller said. He turned and walked off, down the sidewalk, to the gravel

path and up onto the front porch of his house.

In the living room he threw himself down in the easy chair and snapped on the television set. Then he went to the kitchen and got a can of ice cold beer from the refrigerator. He carried it happily back into the safe, comfortable living room.

As he was seating himself in front of the television set he noticed something rolled up on the low coffee table.

He grinned wryly. It was the

morning newspaper, which he had looked so hard for. Marjorie had brought it in with the milk, as usual. And of course forgotten to tell him. He yawned contentedly and reached over to pick it up. Languidly, confidently, he unfolded it—and read the big black headlines.

## RUSSIA REVEALS COBALT BOMB

## TOTAL WORLD DESTRUCTION AHEAD

• • • THE END

### WHAT IS YOUR SCIENCE I.Q.?

IF YOU ARE an "average" reader of science fiction you ought to manage *eight* out of the 13 questions below. If you are a fan, or rabid reader, your score should be *eleven* right! Check your answers with those on page 116.

1. Which planet requires 84 years to make one circuit of the sun?
2. A piezometer is used to measure the compressibility of \_\_\_\_\_.
3. What are the nuclei of heavy hydrogen called?
4. In which constellation are the stars that form the Big Dipper?
5. That part of the science of biology which deals with the relation between organisms and their environment is called \_\_\_\_\_.
6. Which is the fourth brightest star in the heavens?
7. A Metonic cycle is a period of \_\_\_\_\_ years, after which time the new moon and the full moon fall on the same days of the year again.
8. In which constellation is the planet Pluto?
9. Ylem is the word used to describe \_\_\_\_\_ matter.
10. Which is the brightest star in Bootes?
11. The Doppler shift is used by astrophysicists to estimate the \_\_\_\_\_ of luminous bodies.
12. The two principal types of galaxies are spiral and \_\_\_\_\_.
13. Which one is *not* a star: Procyon, Mizar, Spica, Alioth, Cetus, Regulus.



*That It landed on Earth was perhaps destiny. That Les and Marian were making their trip in August was perhaps coincidence. That Ketter kept a zoo was perhaps unfortunate. However, It was hungry—and Les and Marian were making their trip and Ketter kept a zoo . . . A horror story you'll read with shivers down your spine!*

# BEING

By Richard Matheson

Illustrated by Virgil Finlay

**O**N SATURDAY, which was August 6th that year, a ball of eerie light descended on the desert and people twenty miles away stared at the phosphorescent trail it left on the twilight sky.

"A meteor," they said but that was because they had to say something.

*In darkness hovering. A soundless shell of metals glistening pale—held aloft by threads of anti-gravity. Below, the planet, shrouded with night, turning from the moon. On its black-swept face, an animal staring up with bright-eyed panic at the dully phosphorescent globe sus-*

*pended overhead. A twitch of muscle. The hard earth drums delicately beneath fleeing pawbeats. Silence again, wind-soughed and lone. Hours. Black hours passing into grey, then mottled pink. Sunlight sprays across the metal globe. It shimmers with unearthly light.*

It was like putting his hand into a scorching oven.

"Oh my God, it's hot," he said, grimacing, jerking back his hand and closing it once more, gingerly, over the sweat-stained steering wheel.

"It's your imagination." Marian lay slumped against the warm, plas-



tic-covered seat. A mile behind, she'd stuck her sandaled feet out the window. Her eyes were closed, breath fell in fitful gasps from her drying lips. Across her face, the hot wind fanned bluntly, ruffling the short blond hair.

"It's not hot," she said, squirming uncomfortably, tugging at the narrow belt on her shorts. "It's cool. As a cucumber."

"Ha," Les grunted. He leaned forward a little and clenched his teeth at the feel of his sport shirt clinging damply to his back. "What a month for driving," he growled.

They'd left Los Angeles three days before on their way to visit Marian's family in New York. The weather had been equatorial from the start, three days of blazing sun that had drained them of energy.

The schedule they were attempting to maintain made things even worse. On paper, four hundred miles a day didn't seem like much. Converted into practical traveling it was brutalizing. Traveling over dirt cutoffs that sent up spinning, choking dust clouds. Traveling over rut-pocked stretches of highway under repair; afraid to hit more than twenty miles an hour on them for fear of snapping an axle or shaking their brains loose.

Worst of all, traveling up twenty to thirty mile grades that sent the radiator into boiling frenzies every half hour or so. Then sitting for long, sweltering minutes, waiting for the motor to cool off, pouring in fresh water from the water bag, sitting and waiting in the middle of an oven.

"I'm done on one side," Les said, breathlessly. "Turn me."

"And ha to you," Marian sotto voiced.

"Any water left?"

Marian reached down her left hand and tugged off the heavy top of the portable ice box. Feeling inside its coolish interior, she pulled up the thermos bottle. She shook it.

"Empty," she said, shaking her head.

"As my *head*," he finished in a disgusted voice, "For ever letting you talk me into driving to New York in August."

"Now, now," she said, her cajoling a trifle worn, "Don't get heated up."

"*Damn!*" he snapped irritably, "When is this damn cutoff going to get back to the damn highway?"

"Damn," she muttered lightly, "Damn damn."

He said no more. His hands gripped tighter on the wheel. *Hwy. 66, alt. rte.*—they'd been on the damn thing for hours now, shunted aside by a section of the main highway undergoing repair. For that matter, he wasn't even sure they were on the alternate route. There had been five crossroads in the past two hours. In speeding along to get out of the desert, he hadn't looked too carefully at the crossroad signs.

"Honey, there's a station," Marian said, "let's see if we can get some water."

"And some gas," he added, glancing at the gauge, "And some instructions on how to get back to the highway."

"The damn highway," she said.

A faint smile tugged at Les's mouth corners as he pulled the Ford off the road and braked up beside the two paint-chipped pumps that

stood before an old sagging shack.

"This is a hot looking spot," he said dispassionately. "Ripe for development."

"For the right party." Marian's eyes closed again. She drew in a heavy breath through her open mouth.

No one came out of the shack.

"Oh, don't tell me it's *deserted*," Les said disgustedly, looking around.

Marian drew down her long legs. "Isn't there anybody here?" she asked, opening her eyes.

"Doesn't look like it."

Les pushed open the door and slid out. As he stood, an involuntary grunt twitched his body and his knees almost buckled. It felt as if someone had dropped a mountain of heat on his head.

"*God!*" He blinked away the waves of blackness lapping at his ankles.

"What is it?"

"This *heat*." He stepped between the two rusty handled pumps and crunched over the hot, flaky ground for the doorway of the shack.

"And we're not even a third of the way," he muttered grimly to himself. Behind him, he heard the car door slam on Marian's side and her loose sandals flopping on the ground.

Dimness gave the illusion of coolness only for a second. Then the muggy, sodden air in the shack pressed down on Les and he hissed in displeasure.

There was no one in the shack. He looked around its small confines at the uneven-legged table with the scarred surface, the backless chair, the cobwebbed coke machine, the

price lists and calendars on the wall, the threadbare shade on the small window, drawn down to the sill, shafts of burnished light impaling the many rents.

The wooden floor creaked as he stepped back out into the heavy sunlight.

"No one?" Marian asked and he shook his head. They looked at each other without expression a moment and she patted at her forehead with a damp handkerchief.

"Well, onward," she said wryly.

That was when they heard the car come rattling down the rutted lane that led off the road into the desert. They walked to the edge of the shack and watched the old, home-made tow truck make its wobbling, noisy approach toward the station. Far back from the road was the low form of the house it had come from.

"To the rescue," Marian said. "I hope he has water."

As the truck groaned to a halt beside the shack, they could see the heavily-tanned face of the man behind the wheel. He was somewhere in his thirties, a dour looking individual in a tee shirt and patched and faded blue overalls. Lank hair protruded from beneath the brim of his grease-stained stetson.

It wasn't a smile he gave them as he slid out of the truck. It was more like a reflex twitching of his lean, humorless mouth. He moved up to them with jerky boot strides, his dark eyes moving from one to the other of them.

"You want gas?" he asked Les in a hard, thick-throated voice.

"Please."

The man looked at Les a moment

as if he didn't understand. Then he grunted and headed for the Ford, reaching into his back overall pocket for the pump key. As he walked past the front bumper, he glanced down at the license plate.

He stood looking dumbly at the tank cap for a moment, his calloused fingers trying vainly to unscrew it.

"It locks," Les told him, walking over hurriedly with the keys. The man took them without a word and unlocked the cap. He put the cap on top of the trunk door.

"You want ethyl?" he asked, glancing up, his eyes shadowed by the wide hat brim.

"Please," Les told him.

"How much?"

"You can fill it."

The hood was burning hot. Les jerked back his fingers with a gasp. He took out his handkerchief, wrapped it around his hand and pulled up the hood. When he unscrewed the radiator cap, boiling water frothed out and splashed down smoking onto the parched ground.

"Oh, fine," he muttered to himself.

The water from the hose was almost as hot. Marian came over and put one finger in the slow gush as Les held it over the radiator.

"Oh . . . gee," she said in disappointment. She looked over at the overalled man. "Have you got any cool water?" she asked.

The man kept his head down, his mouth pressed into a thin, drooping line. She asked again, without result.

"The hair-triggered Arizonian," she muttered to Les as she started

back toward the man.

"I beg your pardon," she said.

The man jerked up his head, startled, the pupils of his dark eyes flaring. "Ma'm?" he said quickly.

"Can we get some cool drinking water?"

The man's rough-skinned throat moved once. "Not here, ma'm," he said, "but . . ."

His voice broke off and he looked at her blankly.

"You . . . you're from California, ain't you?" he said.

"That's right."

"Goin' . . . far?"

"New York," she said impatiently. "But what about—"

The man's bleached eyebrows moved together. "New York," he repeated. "Pretty far."

"What about the water?" Marian asked him.

"Well," the man said, his lips twitching into the outline of a smile, "I ain't got none here but if you want to drive back to the house, my wife'll get you some."

"Oh." Marian shrugged slightly. "All right."

"You can look at my zoo while my wife gets the water," the man offered, then crouched down quickly beside the fender to listen and hear if the tank were filling up.

"We have to go back to his house to get water," Marian told Les as he unscrewed one of the battery caps.

"Oh? Okay."

The man turned off the pump and replaced the cap.

"New York, haah?" he said, looking at them. Marian smiled politely and nodded.

After Les had pushed the hood

back down, they got into the car to follow the man's truck back to the house.

"He has a zoo," Marian said, expressionlessly.

"How nice," Les said as he let up the clutch and the car rolled down off the slight rise on which the gas pumps stood.

"They make me mad," Marian said.

They'd seen dozens of the zoos since they'd left Los Angeles. They were usually located beside gas stations—designed to lure extra customers. Invariably, they were pitiful collections—barren little cages in which gaunt foxes cringed, staring out with sick, glazed eyes, rattlesnakes coiled lethargically, maybe a feather-molted eagle glowered from a dark cage corner. And, usually, in the middle of the so-called zoo would be a chained-up wolf or coyote; a straggly woe-be-gone creature who paced constantly in a circle whose radius was the length of the chain; who never looked at the people but stared straight ahead with red-rimmed eyes, pacing endlessly on thin stalks of legs.

"I hate them," Marian said bitterly.

"I know, baby," Les said.

"If we didn't need water, I'd never go back to his damned old house."

Les smiled. "Okay ma," he said quietly, trying to avoid the holes in the lane. "Oh." He snapped two fingers. "I forgot to ask him how to get back to the highway."

"Ask him when we get to his house," she said.

The house was faded brown, a two-story wooden structure that

looked a hundred years old. Behind it stood a row of low, squarish huts.

"The zoo," Les said, "Lions 'n tigers 'n everything."

"Nuts," she said.

He pulled up in front of the quiet house and saw the man in the stesson slide off the dusty seat of his truck and jump down off the running board.

"Get you the water," he said quickly and started for the house. He stopped a moment and looked back. "Zoo's in the back," he said, gesturing with his head.

They watched him move up the steps of the old house. Then Les stretched and blinked at the glaring sunlight.

"Shall we look at the zoo?" he asked, trying not to smile.

"No."

"Oh, come on."

"No, I don't want to see *that*."

"I'm going to take a look."

"Well . . . all right," she said, "but it's going to make me mad."

They walked around the edge of the house and moved along its side in the shade.

"Oh, does that feel good," Marian said.

"Hey, he forgot to ask for his money."

"He will," she said.

They approached the first cage and looked into the dim interior through the two-foot-square window that was barred with thick doweling.

"Empty," Les said.

"Good."

"Some zoo."

They walked slowly toward the next cage. "Look how *small* they are," Marian said unhappily, "How

would *he* like to be cooped up in one of them?"

She stopped walking.

"No, I'm not going to look," she said angrily, "I don't want to see how the poor things are suffering."

"I'll just take a look," he said.

"You're a fiend."

She heard him chuckle as she stood watching him walk up to the second of the cages. He looked in.

"*Marian!*" His cry made her body twitch.

"What *is* it?" she asked, running to him anxiously.

"*Look.*"

He stared with shocked eyes into the cage.

Her whisper trembled. "*Oh my God.*"

There was a man in the cage.

**S**HE LOOKED at him with unbelieving eyes, unconscious of the large drops of sweat trickling across her brow and down her temples.

The man was lying on the floor, sprawled like a broken doll across a dirty army blanket. His eyes were open but the man saw nothing. His pupils were dilated, he looked doped. His grimy hands rested limply on the thinly-strawed floor, motionless twists of flesh and bone. His mouth hung open like a yellow-toothed wound, edged with dry, cracking lips.

When Les turned, he saw that Marian was already looking at him, her face blank, the skin drawn tautly over her paling cheeks.

"What *is* this?" she asked in a faint tremor of voice.

"I don't know."

He glanced once more into the cage as if he already doubted what he'd seen. Then he was looking at Marian again. "I don't know," he repeated, feeling the heartbeats throb heavily in his chest.

Another moment they looked at each other, their eyes stark with uncomprehending shock.

"What are we going to do?" Marian asked, almost whispering the words.

Les swallowed the hard lump in his throat. He looked into the cage again. "Hello," he heard himself say, "Can you—"

He broke off abruptly, throat moving again. The man was comatose.

"Les, what if—"

He looked at her. And, suddenly, his scalp was crawling because Marian was looking in wordless apprehension at the next cage.

His running footsteps thudded over the dry earth, raising the dust.

"*No,*" he murmured, looking into the next cage. He felt himself shudder uncontrollably as Marian ran up to him.

"*Oh my God, this is hideous,*" she cried, staring with sick fright at the second caged man.

They both started as the man looked up at them with glazed, lifeless eyes. For a moment, his slack body lurched up a few inches and his dry lips fluttered as though he were trying to speak. A thread of saliva ran from one corner of his mouth and dribbled down across his beard-blackened chin. For a moment his sweaty, dirt-lined face was a mask of impotent entreaty.

Then his head rolled to one side and his eyes rolled back.

Marian backed away from the cage, shaking hand pressed to her cheek.

"The man's *insane*," she muttered and looked around abruptly at the silent house.

Then Les had turned too and both of them were suddenly aware of the man in the house who had told them to go and look at his zoo.

"Les, what are we going to *do*?" Marian's voice shook with rising hysteria.

Les felt numb, devoured by the impact of what they'd seen. For a long moment he could only stand shivering and stare at his wife, feeling immersed in some fantastic dream.

Then his lips jammed together and the heat seemed to flood over him.

"Let's get out of here," he snapped and grabbed her hand.

The only sound was their harsh panting and the quick slap of Marian's sandals on the hard ground. The air throbbed with intense heat, smothering their breath, making perspiration break out heavily across their faces and bodies.

"Faster," Les gasped, tugging at her hand.

Then, as they turned the edge of the house, they both recoiled with a violent contracting of muscles.

"*No!*" Marian's cry contorted her face into a twisted mask of terror.

The man stood between them and their car, a long double-barreled shotgun leveled at them.

Les didn't know why the idea flooded through his brain. But, suddenly, he realized that no one knew

where he and Marian were, no one could even know where to begin searching for them. In rising panic, he thought of the man asking them where they were going, he thought of the man looking down at their California license plate.

And he heard the man, the hard, emotionless voice of the man.

"Now go on back," the man said, "to the *zoo*."

**A**FTER he'd locked the couple in one of the cages, Merv Ketter walked slowly back to the house, the heavy shotgun pulling down his right arm. He'd felt no pleasure in the act, only a draining relief that had, for a moment, loosened the tightness in his body. But, already, the tightness was returning. It never went away for more than the few minutes it took him to trap another person and cage him.

If anything, the tightness was worse now. This was the first time he'd ever put a woman in one of his cages. The knowledge twisted a cold knot of despair in his chest. A woman—he'd put a *woman* in his cage. His chest shuddered with harsh breath as he ascended the rickety steps of the back porch.

Then, as the screen door slapped shut behind him, his long mouth tightened. Well, what was he supposed to do? He slammed the shotgun down on the yellow oil-clothed surface of the kitchen table, another forced breath wracking his chest. What *else* could I do—he argued with himself. His boots clacked sharply across the worn linoleum as he walked to the quiet, sun-lanced livingroom.

Dust rose from the old arm chair as he dropped down heavily, spiritlessly. What *was* he supposed to do? He'd had no choice.

For the thousandth time, he looked down at his left forearm, at the slight reddish bulge just under the elbow joint. Inside his flesh, the tiny metal cone was still humming delicately. He knew it without listening. It never stopped.

He slumped back exhaustedly with a groan and lay his head on the high back of the chair. His eyes stared dully across the room, through the long slanting bar of sunlight quivering with dust motes. At the mantelpiece.

The Mauser rifle—he stared at it. The Luger, the bazooka shell, the hand grenade, all of them still active. Vaguely, through his tormented brain, curled the idea of putting the Luger to his temple, holding the Mauser against his side, even of pulling out the pin and holding the grenade against his stomach.

*War hero.* The phrase scraped cruelly at his mind. It had long lost its meaning, its comfort. Once, it had meant something to him to be a medaled warrior, ribboned, lauded, admired.

Then Elsie had died, then the battles and the pride were gone. He was alone in the desert with his trophies and with nothing else.

And then one day he'd gone into that desert to hunt.

His eyes shut, his leathery throat moved convulsively. What was the use of thinking, of regretting? The will to live was still in him. Maybe it was a stupid, a pointless will but it was there just the same; he

couldn't rid himself of it. Not after two men were gone, not after five, no, not even after seven men were gone.

The dirt-filled nails dug remorselessly into his palms until they broke the skin. But a woman, a *woman*. The thought knifed at him. He'd never planned on caging a woman.

One tight fist drove down in futile rage on his leg. He couldn't help it. Sure, he'd seen the California plate. But he wasn't going to do it. Then the woman had asked for water and he suddenly had known that he had no choice, he *had* to do it.

There were only two men left.

And he'd found out that the couple were going to New York and the tension had come and gone, loosened and tightened in a spastic rhythm as he knew, in his very flesh, that he was going to tell them to come and look at his zoo.

I should have given them an injection, he thought. They might start screaming. It didn't matter about the man, he was used to men screaming. But a woman . . .

Merv Ketter opened his eyes and stared with hopeless eyes at the mantelpiece, at the picture of his dead wife, at the weapons which had been his glory and now were meaningless—steel and wood without worth, without substance.

*Hero.*

The word made his stomach turn.

*The glutinous pulsing slowed, paused a moment's fraction, then began again, filling the inner shell with its hissing, spumous sound. A flaccid wave of agitation rippled down along the rows of muscle*



*coils. The being stirred. It was time.*

*Thought. The shapeless, gauze-like airbubble coalesced; surrounded. The being moved, an undulation, a gelatinous worming within the shimmering bubble. A bumping, a slithering, a rocking flow of viscous tissues.*

*Thought again—a wave directing. The hiss of entering atmosphere, the soundless swinging of metal. Open. Shutting with a click. Sunset's blood edged the horizon. A slow and noiseless sinking in the air, a colorless balloon filled with something formless, something alive.*

*Earth, cooling. The being touched it, settled. It moved across the ground and every living thing fled its scouring approach. In its rosy wake, the ground was left a green and yellow iridescence.*

*"Look out."*

Marian's sudden whisper almost made him drop the nail file. He jerked back his hand, his sweat-grimed cheek twitching and drew back quickly into the shadows. The sun was almost down.

"Is he coming this way?" Marian asked, her voice husky with dryness.

"I don't know." He stood tensely, watching the overalled man approach, hearing the fast crunch of his boot heels on the baked ground. He tried to swallow but all the moisture in him had been blotted up by the afternoon heat and only a futile clicking sounded in his throat. He was thinking about the man seeing the deeply-filed slit in the window bar.

The man in the stetson walked

quickly, his face blank and hard, his hands swinging in tense little arcs at his sides.

"What's he going to do?" Marian's voice rasped nervously, her physical discomfort forgotten in the sudden return of fear.

Les only shook his head. All afternoon he'd been asking himself the same question. After they'd been locked up, after the man had gone back to his house, during the first terrifying minutes and for the rest of the time when Marian had found the nail file in the pocket of her shorts and shapeless panic had gained the form of hoping for escape. All during that time the question had plagued him endlessly. *What was the man going to do with them?*

But it wasn't their cage the man was headed for. A loosening of relief made them both go slack. The man hadn't even looked toward the cage they were in. He seemed to avoid looking toward it.

Then the man had passed out of their sight and they heard the sound of him unlocking one of the cages. The squeaking rasp of the rusty door hinges made Les's stomach muscles draw taut.

The man appeared again.

Marian caught her breath. They both stared at the unconscious man being dragged across the ground, his heels raking narrow gouges in the dust.

After a few feet, the man let go of the limp arms and the body fell with a heavy thud. The man in the overalls looked behind him then, his head jerking around suddenly. They saw his throat move with a convulsive swallow. The man's eyes

moved quickly, looking in all directions.

"What's he *looking* for?" Marian asked in a shaking whisper.

"Marian, I don't *know*."

"He's *leaving* him there!" She almost whimpered the word.

Their eyes filled with confused fear, they watched the overalled man move for the house again, his long legs pumping rapidly, his head moving jerkily as he looked from side to side. Dear God, what *is* he looking for?—Les thought in rising dread.

The man suddenly twitched in mid-stride and clutched at his left arm. Then, abruptly, he broke into a frightened run and leaped up the porch steps two at a time. The screen door slapped shut behind him with a loud report and then everything was deadly still.

A sob caught in Marian's throat. "I'm *afraid*," she said in a thin, shuddering voice.

He was afraid too; he didn't know of what but he was terribly afraid. Chilling uneasiness crawled up his back and rippled coldly on his neck. He kept staring at the body of the man sprawled on the ground, at the still, white face looking up sightlessly at the darkening sky.

He jolted once as, across the yard, he heard the back door of the house being slammed shut and locked.

**S**ILENCE. A great hanging pall of it that pressed down on them like lead. The man slumped motionless on the ground. Their breaths quick, labored. Their lips trembling, their eyes fastened almost hypno-

tically on the man.

Marian drew up one fist and dug her teeth into the knuckles. Sunlight rimmed the horizon with a scarlet ribbon. Soundlessness. Heavy soundlessness.

Soundlessness.

*Sound.*

Their breath stopped. They stood there, mouths open, ears straining at the sound they'd never heard before. Their bodies went rigid as they listened to—

*A bumping, a slithering, a rocking flow of—*

"Oh, *God!*" Her voice was a gasping of breathless horror as she spun away, shaking hands flung over her eyes.

It was getting dark and he couldn't be sure of what he saw. He stood paralyzed and numb in the fetid air of the cage, staring with blood-drained face at the thing that moved across the ground toward the man's body; the thing that had shape yet not shape, that crept like a current of shimmering jellies.

A terrified gagging filled his throat. He tried to move back but he couldn't. He didn't want to see. He didn't want to hear the hideous gurgling sound like water being sucked into a great drain, the turbid bubbling that was like vats of boiling tallow.

No, his mind kept repeating, unable to accept, no, no, no, *no!*

Then the scream made them both jerk like boneless things and drove Marian against one of the cage walls, shaking with nauseous shock.

And the man was gone from the earth. Les stared at the place where he had been, stared at the luminous mass that pulsated there like a great

mound of balloon-encased plankton undulating palely in their fluids.

He stared at it until the man had been completely eaten.

Then he turned away on deadened legs and stumbled to Marian's side. Her shaking fingers clutched like talons at his back and he felt her tear-streaked, twisted face press into his shoulder. Unfeelingly, he slid his arms around her, his face stiff with spent horror. Vaguely, through the body-clutching horror, he felt the need to comfort her, to ease her fright.

But he couldn't. He felt as if a pair of invisible claws had reached into his chest and ripped out all his insides. There wasn't anything left, just a cold, frost-edged hollow in him. And, in the hollow, a knife jabbing its razor tip each time he realized again why they were there.

When the scream came, Merv slammed both hands across his ears so hard it made his head ache.

He couldn't seem to cut off the sound anymore. Doors wouldn't shut tightly enough, windows wouldn't seal away the world, walls were to porous—the screams always reached him.

Maybe it was because they were really in his mind where there were no doors to lock, no windows to shut and close away the screaming of terror. Yes, maybe they *were* in his mind. It would explain why he still heard them in his sleep.

And, when it was over and Merv knew that the thing had gone, he trudged slowly into the kitchen and opened the door. Then, like a robot driven by remorseless gears, he went to the calendar and circled the date.

Sunday, August 22nd.

The eighth man.

The pencil dropped from his slack fingers and rolled across the linoleum. Sixteen days—one man each two days for sixteen days. The mathematics of it were simple. The truth was not.

He paced the living room, passing in and out of the lamplight aura which cast a buttery glow across his exhausted features, then melted away as he moved into shadow



again. Sixteen days. It seemed like sixteen years since he'd gone out into the desert to hunt for jackrabbits. Had it only been sixteen days ago?

Once again he saw the scene within his mind; it never left. Him scuffing across late afternoon sands, shotgun cradled against his hip, head slowly turning, eyes searching beneath the brim of his hat.

Then, moving over the crest of a scrub-grown dune, stopping with a

gasp, his eyes staring up at the globe which shimmered like a light immersed in water. His heartbeat jolting, every muscle tensing abruptly at the sight.

Approaching then, standing almost below the luminescent sphere that caught the lowering sun rays redly.

A gasp tearing back-his lips at the circular cavity appearing on the surface of the globe. And out of the cavity floating—

He'd spun then and run, his breath whistling as he scrambled frantically up the rise again, his boot heels gouging at the sand. Topping the rise, he'd started to run in long, panic-driven strides, the gun held tautly in his right hand, banging against his leg.

Then the sound overhead—like the noise of gas escaping. Wild-eyed, he'd looked up over his shoulder. A terrified cry had wrenched his face into a mask of horror.

Ten feet over his head, the bulbous glow floated.

Merv lunged forward, his legs rising high as he fled. A fetid heat blew across his back. He looked up again with terrified eyes to see the thing descending on him. Seven feet above him—six—five—

Merv Ketter skidded to his knees, twisted around, jerked up the shotgun. The silence of the desert was shattered by the blast.

A gagging scream ripped from his throat as shot sprayed off the lucent bubble like pebbles off a rubber ball. He felt some of it burrow into his shoulder and arm as he flung over to one side, the gun falling from his nerveless grip. Four feet—three—the heat surrounded

him, the choking odor made the air swim before his eyes.

His arms flung up. "NO!"

Once he had jumped into a water hole without looking and been mired on the shallow bottom by hot slime. It felt like that now, only this time the ooze was jumping onto him. His screams were lost in the crawling sheath of gasses and his flailing limbs caught fast in glutinous tissue. Around his terror-frozen eyes, he saw an agitating gelatine filled with gyrating spangles. Horror pressed at his skull, he felt death sucking at his life.

But he didn't die.

He inhaled and there was air even though the air was grumous with a stomach-wrenching stench. His lungs labored, he gagged as he breathed.

Then something moved in his brain.

He tried to twist and tried to scream but he couldn't. It felt like vipers threading through his brain, gnawing with poisoned teeth on tissues of his thought.

The serpents coiled and tightened. *I could kill you now*—the words scalded like acid. The muscle cords beneath his face tensed but even they couldn't move in the putrescent glue.

And then more words had formed and were burning, were branding themselves indelibly into his mind.

*You will get me food.*

He was still shuddering now, standing before the calendar, staring at the penciled circles.

What else could he have done? The question pleaded like a groveling suppliant. The being had picked

his mind clean. It knew about his home, his station, his wife, his past. It told him what to do, it left no choice. He had to do it. Would anyone have let themselves die like that if they had an alternative; would *anyone*? Wouldn't anyone have promised the world itself to be freed of that horror?

Grim-faced, trembling, he went up the stairs on feeble legs, knowing there would be no sleep, but going anyway.

Slumped down on the bed, one shoe off, he stared with lifeless eyes at the floor, at the hooked rug that Elsie had made so long ago.

Yes, he'd promised to do what the being had ordered. And the being had sunk the tiny, whirring cone deep into his arm so that he could only escape by cutting open his own flesh and dying.

And then the hideous gruel had vomited him onto the desert sands and he had lain there, mute and palsied while the being had raised slowly from the earth. And he had heard in his brain the last warning—

*In two days. . .*

And it had started, the endless, enervating round of trapping innocent people in order to preserve himself from the fate he knew awaited them.

And the horrible thing, the truly horrible thing was that he knew he would do it again. He knew he'd do anything to keep the being away from him. Even if it meant that the woman must—

His mouth tightened. His eyes shut and he sat trembling without control on the bed.

What would he do when the

couple were gone? What would he do if no one else came to the station? What would he do if the police came checking on the disappearances of eleven people?

His shoulders twisted and an anguished sobbing pulsed in his throat.

Before he lay down he took a long swallow from the dwindling whiskey bottle. He lay in the darkness, a nerve-scraped coil, waiting, the small pool of heat in his stomach unable to warm the coldness and the emptiness of him.

In his arm the cone whirled.

**L**ES JERKED out the last bar and stood there for a moment, head slumped forward on his chest, panting through clenched teeth, his body heaving with exhausted breath. Every muscle in his back and shoulders and arms ached with throbbing pain.

Then he sucked in a rasping breath. "Let's go," he gasped.

His arms vibrated as he helped Marian clamber through the window.

"Don't make any noise." He could hardly speak he was so tired from the combination of thirst, hunger, heat exhaustion and seemingly endless, muscle-cramped filing.

He couldn't get his leg up, he had to go through the rough-edged opening head first, pushing and squirming, feeling splinters jab into his sweat-greased flesh. When he thudded down, the pain of impact ran jaggedly along his extended arms and, for a second, the darkness swam with needles of light.

Marian helped him up.

"Let's go," he said again, breathlessly and they started to run across the ground toward the front of the house.

Abruptly, he grabbed her wrist and jerked her to a halt.

"Get those *sandals* off," he ordered hoarsely. She bent over quickly and unbuckled them.

The house was dark as they hurried around the back corner of it and dashed along the side beneath the moon-reflecting windows. Marian winced as her right foot jarred down on a sharp pebble.

"Thank God," Les gasped to himself as they reached the front of the house.

The car was still there. As they ran toward it, he felt into his back pocket and took out his wallet. His shaking fingers reached into the small change purse and felt the coolness of the extra ignition key. He was sure the other keys wouldn't be in the car.

They reached it.

"*Quick*," he gasped and they pulled open the doors and slid in. Les suddenly realized that he was shivering in the chilly night air. He took out the key and fumbled for the ignition slot. They'd left the doors open, planning to close them when the motor started.

Les found the slot and slid in the key, then drew in a tense, shuddering breath. If the man had done anything to the motor, they were lost.

"Here goes," he murmured and jabbed at the starter button.

The motor coughed and turned over once with a groan. Les's throat clicked convulsively, he jerked back his hand and threw an apprehen-

sive look at the dark house.

"Oh God, won't it start?" Marian whispered, feeling her legs and arms break out in gooseflesh.

"I don't know, I hope it's just cold," he said hurriedly. He caught his breath, then pushed in the button again, pumping at the choke.

The motor turned again lethargically. Oh God, he *has* done something to it!—the words exploded in Les's mind. He jammed in the button feverishly, his body tense with fear. Why didn't we *push* it to the main road!—the new thought came, deepening the lines on his face.

"*Les!*"

He felt her hand clutch at his arm and, almost instinctively, his gaze jerked over to the house.

A light had flared up at a second story window.

"Oh Jesus, *start!*" he cried in a broken frenzy and pushed at the button with a rigid thumb.

The motor coughed into life and a wave of relief covered him. Simultaneously, he and Marian pulled at the doors and slammed them shut while he gunned the engine strongly to get it warm.

As he threw the gears into first, the head and trunk of the man appeared in the window. He shouted something but neither of them heard of it over the roar of the motor.

The car jerked forward and stalled.

Les hissed in impotent fury as he jabbed in the button again. The motor caught and he eased up the clutch. The tires bumped over the uneven ground. Upstairs, the man was gone from the window and

Marian, her eyes fastened to the house, saw a downstairs light go on.

"Hurry!" she begged.

The car picked up speed and Les, shoving the gears into second, jerked the car into a tight semi-circle. The tires skidded on the hard earth and, as the car headed for the lane, Les threw it into third and jerked at the knob that sent the two headlights splaying out brightly into the darkness.

Behind them, something exploded and they both jerked their shoulders forward convulsively as something gouged across the roof with a grating shriek. Les shoved the accelerator to the floor and the car leaped forward, plunging and rocking into the rutted lane.

Another shotgun blast tore open the night and half of the back window exploded in a shower of glass splinters. Again, their shoulders twitched violently and Les grunted as a sliver gouged its razor edge across the side of his neck.

His hands jerked on the wheel, the car hit a small ditch and almost veered into a bank on the left side of the lane. His fingers tightened convulsively and, with arms braced, he pulled the car back into the center of the lane, crying to Marian,

"Where is he?"

Her white face twisted around.

"I can't see him!"

His throat moved quickly as the car bucked and lurched over the holes, the headlights jerking wildly with each motion.

Get to the next town, he thought wildly, tell the sheriff, try and save that other poor devil. His foot pressed down on the pedal as the lane smoothed out. Get to the next

town and—

She screamed it. "*Look out!*"

He couldn't stop in time. The hood of the Ford drove splintering into the heavy gate across the lane and the car jolted to a neck-jerking halt. Marian went flailing forward against the dashboard, the side of her head snapping against the windshield. The engine stalled and both headlights smashed out in an instant.

Les shoved away from the steering wheel, knocked breathless by the impact.

"Honey, *quick*," he gasped.

A choking sob shook in Marian's throat. "My head, my *head*." Les sat in stunned muteness a moment, staring at her as she twisted her head around in an agony of pain, one hand pressed rigidly to her forehead.

Then he shoved open the door at his side and grabbed for her free hand. "Marian, we have to get *out* of here!"

She kept crying helplessly as he almost dragged her from the car and threw his arm around her waist to support her. Behind him, he heard the sound of heavy boots running down the lane and saw, over his shoulder, a bright flashlight eye bobbing as it bore down on them.

Marian collapsed at the gate. Les stood there holding her, trembling impotently as the man came running up, a forty-five clutched in his right hand, a flashlight in his left. Les winced at the beam flaring into his eyes.

"Back," was all the man said, panting heavily and Les saw the barrel of the gun wave once toward



the house.

"But my wife is *hurt!*" he said, "She hit her head against the windshield. You can't just put her back in a *cage!*"

"I said get *back!*" The man's shout made Les start.

"But she can't walk, she's unconscious!"

He heard a rasping breath shudder through the man's body and saw that he was stripped to the waist and shivering.

"Carry her then," the man said.

"But—"

"Shall I blast ya where ya stand!" the man yelled in a frenzied anger.

"No. No." Les shook nervously as he lifted up Marian's slack body. The man stepped aside and Les started back up the lane, trying to watch Marian's face and his footing at the same time.

"Honey," he whispered, "Marian?"

Her head hung limply over his left forearm, the short blond hair ruffling against her temples and brow as he walked. Tension kept building up in him until he felt like screaming.

"Why are you *doing* this?" he suddenly blurted out over his shoulder.

No answer, just the rhythmic slogging of the man's boots over the pocked ground.

"How can you *do* this to anyone?" Les asked brokenly, "Trapping your own kind and giving them to that—that God only knows what it is!"

"Shut up!" But there was more defeat than anger in the man's voice.

"Look," Les said suddenly, im-

pulsively, "Let my wife go. Keep me here if you have to but . . . but let *her* go. *Please!*"

The man said nothing and Les bit his lips in frustrated anguish. He looked down at Marian with sick, frightened eyes.

"Marian," he said, "*Marian.*" He shivered violently in the cold night air.

The house loomed up bleakly out of the flat darkness of the desert.

"For God's sake, don't put her in a cage!" he cried out desperately.

"*Get back.*" The man's voice was flat, there was nothing in it, neither promise nor emotion.

Les stiffened. If it had been just him, he would have whirled and leaped at the man, he knew it. He wouldn't, willingly, walk back past the edge of the house again, back toward the cages, toward that *thing*.

But there was Marian.

He stepped over the thrown-down shotgun on the ground and heard, behind him, the grunt of the man as he bent over and picked it up. I have to get her out of here, he thought, I *have* to!

It happened before he could do anything. He heard the man step up suddenly behind him and then felt a pinprick on his right shoulder. He caught his breath at the sudden sting and turned as quickly as he could, weighed down by Marian's dead limpness.

"What are you—"

He couldn't even finish the sentence. It seemed suddenly as if hot, numbing liquors were being hosed through his veins. An immense lassitude covered his limbs and he hardly felt it when the man took

Marian from his arms.

He stumbled forward a step, the night alive with glittering pinpoints of light. The earth ran like water beneath his feet, his legs turned to rubber.

"No." He said it in a lethargic grumble.

Then he toppled. And didn't even feel the impact of the ground against his falling body.

*The belly of the globe was warm. It undulated with a thick and vaporous heat. In the humid dimness, the being rested, its shapeless body quivering with monotonous pulsations of sleep. The being was comfortable, it was content, coiled grotesquely like some cosmic cat before a hearth.*

*For two days.*

**P**IERCING screams woke him. He stirred fitfully and moved his lips as though to speak. But his lips were made of iron. They sagged inertly and he couldn't move them. Only a great forcing of will would raise his leaden eyelids.

The cage air fluttered and shimmered with strange convections. His eyes blinked slowly; glazed, uncomprehending eyes. His hands flopped weakly at his sides like dying fish.

It was the man in the other cage screaming. The poor devil had come out of his drugged state and was hysterical because he knew.

Les's sweat-grimed brow wrinkled slowly, evenly. *He could think.* His body was like a massive stone, unwieldy and helpless. But, behind its flint, immobile surface, his brain

was just as sure.

His eyes fell shut. That made it all the more horrible. To know what was coming. To lie there helpless and know what was going to happen to him.

He thought he shuddered, but he wasn't sure. That thing, what *was* it? There was nothing in knowledge to construct from, no foundation of rational acceptance to build upon. What he'd seen that night was something beyond all—

What day was it? Where was—  
*Marian!*

It was like rolling a boulder to turn his head. Clicking filled his throat, saliva dribbled unnoticed from the corners of his mouth. Again, he forced his eyes open with a great straining of will.

Panic drove knife blades into his brain even though his face changed not at all.

Marian wasn't there.

She lay, limply drugged, on the bed. He'd laid another cool, wet cloth across her brow, across the welt on her right temple.

Now he stood silently, looking down at her. He'd just gotten back from the cages where he'd injected the screaming man again to quiet him. He wondered what was in the drug that being had given him, he wondered what it did to the man. He hoped it made him completely insensible.

It was the man's last day.

No, it's dumb imagination, he told himself suddenly. She didn't look like Elsie, she didn't look at all like Elsie.

It was his mind. He *wanted* her to look like Elsie, that was what it

was. His throat twitched as he swallowed. Stupid. The word slapped dully at his brain. She *didn't* look like Elsie.

For a moment, he let his gaze move once more over the woman's body, at the smooth rise of her bust, the willowy hips, the long, well-formed legs. Marian. That was what the man had called her. *Marian*.

It was a nice name.

With an angry twist of his shoulders, he turned away from the bed and strode quickly from the room. What was the *matter* with him anyway? What did he think he was going to do—let her go? There had been no sense in taking her into the house the night before last, in putting her in the spare bedroom. No sense in it at all. He couldn't let himself feel sympathy for her, for anyone. If he did, he was lost. That was obvious.

As he moved down the steps, he tried to remind himself once more of the horror of being absorbed into that gelatinous mass. He tried to remember the brain-searing terror of it. But, somehow, the memory kept disappearing like wind-blown cloud and he kept thinking instead of the woman. *Marian*. She did look like Elsie; the same color hair, the same mouth.

*No!*

He'd leave her in the bedroom until the drug wore off. Then he'd put her back in the cage again. *It's me or them!*—he argued furiously with himself. I ain't going to die like *that!* Not for anyone.

He kept arguing with himself all the way down to the station.

I must be crazy, he thought, tak-

ing her in the house like that, feeling sorry for her. I can't afford it, I *can't*. She's just two days to me, that's all, just a two-day reprieve from—

The station was empty, silent. Merv braked the truck and got out.

His boots crunched over the hot earth as he paced restlessly around the pumps. I *can't* let her go! he lashed out at himself, his face taut with fury. He shuddered then at the realization that he had been entertaining the thought for two days now.

"Why wasn't she a *man*?" he muttered to himself, fists tight and blood-drained at his sides. He raised his left arm and looked at the reddish lump. Why couldn't he tear it out of his flesh? *Why?*

The car came then. A salesman's car, dusty and hot.

As Merv pumped gas in, as he checked the oil and water, he kept glancing from under his hat brim at the hot-faced little man in the linen suit and panama hat. *Replace* her. Merv wouldn't let the thought out yet he knew it was there. He found himself glancing down at the license plate.

*Arizona*.

His face tightened. No. No, he'd always gotten out-of-state cars, it was safer that way. I'll have to let him go, he thought miserably, I'll *have* to. I can't afford to. . .

But when the little man was reaching into his wallet, Merv felt his hand slide back to his back over-all pocket, he felt his fingers tighten over the warm butt of the forty-five.

The little man stared, slack-jawed, at the big gun.

"What is this?" he asked weakly. Merv didn't tell him.

Night brushed its black iced fingers across the moving bubble. Earth flowed beneath its liquid coming.

Why was the air so faint with nourishment, why did the atmosphere press so feebly in? This land, it was a weak, a dying land, its life-administering gasses almost spent.

Amidst slithering, amidst scouring approach, the being thought of escape.

How long now had it been here in this barren place? There was no way of telling for the planet's sun appeared and disappeared with insane rapidity, darkness and light flickering in alternation like the wink of an eye.

And, on the ship, the instruments of chronometry were shattered, they were irreparable. There was no context any more, no customized metric to adjust by. The being was lost upon this tenuous void of living rock, unable to do more than forage for its sustenance.

Off in the black distance, the dwelling of the planet's animal appeared, grotesquely angular and peaked. It was a stupid animal, this brainless beast incapable of rationality, able only to emit wild squawking cries and flap its tendrils like the night plants of his own world. And its body—it was too hard with calciumed rigidity, providing scant nutriment, making it necessary for the being to eat twice as often so violent an energy did digestion take.

Closer. The clicking grew louder. The animal was there, as usual,

lying still upon the ground, its tendrils curled and limp. The being shot out threads of thought and sapped the sluggish juices of thought from the animal. It was a barbaric place if this was its intelligence. The being heaved closer, swelling and sucking along the wind-swept earth.

The animal stirred and deep revulsion quivered in the being's mind. If it were not starving and helpless it could never force itself to absorb this twitching, stiff-ribbed beast.

Bubble touched tendril. The being flowed across the animal form and trembled to a stop. Visual cells revealed the animal looking up, distended eyed. Audial cells transferred the wild and strangling noise the dying animal made. Tactile cells absorbed the flimsy agitations of its body.

And, in its deepest center, the being sensed the tireless clicking that emanated from the dark lair where, hidden and shaking, the first animal was—the animal in whose flaccid tendril was imbedded the location cone.

The being ate. And, eating, wondered if there would ever be enough food to keep it alive—

—for the thousand earth years of its life.

He lay slumped across the cage floor, his heartbeat jolting as the man looked in at him.

He'd been testing the walls when he heard the slap of the screen door and the sound of the man's boots descending the porch steps. He'd lunged down and rolled over quickly onto his back, trying des-

perately to remember what position he'd been in while he was still drugged, arranging his hands limply at his sides, drawing up his right leg a little, closing his eyes. The man mustn't know that he was conscious. The man had to open the door without caution.

Les forced himself to breathe slowly and evenly even though it made his stomach hurt. The man made no sound as he gazed in. When he opens the lock, Les kept telling himself—as soon as I hear the door pulled open, I'll jump.

His throat moved once as a nervous shudder rippled through him. Could the man tell he was faking? His muscles tensed, waiting for the sound of the door opening. He *had* to get away now.

There would be no other time. *It* was coming tonight.

Then the sound of the man's boots started away. Abruptly, Les opened his eyes, a look of shocked disbelief contorting his features. The man wasn't going to open the cage!

For a long time he lay there, shivering, staring up mutely at the barred window where the man had stood. He felt like crying aloud and beating his fists against the door until they were bruised and bleeding.

"No . . . no." His voice was a lifeless mumble.

Finally, he pushed up and got on his knees. Cautiously, he looked over the rim of the window. The man was gone.

He crouched back down and went through his pockets again.

His wallet—nothing there to help him. His handkerchief, the

stub of pencil, forty-seven cents, his comb.

Nothing else.

He held the articles in his palms and stared down at them for long moments as if, somehow, they held the answer to his terrible need. There *had* to be an answer, it was inconceivable that he should actually end up out there on the ground like that other man, put there for that thing to—

"No!"

With a spasmodic twitch of his hands, he flung the articles onto the dirt floor of the cage, his lips drawn back in a dull cry of frightened outrage. It can't be real, it has to be a dream!

He fell to his knees desperately and once more began running shaking fingers over the sides of the cage, looking for a crack, a weak board, anything.

And, while he searched in vain, he tried not to think about the night coming and what the night was going to bring.

But that was all he could think about.

**S**HE SAT UP, gasping, as the man's calloused fingers stroked at her hair. Her widened eyes stared at him in horror as he jerked back his hand.

"Elsie," he muttered.

The whiskey-heavy cloud of his breath poured across her face and she drew back, grimacing, her hands clutching tensely at the bedspread.

"Elsie." He said it again, thick voiced, his glazed eyes looking at her drunkenly.

The bedspread rustled beneath her as she pushed back further until her back bumped against the wooden headboard.

"Elsie, I didn't mean to," the man said, dark blades of hair hanging down over his temples, breath falling hotly from his open mouth, "Elsie, don't . . . don't be scared of me."

"W-where's my husband?"

"Elsie, you look like Elsie," the man slurred the words, his blood-streaked eyes pleading, "You look like Elsie, oh . . . *God*, you look like Elsie."

"Where's my husband!"

His hand clamped over her wrist and she felt herself jerked like a flimsy doll against the man's chest. His stale breath surrounded her.

"No," she gasped, her hands pushing at his shoulders.

"I love ya, Elsie, I *love* ya!"

"*Les!*" Her scream rang out in the small room.

Her head snapped to the side as the man's big palm drove across her cheek.

"He's *dead!*" the man shouted hoarsely, "It ate him, it *ate* him! You *hear!*"

She fell back against the headboard, her eyes stark with horror. "No." She didn't even know she'd spoken.

The man struggled up to his feet and stood there weaving, looking down at her blank face.

"You think I wanted to?" he asked brokenly, a tear dribbling down his beard-darkened cheek, "You think I *liked* to do it?" A sob shuddered in his chest. "I *didn't* like to do it. But you don't know, y-you don't *know*. I was in it, I



was *in* it! Oh God . . . you don't know what it was like. You don't *know!*"

He sank down heavily on the bed, his head slumped forward, his chest racked with helpless sobs.

"I didn't want to. God, do you think I *w-wanted* to?"

Her left fist was pressed rigidly against her lips. She couldn't seem to breathe. No. Her mind struggled to disbelieve. No, it's not true, it isn't true.

Suddenly, she threw her legs over the side of the bed and stood. Outside, the sun was going down. It doesn't come till dark, her mind argued desperately, not until dark. But how long had she been unconscious?

The man looked up with red-rimmed eyes. "What are ya doing?"

She started running for the door.

As she jerked open the door, the man collided with her and the two of them went crashing against the wall. Breath was driven from her

body and the ache in her head flared up again. The man clutched at her; she felt his hands running wildly over her chest and shoulders.

"Elsie, Elsie. . ." the man gasped, trying to kiss her again.

That was when she saw the heavy pitcher on the table beside them. She hardly felt his tightening fingers, his hard, brutal mouth crushed against hers. Her stretching fingers closed over the pitcher handle, she lifted. . .

Great chunks of the white pottery showered on the floor as the man's cry of pain filled the room.

Then Marian was leaning against the wall, gasping for breath and looking down at his crumpled body, at his thick fingers still twitching on the rug.

Suddenly her eyes fled to the window. Almost sunset.

Abruptly, she ran back to the man and bent over his motionless body. Her shaking fingers felt through his overall pockets until they found the ring of keys.

As she fled from the room, she heard the man groan and saw, over her shoulder, the fleeting sight of him turning slowly onto his back.

She ran down the hall and jerked open the front door. Dying sunlight flooded the sky with its blood.

With a choking gasp, she jumped down the porch steps and ran in desperate, erratic strides around the house, not even feeling the pebbles her feet ran over. She kept looking at the silent row of cages she was running toward. It's not true, it's not true—the words kept running through her brain—he lied to me. A sob pulled back her lips. He *lied!*

Darkness was falling like a rapid curtain as she dashed up to the first cage on trembling legs.

Empty.

Another sob pulsed in her throat. She ran to the next cage. He was lying!

Empty.

"No."

"Les!"

"Marian!" He leaped across the cage floor, a sudden wild hope flashing across his face.

"Oh, *darling.*" Her voice was a shaking, strengthless murmur, "He told me—"

"Marian, open the cage. Hurry! It's *coming.*"

Dread fell over her again, a wave of numbing cold. Her head jerked to the side instinctively, her shocked gaze fled out across the darkening desert.

"Marian!"

Her hands shook uncontrollably as she tried one of the keys in the lock. It didn't fit. She bit her lip until pain flared up. She tried another key. It didn't fit.

"Hurry."

"Oh God." She whimpered as her palsied hands inserted another key. That didn't fit.

"I can't find the—"

Suddenly, her voice choked off, her breath congealed. In a second, she felt her limbs petrify.

In the silence, faintly, a sound of something huge grating, and hissing over the earth.

"Oh, *no.*" She looked aside hurriedly, then back at Les again.

"It's all right, baby," he said. "All right, don't get excited. There's plenty of time." He drew in a heavy breath. "Try the next



key. That's right. No, no, the other one. It's *all* right now. There. No, that doesn't work. Try the next one." His stomach kept contracting into a tighter, harder knot.

The skin of Marian's lower lip broke beneath her teeth. She winced and dropped the key ring. With a gagging whimper, she bent over and snatched it up. Across the desert, the wheezing, squashing sound grew louder.

"Oh, Les, I can't, I *can't!*"

"All right, baby," he heard himself say suddenly, "Never mind. Run for the highway."

She looked up at him, suddenly expressionless. "*What?*"

"Honey, don't stand there for God's sake!" he cried, "*Run!*"

She caught the breath that shook in her and dug her teeth again into the jagged break on her lip. Her hands stopped shaking and, almost numbed, she tried the next key, the next, while Les stood watching her with terrified eyes, looking over her shoulder toward the desert.

"Honey, don't—"

The lock sprang open. With a breathless grunt, Les shoved open the door and grabbed Marian's hand as the lathing sibilance shook in the twilight air.

"Run!" he gasped, "Don't look back!"

They ran on wildly pumping legs away from the cages, away from the six-foot high mass of quivering life that flopped into the clearing like gelatine dumped from a gargantuan bowl. They tried not to listen, they kept their eyes straight ahead, they ran without breaking their long, panic-driven strides.

The car was back in front of the house again, it's front bashed in. They jerked open the doors and slid in frantically. His shaking hand felt the key still in the ignition. He turned it and jabbed in the starter button.

"Les, it's coming this way!"

The gears ground together with a loud rasp and the car jerked forward. He didn't look behind, he just changed gears and kept pushing down on the accelerator until the car lurched into the lane again.

**L**ES TURNED the car right and headed for the town he remembered passing through—it seemed like years before. He pushed the gas pedal to the floor and the car picked up speed. He couldn't see the road clearly without the headlights but he couldn't keep his foot up, it seemed to jam itself down on the accelerator. The car roared down the darkening road and Les drew in his first easy breath in four days as. . .

*the being foamed and rocked across the ground, fury boiling in its tissues. The animal had failed, there was no food waiting, the food had gone. The being slithered in angry circles, searching, its visual cells picking at the ground, its sheathed and luminous formlessness scouring away the flaky dirt. Nothing. The being gurgled like a viscid tide for the house, for the clicking sound in . . .*

Merv Ketter's arm jerked spasmodically and he sat up, eyes wide and staring. Pain drove jagged lines

of consciousness into his brain—pain in his head, pain in his arm. The cone was like a burrowing spider there, clawing with razor legs, trying to cut its way out of his flesh. Merv struggled up to his knees, teeth gritted together, eyes clouding with the pain.

He had barely gained his feet when the crashing, splintering sound shook the house. He twitched violently, his lower jaw dropping. The digging, gouging fire in his arm increased and, suddenly he knew. With a whining gasp, he leaped into the hall and looked down the dark stairway pit.

*the being undulated up the stairs, its seventy ingot eyes glowering, its shimmering deformity lurching up toward the animal. Maddened fury hissed and bubbled through its amorphous shape, it flopped and flung itself up the angular steps. The animal turned and fled toward*

the back steps!—it was his only chance. He couldn't breathe, air seemed liquid in his lungs. His boot heels hammered down the hall and through the darkness of his bedroom. Behind, he heard the railings buckle and snap as the being reached the second floor, bent itself around into a U-shaped bladder, then threw its sodden form forward again.

Merv flung himself down the steep stairway, his palsied hand gripping at the railing, his heart-beat pounding at his chest like mallet blows. He cried out hoarsely as the pain in his arm flared again, almost making him lose consciousness.

As he reached the bottom step, he heard the doorway of his bedroom shattered violently and heard the gushing fury of the being as it

*heaved and bucked into the backstair doorway and smashed it out to its own size. Below, it heard the pounding of the fleeing animal. Then adhesiveness lost hold and the being went grinding and rolling down the stairway, its seven hundred feelers pricking the casing and scraping at the splintering wood.*

*It hit the bottom step, crushed its huge misshapen bulk through the doorway and boiled across the kitchen floor.*

In the living room Merv dashed for the mantel. Reaching up, he jerked down the Mauser rifle and whirled as the distended being cascaded its luminescent body through the doorway.

The room echoed and rang with sharp explosions as Merv emptied the rifle into the onrushing hulk. The bullets sprayed off its casing impotently and Merv jumped back with a scream of terror, the gun flung from his hands. His outflung arm knocked off the picture of his wife and he heard it shatter on the floor and, in his twisted mind, had the fleeting vision of it lying on the floor, Elsie's face smiling behind jagged glass.

Then his hand closed over something hard. And, suddenly, he knew exactly what to do.

As the glittering mass reared up and threw its liquidity toward him, Merv jumped to the side. The mantel splintered, the wall cracked

open.

Then, as the being pulled itself up again and heaved over him, Merv jerked out the pin of the grenade and held it tightly to his chest.

*Stupid beast! I'll kill you now for—*

**PAIN !!**

*Tissues exploded, the casing split, the being ran across the floor like slag, a molten torrent of proto-plasms.*

*Then silence in the room. The being's minds snuffed out one by one as tenuous atmosphere starved each tissue of its life. The remains trembled slightly, agony flooded*

*through the being's cells and glutinous joints. Thoughts trickled.*

*Vital fluids trickling. Lamp beams giving warmth and life to pulsing matter. Organisms joining, cells dividing, the undulant contents of the food vat swelling, swelling, overpowering. Where are they! Where are the masters who gave me life that I might feed them and never lose my bulk or energy?*

*And then the being, which was born of tumorous hydroponics, died, having forgotten that it, itself, had eaten the masters as they slept, ingesting, with their bodies, all the knowledge of their minds.*

• • • THE END

## WORTH CITING

A NEW mark in the long history of communications is the first trans-ocean telephone cable. Stretched 2,300 miles across the ocean floor from Nova Scotia to Newfoundland to Scotland it will be another step in bringing the New World and the Old together. In terms of time New York and London will be a mere 4/100ths of a second apart.

Plans call for two cables laid about ten miles apart and able to carry as many as 36 separate conversations simultaneously. Yet the cable itself will be no thicker than an ordinary lead pencil.

Three miles down on the ocean floor the cable will be impervious to the atmospheric conditions that now wreak havoc with radiotelephonic communication. Jamming will be impossible, and the danger of having enemy agents hear secret messages will also be obviated. Since the exact location of the cable will be a security secret, tapping the line or cutting it will scarcely be possible without detection.

Our citation of the month goes to the combined international effort that has made this 100 year old dream possible; and to the American Telephone and Telegraph Co., the British Post Office, and the Canadian Overseas Telecommunication Corporation who have combined their skill and resources for this project.

*To the three survivors of Spaceship Arcturus there was, suddenly a point of no going on and no going back. Which left only one course—that of exit. And sometimes it depends on how you make that exit.*

# CONTACT POINT

By Poul Anderson and  
Theodore Cogswell

Illustrated by Kelly Freas

**B**YOND the ports there was darkness and loneliness and a million swarming stars. Earth had grown to a bright blue crescent, the size of her moon seen from the ground, the size of the sun-disk that blazed through the darkened starboard ports. The ship was a humming metal shell falling toward the planet which sent her forth, a meteor driving through a night of immensities. There were only three men left, and the huge solitude was heavy on them.

They were crowded into the forward compartment—the pilot, Kurt Keeler, at the controls; the navigator, Duncan Carr, bent over

his instruments and plotting board; the biologist, Edward Brian, working over a microscope at his table. Kurt's voice was the only human sound in the thrumming cabin—bored and monotonous, droning into the radio microphone before him.

“Spaceship Arcturus calling Spaceport Chicago. Spaceship Arcturus calling Spaceport Chicago. Spaceship. . .”

Brian picked up a couple of test tubes and went out, closing the control room hatch behind him. Kurt's monotone went on: “. . . approximate distance, eight hundred and forty thousand miles out. Esti-



mated time of arrival, thirty-two hours. Over."

He sat listening for a moment, but the loudspeaker remained silent. His right fist clinched irritably; all their nerves were rubbed raw by the long journey and the death that lay behind them and the death that stirred within them. For another instant he sat motionless, a tall rangy man of thirty-eight, lean faced and cold-eyed. Then he swung suddenly around in his chair and his hard voice broke the stillness: "Damn it, Dunc, I told you your figures were off. You haven't been worth a damn since we left Alpha Centauri. Ten to one we don't hit radio contact point before 0500."

The navigator's slender figure stiffened in its drab overalls, and his lips parted in the boyish face as if to form words. He closed his mouth again, tightly, as Brian came in with a hypodermic needle.

"Time for your shots, boys," said the biologist.

Wordlessly, the other two rolled up their sleeves. He swabbed their arms with alcohol and thrust the needle into Duncan's skin.

"Anything new, Doc?" asked Kurt.

"Yes," said Brian. He took the needle from Duncan's arm and prepared to stick the pilot. "Yes, there is."

"Ouch!" said Kurt. "Why don't you sharpen that thing?" He rubbed his arm and looked up. His face had not changed its taut expressionlessness, and his voice remained flat as he asked, "What's the story?"

Brian walked over to the micro-

scope and adjusted it. "There she is, Kurt," he said, motioning them over. "I know its refractive index and its biaxial interference fringe . . . and that's about all."

"Yeah," grunted Kurt, "but what is it?"

There was a hint of a twinkle in Brian's eyes. "A rectangular parallelepiped bounded by pinacoidal faces. Optically anisotropic."

"Oh, yeah," muttered Kurt. "Sure. Of course!" His tones roughened a little. "Okay, Doc, climb off it. So we picked up some dust in the Alpha Centauri system and we aren't feeling so good. Why make big words out of green dirt?"

Brian was suddenly serious. "Because big words is all I can make out of it. It's a strange sort of radioactive life, a crystalline virus that attacks any organic tissue it comes in contact with. And there doesn't seem to be any stopping it once it gets going. It's not good." He went out again, shaking his head, before they could ask him any more questions.

"Doc has his wind up again," said Kurt with a shadowy smile. He looked into the microscope and sang in a lugubrious voice:

"Oh, the dust blows in  
And the dust blows out. . ."

Duncan shoved him aside and stared down the barrel of the microscope.

"What's your rush, Dunc?" asked Kurt softly. "It won't run away. Even if it did, there's lots more where that came from. The ship's full of it." He walked over to the wall, ran his finger along the

molding, and came back holding it erect. It was green with the dust. "Here, want some?"

Duncan pushed his hand away and looked up from the instrument. His face was haggard. "So that's what it looks like."

Kurt grinned at him, without much humor. "Purty, ain't it? Buck up, kid. You ain't a man until you've had it once." He laughed and seated himself before the controls again, cocking his feet up on the panel. He began to sing, tunelessly.

"Oh, I left my girl at the space-  
port,  
Left her at the spaceport gate;  
Said, 'I hate to leave you, honey,  
But the *Lunar Queen* won't wait.'

I'm outward bound,  
But I'll soon be back.

Now when I blast off from Den-  
ver  
With all of my jets flaring red,  
I'll set my course for the rising  
moon  
That floats out there cold and  
dead.

I'm outward bound,  
But I'll soon be back. . ."

Duncan had returned to his computations. He lifted his voice now, snappishly: "Pipe down, will you? I've got work to do."

"What's the matter, kid?" grinned Kurt. "With a voice like mine, you're lucky you don't have to pay admission." His voice rose to a harsh bellow.

"OOOOOOOH, I ain't going to hold her to three G's,  
I ain't going to hold her to four,  
I'm going to make this flight faster  
Than she's ever been made before.

I'm outward bound. . ."

Duncan yelled this time. "*Shut up!*"

"Aw, relax," said Kurt. "You've been so jumpy lately there's no living with you."

"That's a good one," snapped the navigator. "You mean dying with me, don't you?"

"Take it easy," said Kurt. "Relax before you blow a jet. Doc's taking care of us."

"Sure he's taking care of us." The tone was ragged. "Just like he took care of Ames and Livingston. Dr. Brian's Universal Panacea. A shot in the arm every three hours cures everything. With the Court's permission, I hereby submit as Exhibit A, three satisfied corpses."

"Two, Dunc," said Kurt. "Shirey wasn't sick and you know it."

"I suppose he threw himself out through the airlock because he had claustrophobia? He knew he was going to die . . . just like we're all going to die." The young man's voice climbed toward a scream. "If we had any guts we'd blow the ship up and get it over with instead of sitting around waiting for that green virus to claw the life out of us!"

"Climb off it, Dunc," said Kurt. "Climb off it." He got up from the controls and went over to the navigator and slapped him on the back.



"Look, kid, forget all that. Doc will get us through. We're almost home." He skinned his teeth in a grin. "Once I get this starwagon in for a landing we'll be sitting on top of the world. Think of it, Dunc! The first men to make the big jump!" He shrugged. "Sure we lost three guys. They knew the chance they were taking when they signed on. What matters is that we got there and some of us are getting back to talk about it."

"We got there," said Duncan dully. "Yeah! And we got something to tell them. About Ames standing out on the green desert with the dust swirling around him and us goggling down at him through the port. And Doc yelling, 'Crack open the champagne' when the kid came clumping back into the ship with the dust all over his suit. 'A toast to the first man to set foot on a planet of another star!' He raised an imaginary glass and dashed it to the floor in a hysterical gesture. "And all the time. . ." His voice cracked. "All the time the dust was spreading through the ship and working its way down into our lungs and. . ."

Kurt grabbed him by the shoulders and shook him. "Stop it!" he barked.

". . . and eating away at our insides with sharp little teeth!"

Kurt gripped him by the front of his tunic and slapped his face, back and forth. The sharp cracks seemed to fill the cabin. "Damn it, I told you to stop. One more whimper and you're going to get my fist instead of the back of my hand. Doc's keeping us alive, isn't he? You don't hear him crying about

what might happen, do you? He'll fix us up if you give him half a chance. Now sit down at that plotting board and give me a corrected course!"

Duncan drew a shaky breath and was silent.

Kurt went back to the controls and sat down, easing himself into the pilot's chair like a big cat. "I've got a blonde waiting for me Earth-side," he said cheerfully, "and the sooner I can get this mechanized sky-rocket in for a landing, the sooner I can start putting some of my theories into practice."

Duncan returned to his plotting board. His fingers still trembled as he picked up his slide rule. After a moment he looked up. Kurt, bent over his own instruments, didn't see his shamefaced air.

"Kurt." It was almost a whisper. "Yeah?"

"I'm sorry. I didn't mean to let myself go like that. It was just that I got to thinking about Ames and Livingston—and Shirey—and—"

"Forget it, kid. Anyone's apt to go off half-cocked once in a while. Hell, I remember once back in '84, just after the Venusians atomicked New York. I was flying patrol in an old Tri-Jet Cyclone, cruising along easy-like, minding my own business, when all of a sudden down out of the sun came—"

"Well?" Duncan's tone brought Kurt around sharply. Brian had come back in.

The pilot studied the biologist with a narrowing gaze. His grey hair was ruffled, and there was a terrible quiet desperation in his eyes.

"Come here, Duncan." Brian's

voice was very soft. "You too, Kurt."

They came over to his worktable. His eyes held theirs. "Boys," he said slowly, "I'm afraid I've got some bad news for you."

Duncan's breath rattled in his throat. "The dust?"

Brian nodded and gestured toward the microscope. "Those little specks have a structure like nothing I've ever seen, but they're alive—alive with an eager life that keeps growing and spreading. I've tried everything and I can't stop them. The crystals keep growing and dividing, and then growing again. It doesn't make sense, Dunc." He shook his head as if in puzzled bewilderment. "It just doesn't make sense."

Kurt grinned lop-sidedly. "What we need is a large family size bottle of Listerine," he said. "Want me to run down to the corner and get one, Doc?"

"It isn't funny, Kurt," said Brian. "I can take care of the radioactivity. The shots I've been giving you do that." He sighed, "If I had realized what was up sooner, I might have been able to save Ames and Livingston. Perhaps it's just as well that they went when they did."

"What do you mean, 'just as well'?" asked Duncan slowly.

"I think maybe he means that he can keep us alive for a while but he can't cure us," said Kurt. "Right, Doc?"

"I'm afraid that that's about it," said Brian. "When the green dust hit our lungs each tiny crystal began to grow and radiate. Blocking off radiation seems to slow down the growth. It will be a long time

yet before they grow big enough to get really hungry."

"How long?" asked Kurt.

"Maybe fifteen years, maybe twenty."

"That calls for a drink." Kurt went over to the wall cabinet, took out a bottle, gulped twice, and came back.

"There's an answer for it somewhere, but answers take time," said Brian. "Sometimes too much time. We've got twenty years. To get inside this thing far enough to find out what makes it tick would take equipment that is still generations in the future. I didn't want to tell you until I was sure."

"So you knew it all along and never told us," said Kurt slowly. "Just let us go on week after week thinking you were going to be able to do something. You shouldn't have done that, Doc. Why didn't you tell us?"

"Would it have helped any?" asked Brian. "Haven't the last months been bad enough?"

"You've got to do something for us," whispered Duncan. "I can't take it, Doc. It isn't death I'm afraid of—it's waiting year after year, knowing that damned virus is rotting away the insides of me—" He looked around wildly. "Maybe Shirey had the right idea. He knew what was ahead of him and did something about it."

"Shut up before I slug you!" said Kurt brutally. He started toward Duncan.

Brian motioned him away and placed his hand gently on the navigator's shoulder. "Listen, son. . ."

Duncan shook him off. "You can't know for sure," he cried.

"You're only one man. Once we get to Earth they'll be able to do something. They won't let us die. They can't. Not after what we've done for them."

Brian tried again. "Duncan, don't let yourself go like this." He placed one hand on the boy's arm. "Go aft and lie down for a while. We're all tired and—"

Duncan slapped down his hand. "Leave me alone, can't you? I can't sleep. How do you expect me to sleep when I have a torch inside me slowly burning and searing the life out of me? And the glow of it coming through my skin so my face looks like a paper skull with a lantern inside." He turned to Kurt. "You know what it's like to undress in the dark and see that hellish light coming from your skin! Standing in front of the mirror watching yourself shine like a rotten mackerel! You know, don't you?" He was almost screaming now. "Don't you?" He broke into a sob. "Look at us!"

He jumped over to the interior light switch and flicked it off. In the sudden darkness the stars loomed enormously, crowding against the ports. And the faces and hands of the three men were limned in blue phosphorescence.

". . . shining like stinking mackerel!"

"Duncan!" cried Brian sharply.

Kurt stepped over to the boy, spun him around, and knocked him to the floor with a short brutal left to the jaw. Then he switched on the lights, pressing back the sardonic stars, and stood rubbing his knuckles.

Brian gave him an indignant

look. Wordlessly the biologist helped the navigator to his feet and led him out of the control room. Kurt looked after him, shrugged, and seated himself back at the pilot board. He fiddled with minor adjustments and began to sing softly to himself.

"Now when I blast off from Denver. . ."

**T**HERE will be no more of that," said Brian sternly as he came back into the control room.

"Okay," said Kurt, without looking up from the controls. "He had it coming though."

There was a long silence broken only by the thrum of the hyperdrive. Then finally the pilot turned around and asked, "You said twenty years?"

"What?" Brian looked up from his work. "Something like that."

"How many years before it would really start to bother a guy?" went on Kurt.

"I'd guess at fifteen." Brian turned back to his work.

"Hell, that's not too bad," said Kurt. "I'm thirty-eight now. Fifteen more will boost me to—fifty-three." He smiled wryly. "No offense meant, Doc, but I can't see hanging around until I'm as old as you are. What good's a woman to a guy sixty?" He added quickly: "Yeah, I know you've got your microscope, but in my racket a guy needs what I've got now, and what I've got now I won't have fifteen years from now. Me, I've got no kick coming. Most of the guys I started out with are pushing up daisies now." He rubbed his chin

thoughtfully. "Funny thing, the kid back there. On the way out and during landing he was as solid a character as you could ask for. But ever since Ames and Livingston went west, he's been falling apart at the seams. I'll bet he's tossing around on his bunk right now trying to work up enough guts to knock himself off."

Brian looked up, alarmed. "You don't think he would?"

"Relax, Doc," said Kurt as the biologist started for the door. "I've seen kids like him go psycho before. It takes them a week to work themselves up to the point where they can really face the idea. When they do they usually leave enough farewell notes scattered around so that their friends will be sure and reach them in time."

"I don't know," said Brian uneasily.

"Forget it," said Kurt. Then slowly: "You know, I never could understand people like Dunc and Shirey. Shirey blows his top and goes off the deep end before he's really sick at all, just because the other two went out in a nasty way. And there's Dunc with fifteen or twenty sure years ahead of him, getting his wind up so that there's no telling what he might pull next." He added cheerfully, "Complicated organic structure or not, once Science Center gets to work on the dust, they'll pop up with an answer in no time. And if they don't, I've still got fifteen years. After that—" He shrugged.

"Kurt," said Brian quietly, "I know you're tough enough to take this so I'm not going to sugar-coat the pill. We can't go back to Earth."

The pilot rose slowly to his feet. "I guess I ain't hearing so good these days," he said. "Would you mind saying that again?"

"I said, 'We can't go back to Earth.'"

"And who's going to stop us?"

"Nobody," said Brian, ". . . and everybody."

"Look Doc," said Kurt, "would you mind going back to the beginning and starting all over?"

"It should be obvious, Kurt," said Brian. He checked off on his fingers. "Ames, Livingston, Shirey, Duncan, you—" He laughed sadly and looked down at his hands. "—and even the great doctor. Do you think it would stop with us?"

Kurt shrugged again.

"If we ever land," said Brian, "Earth is done for—finished! The dust would spread until there was nothing left but one great glowing sterile desert stretching from pole to pole. You saw what it was like back there. There was a civilization there once that makes us look like cavemen. Where is it now?"

"I don't give a damn where it is now," snapped Kurt. Then with an effort he controlled his voice. "You're leading up to something that's just plain stupid. Be reasonable. Once we get home they'll take care of us. Any guys that had brains enough to cook up a ship that would reach as far into space as this one has, are smart enough to be able to handle anything we bring back."

"Smart enough!" Brian slammed his fist down on the workbench so hard that his instruments jumped. "The Centaurians worked with forces I can't even understand, and

they couldn't save themselves. You saw what was left. Great shining cities rearing up out of swirling clouds of green dust—cities full of massive machinery ready to whirl into motion at the touch of a button—” Slowly, then, he finished, “and not a solitary spark of organic life left on the whole planet! One boneyard in the galaxy is enough, Kurt.”

The pilot's voice was raw. “What the hell do you want us to do, hang a bell out in front of the ship and wander through space until our supplies run out, jangling the damn thing and yelling, ‘Unclean! Unclean!’?”

“Not quite,” replied Brian evenly. “If we stay on course until we reach radio contact point, we will be able to transmit the data we've picked up on to Earth. Once we've done that, the sensible thing to do would be to put the hyper-drive on emergency power, throw the converters out of phase, and wait for them to blow. A quick clean sunburst and then it would be all over.”

Kurt stood silent for a moment and then said in a slow and quiet voice, “I don't mind taking chances. I wouldn't have signed on for this flight if I had. But I told you before that I can't understand guys who commit suicide. I'm not going to toss away fifteen years of my life for nobody, not even you. Doc, we're going in.”

“I'm not going to argue with you,” said Brian. “Even if I have miscalculated, we can't take a chance. I'm going back now to check on Duncan.” He paused at the door, turned, and said sternly, “This ship will not be taken past

radio contact point. That's an order!”

**A**S HE WENT out Kurt stood for a moment staring at the controls, thinking. Then he went slowly and impassively over to his locker, took out a holstered blaster, and strapped it to his side. Pulling the gun out, he checked it carefully and cocked it. Then he stood waiting by the controls. Long slow minutes passed and then at last Brian returned.

The biologist stopped suddenly as he came through the door and saw the weapon. “What's that for, Kurt?” he asked.

“This?” Kurt flipped the gun into the air and caught it deftly. “This is for you, Doc.”

“This is no time for joking!”

“I'm not kidding, Doc.” Kurt said. “There isn't any use in us arguing. Right now you've got a bee in your bonnet that says I'm not going to take this tub in for a landing, and I've got one in mine that says that I am. And my bee—” he waved the pistol “—has a sting. Look, Doc,” he grew almost gentle, “I don't like to give it to a guy without giving him a chance. You just give me the go-ahead signal and I'll put junior here back in his holster where he belongs.”

“You know what my answer is, Kurt,” said Brian steadily.

“Yeah,” said Kurt sadly, “I was afraid of that. I hate to do this, Doc, but it's just one of those things a guy has to do sometimes whether he wants to or not. If you'd like to say a prayer or smoke a cigarette or something before I go ahead, it's

all right with me.”

“There is something I want to say, Kurt, before you—go ahead.” The biologist’s tones were as steady as the pilot’s now. “Do you mind?”

“Course not, Doc. Get it off your chest.”

“When we took off for Alpha Centauri eight months ago,” said Brian, choosing his words carefully, “we were the third expedition to try the jump. The first ship exploded on takeoff, the second had her main drive go out just beyond Pluto; but still when the Arcturus was completed, hundreds of men fought for a chance to go out with her. We six were chosen. Did you ever ask yourself why we came, why we always come?” Kurt shrugged. “It’s an itch, Kurt, a God-given itch that will be man’s salvation.”

“Climb off the pulpit,” said the pilot wearily. “I’m giving you a chance to change your mind, not preach a sermon.”

“Listen, Kurt!” The words came quickly now, alive with urgency. “I’m not pleading for my own life, you know that! But we’ve got something inside us. You can laugh at it. You can even ignore it. But it sent you and men like you blasting out into space. First the Moon, then to Mars, to Venus, and on and on until every planet in our system became part of the heritage of man. And now we’re the first to go racing out light years to become masters of the stars themselves. We’ve just started. Can’t you see that? After all the dark centuries we’re at last beginning to find our way. This heritage of the past, this promise for the future, can not be sacrificed for any man.” He paused,

then: “Living doesn’t mean much to you, Kurt. The life you’ve lead shows that. You can’t murder a whole planet for just a few more years of it.”

“That was a pretty speech,” said the pilot. “But it doesn’t mean a thing. What happened before my time is none of my business. What comes after, I won’t be around to see. What did your blessed humanity ever give me?” His mouth twisted in a snarl. “They drafted me when I was eighteen. By the time I was twenty I was as fine a space killer as the rocket schools could turn out. Guys like you sat back in their labs cooking up new ways to pass out death, and guys like me got medals for doing the job. Sure we reached out and settled the planets. And now—instead of nations, we have worlds at war.

“Listen, Doc, I had a family once. They got it when the Martians blotted out St. Louis. That’s when I signed up again. I had a girl once, too. She was going to school at Stanford. We were going to get married as soon as I could get leave. A space torpedo that was heading down for Frisco got off course and left a big gouged-out place where the college had been.

“You guys had your chance. You could have stopped it—but you muffed it. Now I’ve got my chance and I’m taking it.”

He stopped, gulped, and tried to recapture his calm.

Brian’s eyes were warm with sympathy. “You’ve had a rough go, Kurt, and I know why you feel as you do.” He gave a weary sigh. “As the twig is bent—” His voice trailed off. “But you’ve got to give them a

chance.”

“Chance?” Kurt smiled humorlessly. “Why sure, Doc, I intended to all along. I’ll pass along your formula for the shots. That way they’ll have fifteen years—just like I have. If they can work out an answer by then maybe they’ll have had enough of a scare thrown into them to get together for once. If they don’t—” He shrugged.

“They won’t be able to find it,” said Brian desperately. “They don’t know enough.”

“It’s no go, Doc,” answered Kurt. “You’ve had your say and I’ve had mine. I’m sorry it has to be like this.”

His face was expressionless as his finger tightened on the trigger. A sudden white hot blast roared through the cabin and the old biologist was slammed back against the wall. He hung there for a moment as if suspended in time and then slowly crumpled to the floor. The control room seemed suddenly very quiet, a quiet that was broken as the aft hatch clanged open and Duncan came rushing in. He stood frozen for a moment, staring unbelievably at the tableau, and then moved quickly to Brian and knelt beside him. There was no heartbeat under his hand.

“What did you do it for?” Duncan didn’t look at Kurt as he spoke. Instead he kept staring down at Brian’s body as if he couldn’t yet believe what he saw.

“He wasn’t going to let us go home. The crazy fool wanted to overload the main drive and blow us to hell. I tried to talk to him but he wouldn’t listen to reason. What else could I do?”

Duncan’s breath sobbed in his throat. “You didn’t give him a chance. You blasted him without even giving him a chance.”

The reply was icy. “I gave him a chance all right but he came up with the wrong answer. Now he’s got a hole in him. Who do you want to go with, me—or him?”

Duncan looked into the deep coldness of Kurt’s eyes and began to stammer, “I—I—”

“Think it over carefully, Dunc,” said Kurt. “I’m offering you the twenty best years of your life on a silver platter. You’ve got a lot of living stored up inside you and it would be a shame to waste it.”

“But Doc said that if we landed—”

Kurt brushed his objections aside with a brusque gesture. “When the heat’s on, kid, they’ll produce. They’ll have to. Doc just had his wind up.”

Duncan pointed shakely to the body on the floor. “Haven’t you forgotten something?”

“That?” Kurt shrugged. “Nothing to it. The airlock is still there isn’t it? When we land we tell them Doc cracked up and went the way Shirey did.”

“Easy, isn’t it?” There was a new note in Duncan’s voice that made Kurt look at him sharply. As he watched the boy seemed to grow bigger. He was still uncertain but somehow Kurt sensed that he was no longer afraid. When he continued his voice was steady.

“So you’re the guy that always takes a chance! The great Kurt Keeler, veteran of half a dozen wars. ‘Take-a-Chance’ Keeler the papers used to call you. You’re of-



fering me a way out, but what about Earth? You give me a stacked deck and her a bullet in the back. What kind of a gamble do you call that? Why don't you give those people down there a decent chance?"

Kurt laughed harshly. "A chance? That's a hot one. A chance for what? The system is suffering from a worse disease than anything that's floating around in this ship. There isn't a planet down there that doesn't have its atomic labs running full-blast cooking up bigger and better ones. Why should I knock myself out so that bunch of carrion rats can go on ripping each other's throats out?" He checked himself, regaining control. "There's been too much talking around here. What will it be?"

"The Doc came in to see me after I broke down out here," said Duncan softly. "He talked to me like a father would to a scared kid. After he quieted me down he told me that we couldn't go back to Earth, and then he told me why. When he was finished I wasn't scared any longer because I knew what I had to do."

Kurt's blaster slowly and deliberately centered on the boy's chest. "Which was?"

"Blow up the ship." There was an uneasy silence. "But Doc's dead now—" His voice trailed off.

Kurt relaxed and slipped his gun back in its holster.

"I knew you'd see the light." He bent over Brian's body. "Here, grab his feet. We'll dump him out the airlock and—" He broke off as a warning buzzer suddenly sounded from the communication panel. He went swiftly to the controls and

slipped into the pilot's seat.

"Radio contact point. We'll take care of him later."

There was a blast of static as he switched on the speaker. Duncan's eyes shifted from the still body of the scientist to Kurt's back and then to the controls of the hyper-drive. He seemed trying to nerve himself to action. He made an indecisive step towards Kurt, hesitated, and then with sudden sure swiftness slid up behind him and smashed him behind the ear with one hammering fist. Kurt jerked and sprawled forward across the controls.

The young navigator moved quickly over to the controls of the hyper-space drive. His hands trembling but resolute, he slowly turned the twin control handles past maximum into the area of sudden death. Red danger lights began to blink and the massive warp generators in the rear of the ship began to howl in a rising crescendo. Frozen, fascinated, he watched as the needle on the field tension indicator crept slowly toward the red danger area. One second! Two seconds! Three. It crossed! Sweat stood out on his forehead as he reached for the lever marked *PHASE CONTROL*.

Behind him a head shook and two glazed eyes cleared to a look of sudden murderous resolution. There was a blur of movement and Kurt's blaster leapt into his hand and thudded twice. Duncan was slammed against the bulkhead. His hand still stretching futilely for the phase control, he crumpled to the deck. He was dead when he hit. Kurt looked down at him with a dawning amazement.

"The crazy kid! And I thought

he'd lick my boots for a chance to get back to Earth. He knew he didn't have a chance in a hundred and still—"

He looked at the flashing light on the communciation panel and then down at the body again. "A chance in a hundred."

Suddenly he threw back his shoulders and smashed his fist into the palm of his left hand. The words shouted through the room. "You've earned it. It's a deal!"

He went back to the communication panel. As he reached it, an unintelligible voice came through in a burst of static. He twisted a tuning dial and a bored monotonous voice came through.

"Spaceport Chicago calling Spaceship Arcturus. Spaceport Chicago calling Spaceship Arcturus. Over."

"Hello, Chicago," said Kurt. "This is the Arcturus. Keeler speaking. Looking for somebody?"

"Spaceport Chicago calling—" It broke off in a whoop. "The Arcturus! Colonel! Colonel Rudd! She's back. The Arcturus is back!"

A sound of running feet and excited voices came over the speaker. Kurt sat down before the panel.

"Give me that mike!" The voice was harsh, breathless. "Keeler?"

"Yes, sir," Kurt's voice was emotionless.

"You made it?"

"We made it, sir. Four light years out and four back. Doc's hunch was right. We found three planets swinging around that yellow sun. Cities too—cities and machines. No people though. Alpha Centauri is plumb out of people. But man what weapons. There's a heat beam that

can curl up a man twenty miles away like an ant under a blow torch—a supersonic projector that can churn blood and bone into a frothy pink jello in a tenth of a second."

Rudd broke in urgently. "Cut it!"

"What?"

"I said cut it. Switch on your scrambler—sub-level 16. We're in trouble down here."

"Trouble?"

"Plenty of it! The Martian Federation pulled a sneak attack. Jet atomics coming in from space so fast that our perimeter defenses are saturated. Pittsburgh's gone up already and London damn near got it. We've nailed Marsport but the lice have their launching racks tucked away back in the asteroid belt where we can't find them. Get your scrambler on, and fast! If they get a cross bearing on your transmitter they'll have their fighters out after you in no time. We're so jammed up down here that we can't spare you much in the way of cover. If the stuff you've brought back is as hot as you say it is, we need it and we need it bad."

Kurt dropped all pretence of military respect. His voice was savage as he answered.

"Scrambler, hell! If you want what I brought back, you can have it, but I've got a bit of talking to do first. Doc Brian was a guy who loved something he called 'humanity'—and when the chips were down Dunc Carr did too. What they picked up on Arcturus they meant for everybody to have."

"Kurt, the enemy is listening!"

"Let 'em listen. I'm going to do a little censorship, right now." He

pulled Brian's notes to him and leafed through them rapidly. "Pity though. I've got stuff here that would make your eyes shine like a kid seeing his first Christmas tree."

He tore several sheets out of the notebook and pulled out his pocket lighter and flicked it on. Rapidly he set fire to sheet after sheet and dropped them into the metal basket at his side.

"What's left, like I said, belongs to everybody. Ready Mars? Ready Venus?"

There was a note of desperation in Rudd's voice. "What's got into you, man?"

"That's a good question," said Kurt quietly. "I'm not sure that I know the answer. Ready Earth?"

"Don't be a fool, Kurt. Get off the air! You can't turn against your own planet. You're from Earth!"

"So were the Martians not too many generations ago," said Kurt softly.

There were the harsh tones of command in Rudd's voice as he snapped, "Keeler, I'm giving you a direct order to get off the air."

"Mister," drawled Kurt, "You can take those shiny comets off your shoulder straps and stuff them where they'll do the most good."

Rudd sputtered like a misfiring jet. "Why—"

"Shut up," said Kurt. Doc left a stack of notes behind and I've got a job of reading to do."

"You'll face a general court-martial for this, Keeler," snapped Rudd. "By all that's holy, I'll see you in a Lunar prison pit if it's the last thing I ever do!"

"Listen, Colonel," said Kurt, "if you can find your swivel chair you

might as well take a load off your feet. This is going to take a long time. Now pipe down, here it comes." He shuffled the notes and began to read in a mechanical voice. "23 July. While preparing for landing on Planet A of Alpha Centauri the following atmospheric pressure readings were taken. At forty thousand feet, 1.54 pounds per square inch. At thirty thousand feet, 2.78 pounds per square inch. At twenty thousand feet, 5.27 pounds per square inch. At ten thousand feet, 7.98 pounds per square inch. Landing was made on a low plateau, longitude 37 degrees, 28 minutes West, latitude 39 degrees, 54 minutes North, as reckoned on the Van Dusan Astronomical Projection. Upon landing an analysis was made of the atmosphere. . ."

He read on with a savage satisfaction that the toneless voice could not altogether hide, finishing after the long minutes had worn away:

"But eventually tissue destruction would reach the point where death would be inevitable. I am further convinced that the life structure of the organism is so complex that . . ."

He broke off and his voice returned to normal. "That's as far as Doc got before his—accident. He intended to finish off something like this." He attempted to mimic Brian's careful English. "The life structure is so complex that I believe it would be extremely difficult to develop a curative agent within the estimated twenty-year margin between first contact and complete destruction of all terrestrial life. Therefore, action must be taken to insure that the Arcturus

and what remains of her crew do not return to Earth."

After another pause he said in his ordinary manner, "But Doc not being around to say it, and Dunc not being able to back him up, I, being what remains of her crew, held a meeting with myself. It was parliamentary as all hell. I suggested that 'what remains of her crew *not* return to Earth' be amended by striking out the word 'not', and somehow the amendment was unanimously accepted. I trust all this meets with your approval, Colonel?"

"All right, Keeler, you've asked for it," said Rudd grimly. "You'll be intercepted by our jets before you get inside the orbit of the moon. And when you are, may God have mercy on your soul."

There was a strange softness in Kurt's reply: "You know, Colonel, I never thought much about God, but if there is one, I've got a hunch He's grown tired of us. I don't think he wants us around any more." His voice changed suddenly, bitterly. "Asked for it. Yeah, I guess I did. I could have slipped in at night, landed back in the bush somewhere, and you wouldn't have known about it until the dust started biting into you!"

He looked out the port, out to the distant soft glowing pearl that was Earth and to the thronging immensity of the stars beyond, to the remote shimmer of the spiral

nebulae, universe beyond universe, the undying frontier, world without end. His voice strengthened. "But two men died tonight that could have kept on living for a long time, died so that Man might have a chance. You're getting it so make the most of it. It's your last one."

The defiance in his voice strengthened as if something of the shining cold immensity beyond the ports had flowed into him, as if he were suddenly a god walking between the stars.

"Listen down there. This is it. This is the big showdown and I'm dealing. I'm the Almighty *IT* and I'll play tag with your space fleets from here around the Milky Way. You, Mars! You, Venus! You, Earth! Are you still snarling at each other? Get down on your knees and start praying to the God that made you. And send up your squadrons along with your prayers. Come and get me, because I'm coming in!"

He paused a moment, waiting for an answer, but there was only the dry whisper of static. He looked out to the stars, and down to the blue phosphorescence of his hands, and his voice grew flat and mechanical. "Spaceship Arcturus ending transmission. Approximate position, seven hundred and eighty thousand miles out. Estimated time of arrival, twenty-nine hours and thirty minutes.

"Over . . . and out."

• • • THE END

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WHAT IS YOUR SCIENCE I.Q.? (*Answers*): 1, Uranus. 2, Liquid. 3, Deutrons. 4, Ursa Major. 5, Ecology. 6, Vega. 7, Nineteen. 8, Leo. 9, Primordial. 10, Arcturus. 11, Velocity. 12, Elliptical. 13, Cetus (constellation).

*The atomic and hydrogen bombs are getting most of the headlines but the really big news—the good news of our atomic age for the average citizen—is being quietly made in the laboratories of industry and health throughout America . . .*

## TODAY AND ATOMICS

An IF Fact Article

By M. T. Kay

**T**WO CONTRACTORS were in something of a dilemma. A spanking new house they had put up had sprung a leak—not a simple roof leak but a hidden one in the heating system buried in the concrete floor. Somewhere in the maze of pipes, buried in tons of rock-hard concrete, the boiler was losing a gallon of hot water every ten minutes.

“I can’t understand it,” one of the contractors said. “We tested that whole system before the cement was poured.”

The other viewed the situation hopelessly. “Well, that’s where it is. So we just start ripping up the tile. Maybe we can find a wet spot.”

“And if you don’t?”

“Then we’ll just have to rip the whole ——— floor out!”

Ripping up the thick concrete floor would have added thousands to the cost, which would have been

out of their own pockets, and the owner would have been delayed another month or so before he could move in. But, fortunately. That wasn’t the way the contractors had to solve their problem. Before the wrecking crew arrived, their problem became known to a firm of nuclear engineers who recommended the use of radioactive isotopes in pin-pointing the leak.

The nuclear engineers put a small amount of the radioactive substance in the water of the heating system. Then it was circulated through the piping in the cement. A geiger counter would have gone crazy in that house. After a few minutes, the system was drained and the piping flushed. Now a geiger counter found only one hot spot, the concrete at the point where the water was seeping into the cement.

Only a couple feet of concrete

had to be chipped out. Without the use of this isotope hundreds of feet of flooring might have been ruined before the leak had been found. The owners moved in on time and the contractors saved a lot of money.

The atomic age is here. Big job or little job, in every phase of life, it's helping everybody toward an easier existence. Even the "con" man has entered the field. Reports are already coming in of sharp operators taking advantage of the public's gullibility to pass off photographic film as a detector for Uranium prospecting.

Our new atomic age started when a small group of men tried to identify the atoms, the building blocks of nature. They found oxygen, nitrogen, silicon, chlorine and the other elements. Then they started putting them back together to give us textiles, cleaning compounds and new foods. From the ninety-three basic elements they have built over a half a million different compounds.

Science was coming to a standstill when Becquerel discovered radioactivity and called the rays that were coming out of the atoms "Becquerel Rays". Later, when Rutherford found that there were three kinds of rays in the "Becquerel Rays", his assistant suggested calling them the "A, B, and C Rays".

"What?" Rutherford snorted. "Are you illiterate? We'll call the 'Alpha, Beta, and Gamma Rays'". And so the Greek curtain was pulled down over radioactivity.

You understand why, of course. Anything new has to be made mys-

terious. If it isn't, people won't appreciate your discovery.

There was power in those radioactive materials. Those early experimenters could feel it. Radioactive materials were warm to the touch. Immediately, they envisioned it as a fuel and tried to speed up the reaction. They heated it, cooled it, chopped it up, tried catalysts, but none of their chemical tricks worked. Nature went along in her own unhurried way; man just couldn't push her.

Then they began to realize that there were different kinds of atoms in the elements. There was a radioactive carbon atom and a stable type. The atoms that were radioactive were changing into atoms of a different element. Man tried his hand at duplicating nature's feat and built expensive machines to transmute the elements. Before 1940, though, you could put all the atoms man had changed into a thimble, and all the entries in the economic ledger were red.

The discovery of the chain reaction brought the reactor into being. High density neutron beams in the reactor were more powerful than anything man or nature could make—and the race to make new atoms was on.

Nowadays you can get just about any of the known atoms you want. In most cases, they are not exorbitantly expensive. Standard samples can be had for experimental purposes for a reasonable price.

But there are still more kinds of atoms that are needed. We need a good radioactive oxygen atom. It would help biologists trace the path of water and carbon dioxide

through the plants. The plants can make sugar out of water, sunlight, and carbon dioxide. Man would like to know how they do it. If we knew we would not be dependant on nature for all our food. From the sugar you can make alcohol too, and then you wouldn't have to worry about the oil fields running dry either.

Making sugar isn't the only dream the scientists have. They want to know how our bodies put sulphur, phosphor, calcium, and iron together to make living cells. This could mean new legs for the cripple, new eyes for the blind, new ears for the deaf, new teeth for the toothless. Most of the lower forms of life can rebuild lost and damaged parts of their bodies. Somehow, for higher forms of life, this was lost in evolution. If enough is known about how our bodies live, some genius may come along to find out how to restore this miracle to us.

**IMPOSSIBLE?** No. If you demand it from science, you will get it. Our grandfathers demanded faster ships and we got our ocean liners. They demanded greater longevity and we got that too. In Caesar's day, a man of thirty was old. Now a man of thirty is just getting started. You demand it—science will give it to you.

It takes a genius to make sugar or to discover a way to help our bodies grow new limbs, but the ordinary man can use these tools too.

For many years men have been stationed in the mountains to measure the depths of the snowbanks.

This information is needed. If the snowfall is light, the dams have to hold all the water that comes down in the spring for next summer's crops. If the snowfall is heavy, the water level in the dams must be lowered to provide the capacity necessary for controlling the spring floods.

These men were lost to us for the most part of a year. They could have been employed in industry, building cars, houses, appliances, etc. Now the atomic age has released these men. Instead of man power, a new machine measures the snowfall in the mountains. It has a small piece of radioactive cobalt buried in the ground and a counter hangs in the air over it. The radiation detected by the counter is proportional to the amount of ice and snow between it and the cobalt. The reading of the counter is relayed by radio to civilization.

Each new machine of the atomic age can be evaluated by estimating the number of man-hours saved or by the reduction in price of a product. If it does one of these two things, our standard of living goes up.

A new drug is being prepared for the market. How good is it? How fast does your body absorb it? How much is used? How much lost?

Radioactive tracers give the manufacturer the answer. The original drug may have been a calceate in the laboratory, but the atomic age tells the maker to use the sulphite form. The result is a better product for you.

A large chemical plant may be making dyes, and successfully too. Their product is selling. The plant



is operating five days a week. But are they as economical as they really can be? Are they working depleted chemicals too long? Should the reaction be kept at 150°F or at 162°F? Radioactive tracers can give the management the answer. Part of the savings in cost can go into higher wages for the workers. This is the kind of wage increase that does not lead to inflation.

These things, more than the atom bomb, will affect your life in the years to come. They have already made their influence felt. It may be a while before we get back the billions of dollars that have been poured into the program, but the dividends are trickling in.

Don't say, "I'm a salesman, this isn't going to affect me." Four years

ago that man in the mountains who measured snowdrifts probably felt that he was the last person the atomic age would reach. All of us are being nudged and pushed by the new era. Sometimes you can trip over a pot of gold, as was the case in electroplating companies who found that the water in their vats became rich in heavy hydrogen, and heavy hydrogen brings a good price these days.

You might lose your job in the new times at hand. Impersonal people call this "economic adjustment". In this case you've just stubbed your toe. But whether you're picking up the gold or nursing a sore toe, you can look to a different and better life in the atomic future.

• • •

## LOOKING AHEAD . . .

IN THE SEPTEMBER ISSUE you're going to be treated to another of Winston Marks' entertaining yarns entitled *Test Colony*, a new novelette about a native of space named "Joe" who became the "father of his country" . . . And, if you are ever worried over your efficiency, read James McKimmey's *Confidence Game* and rest easy! You won't find a better tale to illustrate that old adage about "enough being enough" . . . E. G. Von Wald, who has a rare touch for satire, presents another chuckle-provoking short story about a day when people who cooperate (even biologically!) are unlawful. It's called *World Without War* . . . Plus Robert Sheckley's *The Battle*, Dave Dryfoos' *Waste Not, Want*, Fox B. Holden's *Gift for Terra*, R. E. Banks' *The Work-out Planet*, and other stories and features that, as usual, provide the best in science fiction entertainment. Ask your newsdealer to save you a copy of *IF* every month!



**SAMPLING ORE**—These two explorers are extracting ore samples from rock using an intense heat, the flame being similar to that of an acetylene torch. Many of the Moon's minerals are expected to be akin to those of Earth, but scientists anticipate some of which we have never heard. All samples dug up, or burned out, will be taken to the laboratory in the reconnaissance ship to be analysed and studied before any attempt is made to mine them on a large scale.

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