

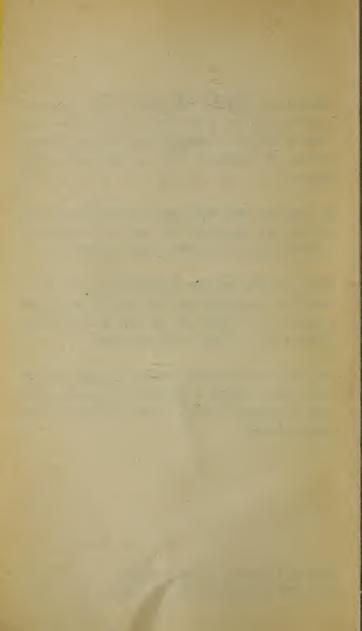
Thirty-two days before the earth's supply of oxygen is due to give out, a tiny band of men and women make a desperate attempt to prevent the transformation of humanity into a fluorine-breathing species.

In a society where mates are matched by computer and sexually aligned for life, one man's audacious—and ingenious—rebellion triggers revolution.

Hypnotic hallucinations overpower the crew of an earthbound spaceship, and the men find themselves caught up in a battle of wits with a deadly non-human race on a planet light years away.

In her search for sunken treasure, a young woman comes upon a Silkie, a being that is part fish, part man, can change its shape at will—and has a very strange request.

THE BEST OF A. E. VAN VOGT is an original POCKET BOOK edition.



THE BEST OF A. E. VAN VOGT

by

A. E. VAN VOGT

THE BEST OF A. E. VAN VOGT

POCKET BOOK edition published July, 1976



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AH, CARELESS, RAPTUROUS VAN VOGT!

"The right to buy weapons is the right to be free."

—The Weapon Makers

Alfred Elton van Vogt, a Californian-by-way-of-Canada, sold his first story, "Black Destroyer," to John Campbell in early 1939, and subsequently became identified with five or six other writers (Heinlein, Asimov, Kuttner, Del Rey, Hubbard, Leiber) as fixtures of the first so-called "Golden Age" of science fiction. Alfred Elton van Vogt may be the most difficult of all science-fiction writers to judge. So much of van Vogt's work, reread after many years, seems to work in terms which are sub- or trans-literary; so much of his power seems to come not from sophisticated technique and/or pyrotechnic style as from his ability to tap archetypal power, archetypal "them," and open up veins of awe or bedazzlement that otherwise are found in love or dreams.

This is not to call van Vogt incompetent; he is anything but. Indeed, he was from the beginning a competent commercial writer with a natural gift for the medium of science fiction and an extremely conscious awareness (rare enough in popular fiction) about the effects he sought and the methods he used. But no display of mere competence, no explanation of awareness or measure of talent, can account for the effect that van Vogt's early work—from 1939 to 1945, say—had upon his audience and has to this day.

What van Vogt had then was nothing less than the ability to deliver (a) total alienness within (b) a hugely panoramic

background that (c) seemingly lacked reason and yet came together to (d) end by making total, if terrifying, sense. In the typical van Vogt plot—a plot so characteristic and familiar to such a wide audience that it is entitled to no other description—the hero is likely to find that the invisible and malevolent enemy that he had been battling from one end of the cosmos to the next was a member of the very organization that had sent him out to defeat the enemy, and that all of his struggles were, therefore, exercises in surrealism and meaninglessness. (Van Vogt might have been the first of the postwar American novelists, it seems; his vision foreshadowed modern absurdity.) In another typical van Vogt plot an alien sets out to destroy humans for no other reason than that it is an alien's duty to kill humans, and one can no more rationalize or reason with this malevolence than one can talk away the Angel of Death. Or, as in his famous The World of Null-A and The Players of Null-A, the protagonist, let alone his situation, may be indefinable, shattered into fragments by the consciousness of the malevolent Overlords.

All of this was done in an offhand, straightforward, understated style that somehow made the most appalling events and implications matter of fact ("This is the race that will rule the Sevagram;" "The alien whimpered and grew yet another arm") and that created what Brian Aldiss has called the fine, careless rapture of the early van Vogt, an artist of the commercial medium who went away into other things for almost a decade and a half and who returned in the midsixties with a different kind of work, a work that by no literary standard can be called inferior, but one that (and I am sure that van Vogt would be the first to admit this) lacked the early sense of mystery, impact, influence.

That impact has yet to receive satisfactory assessment. Science fiction, although maturing as a literature—at least the cliché is that it is maturing; sometimes I am not so sure of this—still has little critical literature. What critical literature there is—Budrys, Blish, Knight, Russ, Panshin—has usually ignored or under-assessed van Vogt, preferring to place him routinely within the "Golden Age" format and then dismiss the unique and individual impact of his work, which strikes me as having gone far beyond that of any of

his contemporaries in its uniqueness. Heinlein, Asimov, Del Rey, Kuttner are marvelous writers making their contributions as a group to a body of literature; van Vogt is standing off by himself building something very personal and unique. His work is neither inferior to nor above that of his contemporaries; it simply cannot be judged in the same away. Above all, van Vogt is to himself.

One of the reasons for my sympathy for this writer is that thirty years later I think that, for better or worse, I have done the same kind of thing in contemporary science fiction. I don't know whether I'm better or worse than my contemporaries, nor do I particularly care—my work is

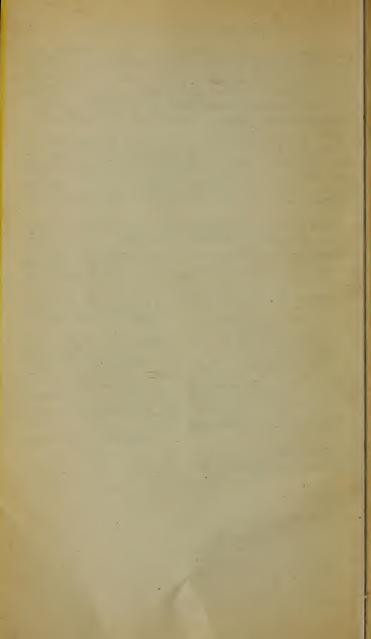
sui generis.

Good stuff here, although I would like to see "The Weapon Shops" or "Black Destroyer." But "The Rull," a largely ignored story in its own time and a forgotten one now, has tremendous power, and may be the best single piece that van Vogt has ever written. "Home of the Gods" is a vintage work from his late early period; it is part of an important series, a work of historical as well as imaginative accomplishment. And the work post-1965 is ample proof that his hand has lost not its cunning.

No, if there is any loss it is within us for what we were, for what van Vogt showed us to be capable of feeling many years ago. We go on and he goes on and in its sad and stricken way so does the world, but that work remains. It is alive, immutable, still in the vastness of our recollection, suspended: like a bird, like a stone. I salute this man. He is irreplaceable; he is incontestably alive.

-BARRY N. MALZBERG

Teaneck, N.J. September 10, 1975



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INTRODUCTION

I begin this collection with a serious problem. I wish to quote a critical comment on my stories.

My problem is that like all science-fiction writers I am definitely reluctant even to read any negative criticism of

my work, let alone quote it.

I propose to handle this dilemma by what might be called a gradational scale approach. I shall start by omitting that portion of the review which implies that there are aspects to my stories that are less than optimum.

Here is the excerpt, edited by me:

... A. E. van Vogt's work has a raw power that has never been equalled in science fiction. His protagonists have an elemental leashed fury, a Satanic madness, that make other fictional characters seem very small and pale by comparison. . . .

Of course I realize that the term "raw power," as used, means the work has a primitive, unsophisticated—by the

standards of the critic-story energy.

"Raw power" writing derives from pulp style. Until Mc-Luhan differentiated a hot medium from a cool one, no technical analysis of "pulp" had ever been made. Pulp writing has a long and uneven history; the term "pulp writing" can refer to stories that are very bad and also to fiction that has in it an unusual vitality.

Are the people who enjoy pulp writing lesser human beings, as Norman Spinrad maintains? And can it be that the readers of Spinrad are the only real people of this world?

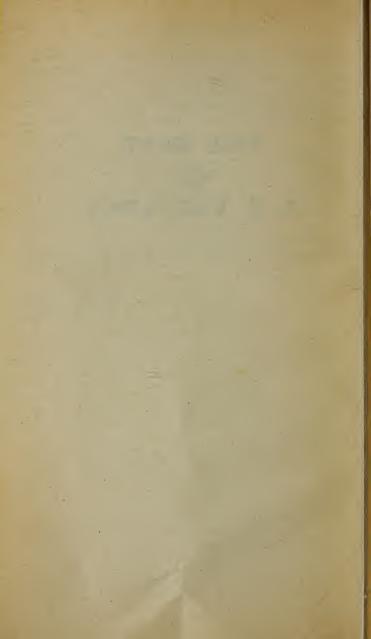
Spinrad seriously believes that the dissidents of the 1960s—presumably including the LSD and marijuana imbibers—are the only individuals on our planet who are living meaningful lives. The rest of us—the vast majority—are a kind of mush that manifests some sort of inchoate life impulse. What this mush reads or does is either nostalgia or otherwise without significance.

My feeling is that my pulp writing—that is, unreality writing—transcends such easy dismissals. Long before McLuhan I did things with my style that were designed to make it even hotter. Reading McLuhan brought the problem into focus and convinced me that what is transpiring in this cultish universe of science fiction, in which both Spinrad and I have chosen to labor for a portion of our lives, is of greater importance than is now evident. And in the course of presenting the pieces in this book, I propose to enlarge on my point of view.

-A. E. VAN VOGT

Hollywood, Calif. January 1, 1976

THE BEST OF A. E. VAN VOGT



T SEEMED TO ME THAT FOR THIS "best of" volume the first two stories, at least, should be either new or relatively unfamiliar to the majority of my readers, but that these should also advance my theme, which is that the peculiar qualities of unreality writing have not yet been properly recognized.

Story number one has been published twice. It appeared first in a Roger Elwood antholoy of original science fiction titled Saving Worlds. (I have yet to meet anyone who has read this hardcover book.) The later paperback version of this book appeared under the title This Wounded Planet.

I recently talked to one of the other authors featured in Saving Worlds and learned that he had not even heard of the paperback version. Naturally, he planned to run down to a major newsstand and pick up a copy for his files.

"Don't Hold Your Breath" is a calculated attempt to put a measure of enduring truth into the quaint ecology scare of the past decade. To make sure that the story itself would not become quaint, I made the science-fictional concept far out. More about all that in the afterword.

DON'T HOLD YOUR BREATH

Though the crazy talk had been going on for years, I had got to age thirty-two when it started in earnest. About the change that was coming. No oxygen in the atmosphere after May 11. Thirty-two days from now. Who do they think they're scaring? Not me, Art Atkins. "Make up your mind!" That was mostly what you heard

"Make up your mind!" That was mostly what you heard when you tuned in on any of the media. "Sign into your nearest tent, and do it now before the last-minute rush."

I had my girls, and my game, and my super-swank apartment and the whole luxury bit; and that nonsense was really beginning to be a nuisance. Most of my time with a girl was usually taken up these nights with arguing her out of making a run for the nearest tent.

—For Pete's sake, I pointed out in my most patient manner, there's nothing in a tent but a little more oxygen. Its only a stopgap. I ought to know. I'm one of the contractors that helped build the local one.

After you'd said that a few hundred times to a sobbing armful of gleaming feminine flesh, it got to be pretty boring; and what followed was no longer that great, either.

This morning, the phone rang shortly after ten. When I picked up the receiver, the picture that flashed on the screen was Mona. Mona was my latest addition—added her to my select collection only six months ago. Right now, she was all dressed up.

"I'm dropping out, Art," she said.

"Look," I said, not exactly amused, but playing it straight, "how can a drop-out drop out?"

"Oh, you will have your joke," she said in a miffed tone. On the telescreen, she made that movement of hers. Tossed her golden hair. The first time I saw her do that, it just about drove me out of my mind with erotic excitement; and I wasn't entirely immune to it this minute either. I grew aware that she was speaking again. "I mean," she went on, "I'm going to move into the tent. This air is too much for me."

"You've been listening to those crazy people," I accused.

"I told you not to."

"Well, maybe you'd better listen to them, too," she flashed. It was a moment of uncontrol, and I could see her make an effort to get back into calmness. She managed it, and said, "Next month is the big day, and that's close enough to midnight for me."

"What big day?" I asked, pretending not to know.

I was talking to a blank screen.

I didn't get around to calling her back until afternoon; in case she expected a quick reaction, and a begging Art Atkins, thank you, no. When I phoned, the ringing signal came back many times, but nobody answered. It penetrated finally that maybe she really meant it.

Okay, okay. Grudgingly, I looked up the tent number, and dialed it. A computer voice said, "Sorry to inform you, sir, no personal calls are accepted for tent inhabitants from

the outside except from authorized phones."

I replaced the receiver sort of gently, but grinding my teeth. Finally, I just sat there, shaking my head. It was amazing. Those people out there never failed to do their madness. Always big and first with bastards like that was putting up barriers. Doing something to be difficult. So be it . . . I was finally resigned—let them have their little moment.

I had another thought. I figured suddenly that Mona hadn't really departed all that fast. Just not answering. Being difficult herself. So I threw on some threads and ankled outside.

You ought to see the city that I emerged onto as I came out of my skyscraper apartment building. Down here, a deserted sidewalk. Above, a hazy sky. Not too bad, really. What was bad was, it was hazy all the time.

The street itself was like death. Best comparison, those old pictures of European cities evacuated during wartime, with only patrol vehicles. I stood there; and of course it was

hard to breathe now that I was away from my air conditioning. Hot, too. After five, late afternoon; and the temperature still over a hundred. Something to do with an excess of carbon dioxide in the atmosphere.

Suppressing an impulse to gasp, I hesitated. Was Mona really worth it? Quickly, I realized: It's the principle. If you let one mistress get away, next thing another one will be slipping off. And before you know it, you're sleeping alone

for a while.

So Mona had to be the object lesson. I needed to be in a position to say to Hettie, Adele and Zoe, "Okay, sister, take a look at what happens to a dame who had her little heart

set on throwing over Art Atkins."

Where I had come out was a hundred yards from Crest-more Street, a main stem. So I went over there, and just for fun tried to thumb down one of the official tanks—which were all that cruised the streets these days. Ugly things. I suppose if you wanted to breathe a normal amount of oxygen you had to keep it sealed in. And the tanks were the simplest mass-produced machines, with their electric motors and rechargeable batteries and their closed-in front seats.

As usual, no one stopped merely to give a guy a free ride. Since my mind was made up, I held up a twenty-dollar bill to the next tank. He pulled over. I told him where I wanted to go, and he motioned me into his rear seat. No extra oxygen there, but still it was sitting down, and hardly any

demands on the body.

For twenty dollars I often get a ride in the front seat; but I take these guys as they are. Once in, I mimed at him with the money. He indicated for me to put it into the ashtray; and then he had the usual trite thought and opened his intercom again. There was a tight-lipped smile on his face as he said, "If you wish, I'll take you over to the nearest tent entrance, and you can sign in."

As if anticipating an adverse reaction, he added quickly, "No amount of bravery is any good against what's coming."

I said patiently, "Look, I'm going to visit my girl. And if I ever decide to go into a tent, I'll use my private entrance."

He must have believed I was joking. In his rearview mirror, I saw the tight-lipped smile was back on his face. Still, he seemed to relax a little. He said in a conversational tone, "The kind of people we're running into this final month are

a strange breed. Natural selection has given us another look at the human race. Huge crowds were camping at the tent gates a year ago. That's one group. When entrance was finally allowed three months ago, they went in; then came other categories—roughly divided by psychologists into about a hundred emotional types. But now we're down to a special type of male and the women this type associates with, over whom the man has an unusually dominant control." He hesitated, then: "May I ask one question?"

I said, surprised, "You're doing me the courtesy and favor

of giving me a ride. Sure, ask anything."

"Why isn't all this affecting you?" He waved with his free arm. It was a gesture that embraced half the horizon. "The no-oxygen condition. The big change that's coming. Why don't you try to get to a safe place?"

It's not easy to explain good sense. I don't try. I merely said pityingly, "You don't look like a schoolteacher. But I feel I'm going to get a classroom lecture for elementary grades. That may be all right for kids, but I should tell you I graduated from high school fourteen years ago."

"Still," he persisted, after smiling that thin smile on his thin face, "you want to live." He didn't wait for me to let that die a natural death. He added quickly, "Nature is bigger than Man; particularly, it's bigger than any one man.

For once everybody really has to cooperate."

It was my turn to smile. "If everybody has to," I said,

"then everybody will. So what's the problem?"

He looked at me uneasily. "The decision of what to do had to be made by qualified scientists," he said. "Some individuals are resisting that decision." He went on, half to himself, as if arguing with a doubting segment of his brain, "At this late stage there's nothing they can do. What do you think?"

"I've never given it a thought," I said—truthfully, because what I do in connection with all those conniving human beings is purely defensive. They start to move against me. My defenses come into view. That simple, I said, "Right now I'm visiting my girl."

He shook his head, wondering. "Mister," he said, "you're either a complete idiot, or a better man than I am. Good

luck."

He let me off at Mona's street, waved at me from inside

his mobile oxygen tent, and drove off. I walked along, slightly nettled by his final words, and mentally grappling with them.

—What I am, I told myself, is a man who confronts a problem long in advance. And then I don't pay any more attention to it until it actually happens. . . . For Pete's sake, this oxygen shortage wouldn't be actue for another month. All right, so thirty days from now I'd finally confront it as a problem. When it began to rain fluorine I'd hold my hand out and let the drops fall on it, sniff them—that is, if the smell wasn't already permeating the whole damp universe around me. And then . . . well, that would be the time to get on my horse, or whatever, and canter over to my personal tent entrance.

By doing things like that, I'd made my first million before I was twenty-five—in a world that was coming to an end, when almost everybody else was sitting petrified. By age twenty-eight, I was one of those wealthy contractors; in case you wondered, that's where some of the big money is to be made, particularly if you find out early where the bodies are buried. Naturally, this past year things had been rough; not much planning ahead. Just bridge stuff. Details of helping people through the transformation. Once the tent was built, the details of what followed were out of my field. Mostly chemical, biological, medical—and thousands of bright-eyed jerks listening to lectures about how to give the injections that would convert the cells of an oxygen breather over to fluorine. And care and feeding of same while in transition

Fine. It had to be done. But don't bother me with it.

I was riding up the elevator to Mona's floor by the time those thoughts were completed. A minute later, I softly inserted my key into the door of 412-J.

I had myself braced. A quick bit of sweet talk to soothe her and get her into bed. If that worked, it would be the end of it. But if it didn't—

I wouldn't really bash Mona up bad. Without her pretty face and curvy body, I wouldn't want her anyway. So there was no point in being rough. Besides, I'm not one for violence except when it is needed. One good smash to the jaw to make her think, but break no bones. Maybe a little blood and after-bruise as a reminder. Anyone who knows women

will realize that I'd be leaning back practically horizontally in my desire to bring about a peaceful solution, if that's all I did.

The door swung open as I manipulated the key; and I walked into the silence inside. I paused, taking it all in; and I've got to admit it, as always I was impressed by the absolutely delightful interior.

My current girls live like queens, and even my cast-offs have it pretty good. I give new mistresses carte blanche on how they fix up an apartment. You can be pretty sure that if you pick your girls carefully they'll create their own dream. Mona had been especially artistic.

So I gazed at sheer enchantment. But it felt empty. I walked through the glittering living room, glanced into the music and book room, examined the kitchen and then went into the glorious frilly bedroom. No one there, either.

She did it! I sat down on the gorgeous queen-sized bed and let the madness of what she had done sink in. And right there, I got angry. It takes a lot to set me off. But I could feel the heat of that anger rise up into my cheeks, and the seethe of it was in my skin all the way down to the toes, like a shot of vitamin B complex. I could even taste the stuff, I was so teed off.

"—Okay, baby, you asked for it." I spoke the words softly but aloud.

of the ten-thousand series. And so I became a human molecule. People swarmed in all the corridors. To anyone but a person like myself (who had learned the pattern during the building stages) it must have seemed like total confusion.

Down to level H—for Henessey (Mona Henessey)—I forced my way, or rode, relieved, on one of the rolling sidewalks. My destination was the east section, where the He's would be.

It took a while. A pigeon-faced stupe held me up at a checkpoint while he studied my pass. But what I had was just the right level of authority. Not VIP—easily verifiable. But with just the proper amount of secondary eminence, more than anyone would be able to cancel out in this rush.

Sure enough, he let me by. Reluctantly. Some people just don't like the set of my beard. He had that look in his eyes. But—nothing he could do.

Since sectional computers had been built in to handle all room designations, when I came to the He area I simply dialed her name on the first computer outlet I saw. Instantly, her room number flashed onto the plate in front of me.

I had brought a peep device with me. So I attached it to the wall of her apartment from the side corridor. The interior scene that came on to the little bright screen should have warned me. The apartment was a family-sized one. Mona did not have a family. But there she was, dressed as I had seen her on the phone viewplate that morning. A sleek-haired man was with her. Seeing him veered my attention from other suspicions.

A boyfriend? Yes—it turned out. As I watched, he took her in his arms and gave Mona one of those lingering lover's kisses. Observing the two of them, I could only shake my head in amazement at the nature of a woman. She didn't come here to breathe more oxygen. She came because she'd fallen for a pair of broad shoulders and striking black eyes.

I saw the eyes as he released her, and turned toward the door. Sizing him up quickly through the peep device, I placed him at twenty-seven or -eight (Mona was twenty-two). The irony of it drilled deep into me, not for the first time in my adult years. Question in my mind: Was this a marriage-to-be, or just a shack-up? A free man learns early to recognize that a woman gradually gets that got-to-be-married thing until she can't be reasoned with. I always tried to train my girls early to keep off that subject. No dice on marriage with Art Atkins.

The man turned at the door and I had a full front view of him. The way he held himself gave me a new perspective. He radiated some level of purposefulness. An implication of authority—which I had learned to recognize in my career. Normally, I'd just go away until I checked his background. But that was not possible in this melee. I gave him two minutes after he went out the door. Then I went around and pushed the buzzer.

Mona opened the door.

When she saw me, she tried to shove it shut. But of course I had expected that. And so I had my foot in the jamb. As I pushed my way in, I said, "Don't worry. I just want to talk to you."

That was not exactly a truth; but it wasn't wholly a lie.

Finding her with a man had transformed this situation, and my attitudes were modifying moment by moment as I considered the unpleasant reality of what level of man it might be.

She continued backing away from me, angling off toward the kitchen door. I pursued her unhurriedly. Fact was, I badly wanted information, but didn't know how to begin.

Before I could decide what to say, there was a diversion. A sound. Behind me. I swung around rapidly. Several men had come out of the hallway that led to the bedrooms. They carried those special electric-shock hand weapons used by the police. As I faced them, they stopped in a tight little cluster and regarded me.

There were five of them and one of me. I remained where I was, keeping my hands out where they could be seen. I had heard what a shock gun does to you, and didn't want any... A remote segment of my mind noted again the direction from which they had come, and reasoned that they had probably entered this apartment through a connecting door at the end of the hall from the adjoining apartment. It was a possibility I had failed to take into account.

I was not chagrined. One man can't think of everything. I had now—as I discovered—met a few of the conspirators, part of planet-wide resistance to what the authorities were planning. And although I had vaguely heard of such a conspiracy, it had never occurred to me that anyone involved had noticed me.

The surprise was that total.

Standing there, I was able to observe that two of my captors looked to be in their mid-twenties, two in their thirties and one probably forty-two or -three. It was this oldest individual who summarized the situation for me. When he described how Mona had been the bait to catch my type of dominant male, my memory shot back instantly to the party where I had met her.

"But there were many beautiful girls there," I protested. "You mean, all?—" I paused, questioning.

My informant nodded. His companions continued to regard me unsmiling.

I remembered more now of the party. A political thing, given by a local bigwig. So he must be in on the scheme,

and at this ultimate hour was prepared to have that information known to me. I had gone to the party because it was the commercial thing to do.

"It wouldn't have mattered," I was told, "which of the girls you were attracted to. They were all dedicated to the plan to save oxygen-breathing mankind."

"B-but—" I began.

What I intended to say was, "Why me?" I didn't say it. I was remembering something else. "Still," I said, "Mona must have been selected in advance. She arrived near the end of the party, and so she made an entrance, and bowled me over. That had to be planned."

No was the headshake.

Her coming as she did was a consequence of a misunderstanding. She was not one of the original volunteers. What had happened was that she and her fiancé had an engagement to attend another affair, and Mona had arrived unexpectedly. Then, when I had been attracted to her, she made the best of her predicament and belatedly volunteered -which offer was immediately accepted by the desperate leaders of the conspiracy.

To say that I was thinking hard as I learned these details was an understatement. I like to know where I'm going and what's next. I often had a purpose in a crisis the instant I

became aware that there was one.

How should you act when you've been caught completely

unprepared?

There was the room; family-size, but still damned small. And five people plus me and Mona were crowded into it.
The five had me backed up against a wall by this time. No place to go but through five determined, armed men. Those were the kind of odds that I respected.

So getting away couldn't be my goal. Chance of success:

zero.

It dawned on me I was in a spot tougher and different from any that I'd ever been in during my somewhat checkered career.

No purpose—except to find a purpose.

These people had swung a ringer in on me: Mona. There she stood, off to one side now. Her color was higher then I'd ever seen it. . . . Embarrassed, I thought; she's ashamed.

That steadied me. Because it pointed up that these were amateurs. Sincere people. In my mind's calculator, I hastily counted the price she'd paid; and for a volunteer virgin which is what I discovered she was, when we began our affair-it was colossal. I liked to get around to my girls four times every eight days. Divide that into six months. And the price leaves you gasping-if you examine it from the point of view of a fiancé off somewhere on the sidelines.

My instant feeling was that I'd better not let Black-eyed Broad-shoulders be alone with me while I was in a captured

condition.

. . . All this did a lightning move through my brain. Which was the way things work inside me. And then, having again considered the improbability of the whole thing, I voiced my original thought.

"But why?" I asked breathlessly. "Why me?"

At this point the oldest of the men stepped forward. Funny, how people are. Until now he had stayed with the group, sort of identifying himself with the others, and not putting on any leadership airs. He could have continued that little game. Instead, he had a thought; and that thought, by God, triggered nervous energy, so that involuntarily he showed where his ego believed he really ought to be; up front.

You'll never catch Art Atkins going out of a role he has set himself to play. Where necessary, I can give a false signal until doomsday. Once more it proved . . . here were amateurs.

So I learned from the spokesman that people like me had been spotted as being capable of playing a decisive part in this crisis. And that, while several other men had also had an equivalent of Mona planted on them, the group had finally settled on me as being the one for our local tent.

All over the earth other versions of Art Atkins were getting this treatment today in connection with their tent as I was in connection with mine. (The girl suddenly leaving, and they following her.)

"Look—" I protested at that point, "the only reason I came after Mona was—" My voice trailed off.

The group's lecturer smiled grimly. "A masculinity dominance thing," he said, "on a level of intensity comparable to a primitive Stone Age male."

I was still fumbling in my mind for something I could do. I only shook my head over the analogy, rejecting it. After all, I only intended to give Mona a single hard punch.

What I did do was speak the basic puzzlement in my mind. "Okay, I'm the key guy in this crisis. Key in what

way?"

Smiling grimly, the old guy told me. . . And, of course, I thought, almost blankly. Naturally, that would be it—

Pretty sharp of them to spot it.

Of course, they couldn't be sure. . . . Suppose, I asked myself, I deny it?

The spokesman must have deduced what was in my mind, so he smiled again, showing his teeth. "You might as well realize, Mr. Atkins, that we mean business. Naturally, we have no idea exactly what you did that places this tent at your mercy. But over in Peking the Art Atkins there was a minister in the government, and what he did was construct the principal oxygen converter beside a huge water reservoir; and so at the key hour that water will be released into the processing room, and if necessary will flood part of the tent itself. In Berlin, the Art Atkins there put in a tank of oxygen alternating with a tank of ammonia, and so at a key moment we will let the oxygen and ammonia intermix. Now, in New York, the story we have is—" He stopped, so he showed his teeth again, and said, "Need I go on?"

He added quickly, "In several instances, torture had to be

used to obtain the information."

I sighed. I was never one of your super-brave types. All I ever wanted to do was protect myself from the schemers, so that I could go about my business.

"My method," I said, "was one of those chain reaction bombs, with a hundred fuses. Once it starts at any of those fuses it keeps going, flashing fire along a thousand exploding pathways.

"Why a bomb? Well, I like things simple and direct."

After the first excitement died down, they grew curious.

What was my reason?

I could only shrug. . . . "Think about it," I said. Here were those experts proposing that mankind endure a biologic transformation. Were they right? Maybe. But then again maybe not.

To me scientists were only people. We kept hearing the

statement: The scientists recommend— Which scientists? Because there was usually another group of equally trained experts who said no; only they didn't happen to be the ones who had their lips close to the official ear.

I learned before I was twenty that it was a matter of personality or sheer accident. The first great success with animal, then human, embryos nurtured on those moons of Jupiter and Saturn that had atmospheres; and finally by remote control on Jupiter itself—these were dazzling victories for what was called the cosmic school of biochemists. They became the kings of science. It was the bandwagon for a chemist to jump onto. And of course when a team developed serum d and its variations that could change an adult oxygen breather to a fluorine utilizer or—by another step—to chlorine gaspers (they actually did gasp, but they survived), just about all the hysteria that you ever wanted to see hit the fan.

But long ago I met experts who said, "We're not giving this enough time. Fluorine-breathing human beings look great right now. But it's only been forty-two years since the first one. There may be side effects. Why not hold off another thirty years?"—which was about the time that (even the doubters agreed) would be about it for oxygen on earth.

My own feeling, after asking a few questions of astronomers: Somewhere in space might be huge chunks of frozen oxygen similar in size to the fluorine meteorites that were now being maneuvered toward a close orbit around earth.

Why not allow the extra years for those to be discovered? At the time, that was just a thought. I wasn't obsessed. And yet—when I considered my usual type of advance precaution, the explosive was the possibility that I understood best. And it was a method that would actually control the situation. Cum see cum saw.

I always took such precautions. I remember once I had a contract to build a bank. Just for fun, in case I ever had a reason to enter the bank vault, I constructed a secret tunnel under it. You won't find that tunnel in the plans, and nowhere in my head was there intent to use it. But there it was waiting for me.

... I emerged from my private thoughts to learn that the

time they wanted me to blow up the oxygen plant was the next day at eleven A.M.

I was startled. It had all happened so fast that I hadn't had time to consider the actuality. I protested, "With all those people near it?"

They did not reply, simply watched me. I watched back,

baffled by my predicament.

In a way, there was no problem here. Nothing, really, to decide, or have a purpose about. What I had to accomplish—what these conspirators wanted from me—was basically something I was in favor of. In my deepest being, I felt total—but total—resistance to being changed over from an oxygen to a fluorine breather.

Oh, I doubt if I'd have done anything about it on my own. And I quailed a little even now at the thought that people would die. But (I argued with myself) there were people dying every day either from oxygen deficiency or from intense psychic disturbance as the ultimate crisis approached.

Was I deciding, as I stood there?

It didn't seem like a decision.

I had no choice. There would be torture if I refused; I believed that. And they had all evening and all night to stick their needles into me.

Once more I looked them over; and they looked back, silently.

Pretty ridiculous (I thought) when a man had to be forced to do something to which he was not opposed.

Still—there were serious, unfavorable aspects that needed to be brought out into the open.

I returned their silent stares, questioningly now.

I could see from the expressions on their faces that they weren't planning to listen to any objections. So all I said was. "They'll reconstruct it. And next time there'll be no implants possible."

The spokesman impatiently brushed that aside. That was a year, two, even three away. "By that time we'll figure something else."

I was silent.

They took that for agreement, and I had to admit to myself that it was,

While I listened, details were discussed. It seemed Mona's boyfriend had wormed his way high into the establishment.

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It was he who would guide me through the guard system that protected the oxygen.

When I heard that, I felt a queasy sensation in my stomach.

I said finally, "May I talk to Mona?"

No one was against it. I walked over to her. All the time I spoke to her, she avoided my eyes. But she answered each question.

"What is his name?"

"Terence O'Day."

It was a family name that I knew. High in local politics. But it was the father I had heard of, not the son.

"Was he jealous?"

"He said he'd had other girls before he met me, so there was nothing unfair for me to have another man, or even more than one." She added swiftly, "He was furious at me for having arrived early, but once it happened he was resigned."

She seemed, in that simple way of girls and women, to believe that. Naturally, I rejected the explanation totally. But I did believe that the poor guy had had no choice, after her big blooper.

All I said was, "Will you see him before eleven A.M. to-morrow?"

"Tonight." She spoke reluctantly, face averted.

I fought instant jealousy. Because something in her face said that she would be spending the night with him.

(Onlookers have an idea that a man with four mistresses doesn't worry about what they do with their spare time. Boy, are they wrong.)

Mona was speaking. "You will be staying in this apartment tonight under guard," she said. "And I"—defiantly—

"will be staying with Terence."

I had control of myself again. I said earnestly, "I want you to tell him that I regret the incident that brought you to that party. That I never knowingly play around with other men's wives or girl friends—" That was not true. Who else was there? All the pretty girls had guys from the day they peaked over the edge of fourteen.

But it was an important lie to put over. "Will you tell him that?" I urged Mona.

"Yes, I'll tell him."

She seemed belatedly to realize the implication of my

words. "I'm sure you can trust him," she said. "When you think of the sacrifice he made in letting me volunteer—" She stopped. She turned impulsively and placed her hand on my arm. "Good luck, Art. Please don't fail us."

But she still didn't look directly at me. And so when I turned to the five, I shrugged and said simply, "What's your

opinion?"

The oldest man was silent. One of the two middle thirties men said, "He's been with us since the beginning. He sacrificed his girl. What more can a man do to prove himself?"

I acknowledged that reluctantly. I said, "I've told you what my advance preparation was. When I did it, I had no particular plan in connection with it. But if I can't set off the trigger mechanism, that's it. There's nothing more in this tent that I know about."

For Terence, the next day, I did my clumsy routine. I kept bumping into people. I could see him gritting his teeth as, each time, he walked on as if he did not know me. That was the game we played at the beginning, at his suggestion. In case we ran into somebody important. Whenever I was delayed, and twice when I fell awkwardly, Terence went ahead about twenty feet, and then he stopped casually, and slowly turned around, and waited until I was ahead of him again.

I presently estimated that we were less than two hundred yards from the oxygen facility—only a short distance from where I had told them the trigger mechanism was located. And yet no sign of the guards that I had heard about. I was beginning to wonder if the security system wasn't a myth. A few seconds after that I rounded another corner.

As I did so, there were quick footsteps. Hands grabbed me from behind and held me. Somebody reached around and grasped both my wrists. My arms were jerked back and pulled together. But by that time I had relaxed from my initial automatic stiffening.

I felt the handcuffs as they snapped around my wrists. But I was able by now to suppress my impulse to turn and see if Terence had also been seized. I suppressed it, because whether he was or not wouldn't change my conviction that this was a trap, and he had led me into it.

I had a sudden insight. Maybe across the world the score

or so of Art Atkins types were also being captured at this moment by other Terence-type counterspies. In all—so I had been told—twenty-three large tents were the targets for today. It was believed by the conspirators that if that many were knocked out (involving upwards of thirty million people), that would end the threat of fluorine transformation for the time being.

Since I was being seized and not instantly killed, I guessed there'd presently be a confrontation—I had to smile. Those poor goops. Thinking they could outwit Art Atkins with such

an elementary tactic. Boy!

I had no time for additional thoughts. I was being hustled along the corridor at a run. I had a few quick glimpses of

about a dozen men running with me.

As rapidly as we had started, we suddenly slowed. A door opened. The brightness from inside flooded the corridor. I was pushed through the doorway into a large, brilliantly lighted room; was vaguely aware the while of the dozen crowding in behind me.

-Somebody always lives better, I thought.

Now, that's not a complaint. I've lived like a king for years. But still, here in the tent apartments were tiny, and in the big dormitories further down people occupied one unit in a tiered bunk system.

The room I was in looked lived in. There were settees and cunningly arranged tables, and on a dais to one side, carpeted floors and a combination music and book section. On this dais was an incongruity. A conference table had been squeezed onto it. Behind it, sitting at it, were four well-groomed older men.

I caught glimpses of other rooms through half-open doors, and for a moment in one of them a young woman's face. That door closed. But, yes, the place was lived in by somebody who was entitled to a living room over sixty feet long by forty wide, and bedrooms to match.

Still being held, I was led to the foot of the dais. And now, for the first time, I saw Terence again.

He was not handcuffed.

He stood just to my right, a faint, cynical smile on his face. His clothes were unrumpled. Clearly, no one had shoved him around.

He said to the men behind the table, "I was with him

every minute, and he didn't have a chance to do anything. Besides"—contemptuously—"he's yellow. I've seen fear before. This guy was so weak in the knees from terror he

could hardly stand up."

One of the seated men, a cold-faced individual, studied me with steely gray eyes. He was in civvies, but his bearing was military. I had never seen him before. He said in a resonant voice, "Mr. Atkins, I'm General Peter Simonville. When I look at you, I see a cool, determined male about six feet tall. I see in your eyes the same kind of self-pitying expression that I used to observe in my oldest son. But women went for that boy, and I understand you're also a woman's he-man type. He was not afraid that I ever saw, and I don't see any fear in you. So my question is, did you have an opportunity during one of those moments of stumbling to trigger that bomb?"

"No!" I lied.

The general glanced at Terence O'Day. "It's now"—he looked down at his watch—"twenty-one minutes to eleven. You have five minutes to get the information out of him, and then we have sixteen minutes to undo the damage. Fair enough."

To me he said, "I turn you over to your rival, Mr. Atkins.

I should tell you that he has carte blanche."

Sharp man, General Simonville—I had to admit it. But I remained silent; simply watched as Terence climbed up the dais, went around to the rear of the table and seated himself. Those black eyes of his surveyed me.

He said, "You must have been out of your mind to set up a destruct system. Don't you realize you can't keep a secret like that? The authorities didn't know who put it there,

but they knew about it three, four years ago."

I simply stood there. Who do they think they're giving lessons to? I understood that kind of junk when I was sixteen. You can't keep a secret. Of course. What else is new? So you tell it yourself. Let it slip. Get it out there where the stupes can start gloating among themselves, and doing all those things like removing the fuses and the powder. Meanwhile, over where the real bomb was—

I had to smile and shake my head.

I was aware of General Simonville's knowing gaze dissecting my thoughts. "Listen, Art," he said in a cajoling

tone, "that is all there is to this, isn't it? We got it all three years ago. We didn't overreach ourselves, did we?"

When he said that, I knew something. . . . For Pete's

sake, I've got a decision to make.

The way I reasoned it, nobody could do anything. There wasn't enough time to torture me. Maybe six hundred, maybe seven hundred seconds. So they were out of luck, unless I did a switcharound inside my skull.

At that point, Terrence O'Day said, "We've got Mona."

I shrugged. That little spy.

Belatedly, I realized who it was who had said that. "So?—" I reacted then.

Terence continued, "As soon as you and I left the apartment where you spent the night, troops went in and captured those five conspirators. At the same time Mona was picked up. All six of these criminals were rushed over to the oxygen process plant. If it blows up, they will blow up with it."

I let my mind's eye visualize Mona. Her golden hair would be hanging down, framing her face. In a few minutes the soft body that belonged to that beautiful face would be segmented into several thousand uneven chunks, and her blood everywhere.

I let my mind go slow-blank on that picture. No reason why it should bother me . . . what happened to a phony. It did a little. But all I said was, "She's your girl, not mine, Mr. O'Day."

His face was suddenly livid. "That stupid girl!" he snarled. "Let the little whore burn."

I stared at him, eyes widening, a large thought in my mind. Women who associated with the Art Atkins type were never satisfied with ordinary males afterward.

"Hey," I said, "I'll bet she wouldn't play last night."

It was a nasty thing to say. But if we weren't at the nasty stage in this situation, when do you get there?

I'm glad black-eyed glares don't kill. I'd've been dead in

three seconds if they did.

I have to admit, looking at that handsome face twisted with hate and jealousy, that I could feel the tight anger inside me start to ease up. Hastily, sensing that weakness might make my decision for me, I dredged up another possibility for Terence O'Day's severe reaction: Was this a

game? Was he dramatizing against her as part of a scheme to delude me?"

I couldn't—I realized—care less. In spite of my efforts, I was inwardly visualizing those golden curls burning in a fury of exploding flame, that beautiful face torn to shreds. And to hell with it. If that's the way they wanted to play, it was too rough for me.

"Listen!" I demanded. "Do the conspirators in this tent

go free if I tell and show where everything is?"

Notice how badly I worded that. They used it against me later on: I was not one of the conspirators.

After I spoke, there were timeless seconds of emptiness in the room, as if everyone there stopped breathing. Then—

"Yes!" General Simonville's voice hit across that silence like a blow.

I accepted his promise. Because there was no time to get proof, or read the fine print. And in fact it was later carried out to the letter.

No time to waste. A couple of engineers and I made a dead run for one of the places in the corridor where I had stumbled against the wall. When the trigger system that was there was back in its safety position again, and for two days after—while, with my help, they stripped the explosive from the real bomb—they seemed to take it for granted that I would be treated like the others. Then—

The job was done.

I was handed a paper with official seals, which began:

The unified governments of earth hereby command, and it shall be, that . . .

My property was confiscated, all my possessions ordered seized, no human being was to have consort with me again, ever.

Clutching this paper, I was kicked out into the street.

I was the S.O.B. who had planned four years ago to destroy the human race.

"Look," I protested, "that isn't why I set up that destruct system. I set it up because I always do things like that—"

Nobody listened. Or cared. To hell with Art Atkins. There was a universal rage at the narrowness of the world's "escape."

I gathered that the twenty-two guys like me in other tents were given the same brush-off treatment.

They had told me when they shoved me out, "Don't think you'll find your private entrance to the tent available a second time."

—Okay, boobs, take a good last look. You'll never see me again, nor locate my body.

Hell, I'd been expecting the world to turn against me since I came up out of the mists of childhood. Somehow, I always knew those so-and-sos didn't like me.

Soon as I was old enough I began getting another identity polished up for the day when they came after me. Why do you think I started growing a beard, practically over my mother's dead body, when I was sixteen? I didn't want anyone, not even her, to remember what I would look like if I ever had to go smooth face.

... Two years have gone by.

They say the fluorine rain has stopped.

Deep in the bowls of the big oxygen tent, a knock comes on my door. I guess who it is, and I say to Mona, "You answer it."

She opens the door. General Simonville stands there. His cold face has a forced smile on it. He says in a somewhat over-hearty voice, "The people in this apartment have been selected by lottery to be the first in this tent for the fluorine shots."

I take that with a straight face. The rest of the selections will—I imagine—actually be by lottery. But my being number one had to be arranged.

The general steps aside, and a trio of girls wheel in the equipment: a metal table with a large transparent jar on it with liquid in it. The liquid is the serum (I deduce). And there are a host of connecting tubes and needles.

As I lie there, and the girls are busy with my exposed thigh, my eyes turn and meet the gaze of General Simonville. "Everything okay?" he asks.

His question has a double meaning, and I consider before I answer. After I had shaved off my whiskers and altered my fingerprints, the problem was to get into the tent.

Well—I figured that a man with a private entry into a bank vault might have, say, a hundred thousand dollars available as a starter. That much cash, it seemed to me,

might persuade a general who had not hesitated to accept a super-sized apartment for his own living quarters to open a gate for me, and find a lower level place where I could live away from it all, and bring Mona over there. With that combo I figured I could sit out the rainstorms in relative comfort. In handing over the down payment, I also stipulated that I would be the first to be changed over.

I promised him a second hundred thousand if I got

through alive-

My gaze flicked down to the needle that was being shoved into me. The question in my mind is, will I wake up?

Have I offered him enough?

I've got a whole bank to draw on. Since the government has guaranteed losses suffered from looting during the transition, the bank will be repaid. . . . My plan is to filch exactly what was expropriated from me.

I look up. I say, "Everything okay, General—on my side."

"On mine, also," he says.

People are hoping that changing mankind to fluorine breathing may alter human nature for the better. My suggestion is, they'd better not hold their breath while they wait for these peculiar two-legged beings to alter their behavior.

Believing that, I'm guessing as I sink into unconsciousness that the general's words mean what I think. And that I will

wake up. I will. I will.

And I will be the first fluorine-breathing son of a bitch on the new earth.

Afterword

The ecology scare, which extravagantly enriched a few writers, was an insult to the tens of thousands of officials and technical people who had been quietly dealing with the problem since World War II.

As soon as the emotional madness hit the fan, we had the usual tiresome overreactions. Ecology became a typical political hysteria item, and fortunes were conned from the deluded public and spent trying to put over unrealistic—and unnecessary standards.

It requires twenty-five square feet of grass, or varying amounts other greenery, to supply one adult human being

with oxygen. The state of Oregon all by itself has enough of both grass and greenery to furnish oxygen to the entire population of earth from now on. Add the state of Washington, and the human race has it made forever and ever. (This leaves the vast forests of Siberia for the Martians when they come.)

The fact that when people congregate in any area problems arise about disposition of wastes is largely a local matter. True, other waste problems require the technical know-how of science applied on a statewide level; but only a few waste problems need to be dealt with nationally and internationally.

I first heard of pollution in the early 1950s from a friend of mine who is a chemical engineer. He later testified before a congressional committee and sent me a copy of the committee's report. That was in the mid-fifties, long before anybody began scooting around the college-speaker circuit terrifying and addling the students, precipitating court actions that to date have cost the United States billions of dollars, and, worst of all, causing me the inconvenience of having to sit in line waiting for gas.

It would take a book to supply all the details to prove what I'm saying. I doubt if such a book would sell. Pollution

is rapidly becoming a quaint reality.

(Please do not confuse the pollution nonsense with the genuine tendency of the human race to do damage to animal and bird life. Many species are seriously endangered. Here legislation is needed, because the world swarms with merciless individuals who would actually shoot the last creature of its kind and merely shrug if that fact were brought to their attention.)

In writing my story for Roger Elwood's ecology-theme book, my problem was to avoid for it—the story—the early death that will come to most of the fiction that takes pollution seriously. My solution was the introduction of the enduring reality exemplified by Art Atkins.

URING MY WRITING LIFE, I HAVE lived a pure, permissive, writing existence. That is, I have never lifted pen or put fingers to typewriter to argue in defense of what I have written. And there was no need for me to until about twelve years ago.

Sometime in the sixties, though, a group of new writers entered the science-fiction field with what was apparently a conscious intention of promoting what they called "relevance" and "reality." For some reason, a lot of old-timers nodded owlishly, so to speak, and agreed that, of course, this was the way it should be in order for science fiction to survive. Almost before anyone could say, "Hey, wait a minute!" the critics were won over. Thereafter, my stories were repeatedly declared kaput.

The stories refused to lie down. They kept being reprinted. To the disgust of the critics they kept selling out there in the market-places. In fact, Algis Budrys, one of the critics, gave up being a science-fiction critic, and one of his stated reasons was that it bothered him that my stories continued to find readers.

Since my stories have survived these at-

tacks without my having come to their rescue with counterarguments, I think I am entitled to assume the posture that what I am stating here is not a defense, but an explanation

for what has already happened.

The thing to notice is that these new writers were all young people. They really hadn't thought long enough about reality or experienced it sufficiently to know what it was. And as proof that my success is no accident, I'd like you now to read a story in which I handle reality material of the inelegant type that has been so popular for so long in mainstream fiction and in "relevant" science fiction.

I wrote "All We Have on This Planet" for a British anthologist who wanted a story subversive of something. I predict my approach to this theme will survive long after 90 percent or more of so-called "relevant" science fiction is as dead as any reality story of the past. I'll explain why in

the afterword.

ALL WE HAVE ON THIS PLANET

THE CRITIC WROTE, "ONE OF THE FAULTS OF this novel is that never, during the entire eighty thousand words, does the hero go to the bathroom."

The author blinked as he read the unexpected attack.... For God's sake, he thought finally, you take things like that for granted in a suspense story. He read on in mounting

outrage.

The critic's review continued: "This reader, who is surely not a minority of one, kept looking for such touches of reality, and only on one page about two-thirds of the way through—which is a little long to wait—came across the following: 'When he [the hero] awakened, he noticed that there was a stain on the lower part of his shirt. Blood? he wondered. Or semen? Or urine?'

"One does not," the critic continued, "have a clear picture of what has happened. There is not even an indication that the hero actually slept in his clothes, or if, perhaps, the shirt referred to is a nightshirt. But aside from the story itself—which is up to the usual par of this author—the implications of the passage constitute the only evidence in the book that he has ever heard of human nature."

It was praise of a sort. And in this world, the author decided, one must suck spiritual nourishment from small offerings.

A little later, at the breakfast table, he read the latest on the invasion by the aliens, which was now in its third week.

Fortunately (for the western world) the invaders had come down on India—this for reasons that were not yet

clear. Their colossal fleets of spaceships, along with the war weapons that had debouched from them, were concentrating on the conquest of the foothill towns in the Himalayas, and seemed to be heading up toward the nearby mountain peaks. Indeed, the attackers had landed on all the highest mountaintops—including Everest—and were building odd structures on them. In the foothills their progress was hindered primarily by the ruggedness of the terrain.

Thus, while these alarming matters developed, it was possible for an American author to read about the invasion at his breakfast table. And, a little later, chat about it over

the phone plate with Devastata.

Devastata had her own views on how to deal with the enemy. "I think we should go in there while they're bogged down and let them have it.

"The way I see this invasion of India first," she went on, is that they want the most densely populated area in the world as their source of human experimental subjects.

"As for that business of heading up into the mountains, it's obvious what that's for. Everest is the highest mountain, and they want it and similar high ground as their base of operations. Probably some far-ranging energy waves will emanate from them.

"If you'll read," she said, "Steiner's History of Mountain Battles, you'll see that command of heights has always fascinated general staffs, and that, in fact, there's really something to it. Tamerlane used entire divisions of berserks to scale strongly held heights. It took that kind of dedication—"

Devastata was a little repetitious at times. But she was beautiful, and admired his writings, and never required so much as a mention of human sweat. She provided a lot of ego nourishment for someone who needed a lot; and he did.

Later, as he entered his study, the author saw that the white light was flashing on the electronic letter transmitter. The letter took instant form as he pressed the release button. It was from Sleekania. It read:

... Your ongoing (what you call) thoughts, as I recorded them this morning, made me realize once again how lucky I was to escape your filthy designs. Because of the universal mental pollution from the aliens, my

ESP blessedly failed to pick up the stupid conversation you had with that childlike female you associate with these days. But enough came through from your earlier thought excrescences to show that you have been found out by the critics at last. Perhaps, now that you are exposed for what you are—a shallow, unskilled word-monger—your misguided reading audience will start shrinking. My hope is that the etheric confusion from the aliens when they do their group thing and all go to the bathroom every four hours will henceforth give me relief six times a day for nearly an hour each time from the steady stream of trash that otherwise flows cease-lessly into my pure mind from that phony brain of yours. . . .

Sleekania was a little hard to take sometimes. But that she bothered to keep in touch at all implied that some of the old spark still flamed inside her. Love from any source was better than from none. In this world one had to get one's emotional nourishment where it was available.

An author like myself sits down at an electric typewriter and simply starts to write. I work at about ninety words a minute, excising with X's when I make a typing mistake. As I write in this, what I call "flow" fashion, I have a comfortable feeling that the emerging words derive from my subconscious. What makes me feel good about this is that it has been conceded ever since Freud that the subconscious knows best, feels best, thinks best.

There is a reality about the wordage that pours forth hour after hour that nourishes not only my belief that I am a creative guy but also my bank account.

I have no idea why my subconscious avoids going to the bathroom. I, personally, go there four or five times each twenty-four hours. It could be that my attention is seldom on the act of urination or defecation, because I usually carry with me a factual book or my latest reviews. Since I'm so busy reading, going to the bathroom is probably my most unreal experience.

I used to write longhand on legal-sized yellow pads. In those days I took the handwritten sheets to a manuscript typist—this was in the days when they only charged a dollar and ninety cents a manuscript page and a writer could afford to have someone else type his output. Today, hiring out typing is like getting a lawyer to collect money owed you. When you finally win your case—or sell the story—you discover that the lawyer got all the money for himself. Or the typist for herself.

I believe that this explanation will not be satisfactory to

my critics.

In the afternoon Devastata came over. While we made love, she asked me if I had heard the latest about the aliens. Without waiting for my reply, she proceeded to tell me.

"A study has been made by teams of psychologists," she reported, "of the behavior of the alien invading forces. It is really amazing what even observation from a distance can do. It seems that the whole attack comes to a stop for an hour every four hours.

"One can imagine," she said, after she had freed her mouth from my kiss, "that they have a plan whereby they re-examine periodically on an orderly basis what they will do next. And, of course, the timing has to be perfect, and nobody off on his own.

"The impression," she continued, "of an armed force that is completely coordinated in its every action is obvious."

Sleekania usually writes me after I have made love to Devastata, and today was no exception. As I entered my workroom, I saw that the light was on in the electronic letter transmitter. And, guessing who it was from, I went over at once and pressed the button. The letter read:

Stupid sex fiend, can't you leave that silly girl alone even one day? I found myself recording from you the same kind of vicious thoughts about her that I used to receive from you during the act. If only that idiot female realized what criticism you feel against her as you go through those erotic wigglings by which you degrade her. Little does she realize that in your little mind you are actually titillating yourself into the ability to perform the act at all by recalling your past sadistic experiences with other female dupes. You should be an

alien. Your whole psyche seems to crave to be a part of the shared ecstasy of a group experience—which is what the aliens feel when they all go to the bathroom at the same time. Except that, of course, you gain the group effect in your own slimy, twisted memory.

My father always believed that if he had had the money he would have been ambassador to one of the Asian countries. He speaks fourteen Asian languages; the men usually appointed couldn't speak any of the languages, but they had enough money, according to my father.

As a result (of not having enough), he never got further than the rank of brigadier general. He works in the Pentagon from eight to four every weekday. Shortly before four I called him there. As soon as he realized who it was, he said, "The ambassadorship to Afghanistan became vacant today, and it looks as if I may get it."

I said, "Isn't that one of the states that they believe will soon be overrun by the aliens?"

"A military man," he replied sternly, "cannot allow such possibilities to deter him."

I had my own purpose in calling him, so at this point I digressed. "In my early training, sir," I said, "what was the parental attitude about urination?"

My father is pretty quick-minded. And, aside from his obsession with being an ambassador to an Asian country, quite bright. "Sub-rosa," he said instantly.

"Subject didn't exist," he said.

"Never mentioned," he went on. "We always set you on the potty and looked the other way, as if you weren't there. Or as if we weren't.

"Same thing, I suppose," he continued.

"Are you implying," he bristled, "that this may have been the wrong way to raise a child?"

I realized it was time to change the subject back.

"In connection with this ambassadorship," I said, "have you consulted the field marshall?" It was a term we used to describe my mother.

"Not yet." He spoke reluctantly. "But she has never stood in the way of my promotions."

I drew a deep breath. "I'll give my permission," I said,

"for you to expose my mother to the possible danger of being captured by aliens, if—" I paused.

"If what?" Grimly. He knew my power with Mother.

"If," I said, "each time the aliens stop for that hour, the combined American-European-Soviet-Chinese space fleet let them have it. But don't go near them during the three-hour in-between times."

On the phone plate the image of my father looked absolutely vibrant in its uniform, more like an older brother in appearance. As I watched, the handsome eidolon on the plate seemed to expand, suddenly hopeful. "If," it said, "I were to persuade the general to make a series of experimental attacks at the times you named, you would definitely make a favorable adjudication to the field marshal?"

"Yes," I breathed. And disconnected.

According to some of the records later deciphered, found in abandoned alien machinery and mountain-peak control buildings, the aliens were outraged by our unfair method of warfare. We violated basic galactic conventions about individual idiosyncracies of a different race not being taken advantage of. Accordingly, we would be denied the privilege of having our planet captured by superior beings and ourselves civilized.

When I got home after seeing my parents off to Afghanistan, I found another letter from Sleekania on my letter machine. In it, she explained:

The aliens, luckily for them, found out quickly what I learned painfully from my association with you—that man is vile—and they left. But their departure made me realize, yes, man is vile, but he is all we woman have on this planet. And so, chauvinist type, you may report to my bed in future three evenings a week. And I engage not to comment on your daytime association with that peculiar student of military tactics.

After my first visit (that night, of course), which provided me with the promised nourishment, I felt encouraged to read my latest book and to discover what my subconscious was pouring forth these days. Alas, not a mention of underarm perspiration, vomit, feces, scratching the crotch, picking the nose, urine, or empty-stomach breath.

I braced myself inwardly. I had a feeling that changes were taking place deep inside me, and that my next book would reflect a reformed and re-educated subsconscious.

But meanwhile, the critics were due for another field day.

Afterword

I hope you noticed there was not a vulgar line in, so to say, my part of the story. I listed a few vulgarisms, which are part of the stuff of today's realism. But I managed by my method of presentation to dissociate myself from them. That is, I treated them scientifically. And so I was able to introduce into what would otherwise have been a slovenly literary style what I call an enduring reality. In short, I made it meaningful—the very thing that the new critics despise most. Their attitude to a story that has something to say is, "Ugh!"

Where did they acquire these "standards"? How did they learn to revel in the stench of a human body so early in life, particularly in stories? You'll have the whole sad tale presently. But meanwhile I'm going to bet that you'll never again read fiction about somebody picking his nose without a sharper awareness of the vulgar reality that you've been conned into admiring.

VERY NEW GENERATION SEEMS TO have to discover that people go to the bathroom, engage in the sex act, get married, and have problems with bacteria, bashfulness, bassinettes (and what's in them), bills, bosses, and other bits and bagatelles of building a life. And the majority likes to read about those things because they're "real."

For some people, that's all there ever is. At night on TV they watch stories about hospitals, crime in the streets, personal tragedies, romantic and married love, etc.

Is there anything wrong with that? No, not really. But you must understand that there are at least *three* kinds of human reaction to reality.

The people I have just described want their reality relatively "straight" though somewhat sentimental.

People who react the second way prefer to satirize the events and feelings of the world of Stage One people, or at least to offer comic relief in connection with it. They "yuck" and "yuck" and "yuck" as somebody points out the apparently bottomless humor of life and its drabber or more stereotyped aspects. We might say that this

tendency to do an inversion on Stage One and laugh it all away is the beginning of philosophy.

In my opinion, this second stage is essentially where you will find the New York Critics, and what they praise are the writings of men like Vladimir Nabokov, who do satire with literary skill.

People in the *third* group have moved on to doing "reality" in symbol form. This kind of "reality" is more and more taught in colleges, and for it and those who teach it there is no hope of reform. It's their livelihood.

Now, I have had many a tear sucked out of me by sad scenes of everyday life in books, films, and life itself. I have laughed at comic versions of all this. I have even—God help me!—enjoyed a few symbol-oriented stories.

But I have to tell you that these are all merely surface phenomena. The underlying dynamics are strange, and not only reflect the human blueprint but very likely have within them clues to the beginning of life and even the beginning of the universe.

The story to which you are about to be exposed opens the way to some insights on unreality writing. The reader of such a story is assigned the most difficult task. Each paragraph—sometimes each sentence—of my brand of science fiction has a gap in it, an unreality condition. In order to make it real, the reader must add the missing parts. He cannot do this out of his past associations. There are no past associations. So he must fill in the gaps from the creative part of his brain.

This is what is required of the science-fiction reader: that he take the hints, the incomplete pictures, the half-suggested ideas and philosophies, and give them a full body. He must do so at the speed of reading—which is faster than the speed of writing.

When he does his part of the job well—and the author has done his share—then the reader thinks he has read a good story.

It is my educated guess that the individual who repeatedly exposes himself to the reading of science fiction will eventuaally change his brain. For the better.

"War of Nerves," incidentally, provides a glimpse or two or three of the sources of human reality and suggests what a fragile thing it actually is.

WAR OF NERVES

The voyage of the Space Beagle—Man's first expedition to the great galaxy, M33 in Andromeda—had produced some grisly incidents. Not once, but three times, deadly attacks by aliens had been made against the nine hundred-odd scientists under Director Morton and the one hundred forty military personnel commanded by Captain Leeth—all this entirely aside from the tensions that had developed among the men themselves. Hate, dislike, anxiety, ambition—of which Chief Chemist Kent's desire to be Director was but one example—permeated every activity aboard.

Elliott Grosvenor, the only Nexialist on the ship, sometimes had the feeling that even one more danger would be too much for the physically weary and emotionally exhausted men, who were now on the long return journey to Earth.

The danger came.

Elliott Grosvenor had just said to Korita, the archeologist aboard the *Space Beagle*: "Your brief outline of cyclic history is what I've been looking for. I did have some knowledge of it, of course. It wasn't taught at the Nexial Foundation, since it's a form of philosophy. But a curious man picks up odds and ends of information."

They had paused at the "glass room" on Grosvenor's floor. It wasn't glass, and it wasn't, by strict definition, a room. It was an alcove of an outer wall corridor, and the "glass" was an enormous curving plate made from a crystallized form of one of the Resistance metals. It was so limpidly

transparent as to give the illusion that nothing at all was there—beyond was the vacuum and darkness of space.

Korita half-turned away, then said, "I know what you mean by odds and ends. For instance, I've learned just enough about Nexialism to envy you the mind trainings you received."

At that moment, it happened—Grosvenor had noticed absently that the ship was almost through the small star cluster it had been traversing. Only a score of suns were still visible of the approximately five thousand stars that made up the system. The cluster was one of a hundred star groups accompanying Earth's galaxy through space.

Grosvenor parted his lips to say, "I'd certainly like to talk to you again, Mr. Korita."—He didn't say it. A slightly blurred double image of a woman wearing a feathered hat was taking form in the glass directly in front of him. The image flickered and shimmered. Grosvenor felt an abnormal tensing of the muscles of his eyes. For a moment, his mind went blank. That was followed rapidly by sounds, flashes of light, a sharp sensation of pain—hypnotic hallucinations! The awareness was like an electric shock. The recognition saved him. He whirled, stumbled over the unconscious body of Korita, and then he was racing along the corridor.

As he ran, he had to look ahead in order to see his way. And yet he had to keep blinking to break the pattern of the light flashes that came at his eyes from other images on the walls. At first, it seemed to him that the images were everywhere. Then he noticed that the woman-like shapes—some oddly double, some single—occupied transparent or translucent wall sections. There were hundreds of such reflecting areas, but at least it was a limitation. At least he knew where he had to run fastest, and where he could slow down.

He saw more men. They lay at uneven intervals along his line of flight. Twice, he came upon conscious men. One stood in his path with unseeing eyes, and did not move or turn as Grosvenor sped by. The other man let out a yell, grabbed his vibrator, and fired it. The tracer beam flashed on the wall beside Grosvenor. Grosvenor whirled and lunged forward, knocking the man to the floor. The man—a Kent supporter—glared at him malignantly. "You damned spy!" he said harshly. "We'll get you yet." Grosvenor didn't pause. He reached his own department safely, and immediately took refuge in the film recording room. There he turned a bar-

rage of flashing lights against the floors, the walls and the ceiling. The images were instantly eclipsed by the strong

light superimposed upon them.

Quickly, Grosvenor set to work. One fact was already evident. This was mechanical visual hypnosis of such power that he had saved himself only by keeping his eyes averted, but what had happened was not limited to vision. The image had tried to control him by stimulating his brain through his eyes. He was up to date on most of the work that men had done in that field, and so he knew—though the attacker apparently did not—that control by an alien of a human nervous system was not possible except with an encephaloadjuster or its equivalent.

He could only guess, from what had almost happened to him, that the other men had been precipitated into deep sleep trances, or else they were confused by hallucinations and were not responsible for their actions. His hope was that the woman-like beings—the enemy seemed to be feminine—were operating at a distance of several light years and so would be unable to refine their attempts at domination.

His job was to get to the control room and turn on the ship's energy screen. No matter where the attack was coming from, whether from another ship or actually from a planet, the energy screen should effectively cut off any carrier beams they might be sending.

With frantic fingers, Grosvenor worked to set up'a mobile unit of lights. He needed something that would interfere with the images on his way to the control room. He was making the final connection when he felt an unmistakable sensation, a slight giddy feeling, that passed almost instantly. Such feelings usually occurred during a considerable change of course and were a result of readjustment of the anti-accelerators. Had the course actually been changed? He couldn't stop to make sure. Hastily, Grosvenor carried his arrangement of lights to a power-driven loading vehicle in a nearby corridor and placed it in the rear compartment. Then he climbed on and headed for the elevators.

He guessed that altogether ten minutes had gone by since he had first seen the image.

He took the turn into the elevator corridor at twenty-five miles an hour, which was fast for these comparatively narrow spaces. In the alcove opposite the elevators, two men were wrestling each other with a life-and-death concentration. They paid no attention to Grosvenor but swayed and strained and cursed. Their labored breathing was a loud sound in the confined area. Their single-minded hatred of each other was not affected by Grosvenor's arrangement of lights. Whatever world of hallucination they were in, it had "taken" profoundly.

Grosvenor whirled his machine into the nearest elevator and started down. He was beginning to let himself hope that he might find the control room deserted. The hope died as he came to the main corridor. It swarmed with men. Barricades had been flung up, and there was an unmistakable odor of ozone. Vibrators fumed and fussed. Grosvenor peered cautiously out of the elevator, trying to size up the situation. It was visibly bad. The two approaches to the control room were blocked by scores of overturned loadingmules. Behind them crouched men in military uniform. Grosvenor caught a glimpse of Captain Leeth among the defenders and, on the far side, he saw Director Morton behind the barricade of one of the attacking groups. That clarified the picture slightly. Suppressed hostility had been stimulated by the images. The scientists were fighting the military whom they had always unconsciously hated. The military, in turn, was suddenly freed to vent its contempt and fury upon the despised scientists.

It was, Grosvenor knew, not a true picture of their feeling for each other. The human mind normally balanced innumerable opposing impulses so that the average individual might live his life-span without letting one feeling gain important ascendancy over the others. That intricate balance had now been upset. The result threatened disaster to an entire expedition of human beings and promised victory to an enemy whose purpose could only be conjectured. Whatever the reason, the way to the control room was blocked. Reluctantly, Grosvenor retreated again to his own department.

Carefully but quickly, he tuned a wall communicator plate to the finely balanced steering devices in the fore part of the Space Beagle. The sending plate there was focussed directly along a series of hair-line sights. The arrangement looked more intricate than it was. As he brought his eyes to the sights, Grosvenor saw that the ship was describing a slow

curve which, at its climax, would bring it to bear directly on a bright white star. A servo-mechanism had been set up to make periodic adjustments that would hold it on its course.

Still he was more puzzled than alarmed. He shifted the viewer over to the bank of supplementary instruments. According to the star's spectral type, magnitude and luminosity, it was just over four light years distant. The ship's speed was up to a light year every five hours. Since it was still accelerating, that would increase on a calculable curve. He estimated that the vessel would reach the vicinity of the sun in approximately eleven hours. Grosvenor's thought suffered a pause at that point. With a jerky movement, he shut off the communicator. He stood there, shocked but not incredulous. Destruction could be the purpose of the deluded person who had altered the ship's course. If so, there was just about ten hours in which to prevent catastrophe.

Even at that moment, when he had no clear plan, it seemed to Grosvenor that only an attack on the enemy, using hypnotic techniques, would effectively do the job. Meanwhile—

He stood up decisively. It was time for his second attempt to get into the control room.

He needed something that would cause direct stimulation to brain cells. There were several devices that could do that. Most of them were usable for medical purposes only. The exception was the encephalo-adjuster. Though important medically, it had other uses as well. It took Grosvenor several minutes to set up one of his adjusters. Testing it consumed still more time; and, because it was such a delicate machine, he had to fasten it to his loading vehicle with a cushion of springs around it. Altogether, the preparation required thirty-seven minutes.

The presence of the encephalo-adjuster made it necessary for him to keep down the speed of his vehicle as he headed for the control room. The enforced slow-down irked him, but it also gave him an opportunity to observe the changes that had taken place since the first moment of attack. He saw only an occasional unconscious body. Grosvenor guessed that most of the men who had fallen into deep trance sleeps had awakened spontaneously. Such awakenings were a common hypnotic phenomenon. Now they were responding to other stimuli on the same chance basis. Unfortunately—

although that also was to be expected—it seemed to mean that long-suppressed impulses controlled their actions.

A highly developed mind—human or alien—was a built-up structure, an intricate balance of positive and negative excitations. The more superficial impulses, having considerable freedom of expression at all times, could not endanger the whole structure. The suppressed impulses, suddenly given free rein, acted like water breaking through a dam. So men who, under normal circumstances, merely disliked each other mildly, all in an instant had their dislike change to a murderous hatred. The deadly factor was that they would be unaware of the change. For the mind could be tangled without the individual's being aware of it. It could be tangled by bad environmental association, or by the attack that was now being made against a ship-load of men. In either case, each person carried on as if his new beliefs were as soundly based as his old ones.

Grosvenor opened the elevator door on the control room level and then drew back hastily. A heat projector was pouring flame along the corridor; the metal walls were burning with a harsh sizzling sound. Within his narrow field of vision, three men lay dead. As he waited, there was a thunderous explosion, and instantly the flames stopped, blue smoke hazed the air and there was a sense of suffocating heat. Within seconds, both the haze and the heat were gone. The ventilating system was still working.

He peered out cautiously. At first sight, the corridor seemed deserted. Then he saw Morton, half-hidden in a protective alcove less than a score of feet away, and at almost the same moment, the Director saw him and beckoned him over. Grosvenor hesitated, then realized he had to take the risk. He pushed his vehicle through the elevator doorway and darted across the intervening space. The Director greeted him eagerly as he came up.

"You're just the man I want to see," he said. "We've got to get control of the ship away from Captain Leeth before Kent and his group organize their attack."

Morton's gaze was calm and intelligent. He had the look of a man fighting for the right. Nor did it seem to occur to him that an explanation for his statement was required. The Director went on:

"We'll need your help, particularly against Kent. They're

bringing up some chemical stuff I've never seen before. So far, our fans have blown it right back at them, but they're setting up fans of their own. Our big problem is, will we have time to defeat Leeth before Kent can bring his forces to bear?"

Time was also Grosvenor's problem. Unobtrusively, he brought his right hand up to his left wrist and touched the activating relay that controlled the directional sending plates of the adjuster. He pointed the plates at Morton as he said, "I've got a plan, sir, and I think it might be effective against the enemy."

He stopped. Morton was looking down. The Director said, "You've brought along an adjuster, and it's on. What do you expect from that?"

Grosvenor's first tense reaction yielded to a need for a suitable answer. He had hoped that Morton would not be too familiar with adjusters. With that hope blasted, he could still try to use the instrument, though without the initial advantage of surprise. He said in a voice that was taut in spite of himself, "That's it. It's this machine I want to use."

Morton hesitated, then said, "I gather from the thoughts coming into my mind that you're broadcasting—" He stopped. Interest quickened in his face. "Say," he said presently, "that's good. If you can put over the notion that we're being attacked by aliens—" He broke off. His lips pursed. His eyes narrowed with calculation. He said, "Captain Leeth has twice tried to make a deal with me. Now, we'll pretend to agree, and you go over with your machine. We'll attack the moment you signal us." He explained with dignity, "You understand, I would not consider dealing with either Kent or Captain Leeth except as a means to victory. You appreciate that, I hope?"

Grosvenor found Captain Leeth in the control room. The commander greeted him with stiff-backed friendliness. "This fight among the scientists," he said earnestly, "has placed the military in an awkward position. We've got to defend the control room and the engine room and so perform our minimum duty to the expedition as a whole." He shook his head gravely. "It's out of the question, of course, that either of them be allowed to win. In the final issue, we of the military are prepared to sacrifice ourselves to prevent the

victory of either group." The explanation startled Grosvenor out of his own purpose. He had been wondering if Captain Leeth was responsible for aiming the ship directly at a sun. Here was at least partial confirmation. The commander's motivation seemed to be that victory for any group but the military was unthinkable. With that beginning, it was probably only a tiny step to the concept that the whole expedition must be sacrificed. Unsuspected hypnosis had stimulated the step.

Casually, Grosvenor pointed the directional sender of the adjuster at Captain Leeth. . . . Brain waves, minute pulsations transmitted from axon to dendrite, from dendrite to axon, always following a previously established path depending on past associations—a process that operated endlessly among the ninety million neuron cells of a human brain. Each cell was in its own state of electro-colloidal balance, an intricate interplay of tension and impulse. Only gradually, over the years, had machines been developed that could detect with some degree of accuracy the meaning of the energy flow inside the brain.

The earliest encephalo-adjuster was an indirect desecendant of the famous electro-encephalograph. But its function was the reverse of that first device's. It manufactured artificial brain waves of any desired pattern. Using it, a skillful operator could stimulate any part of the brain, and so cause thoughts, emotions and dreams and bring up memories from the individual's past. It was not in itself a controlling instrument. The subject maintained his own ego. However, it could transmit the mind-impulses of one person to a second person. Since the impulses varied according to the sender's thoughts, the recipient was stimulated in a highly flexible fashion.

Unaware of the presence of the adjuster, Captain Leeth did not realize that his thoughts were no longer quite his own. He said, "The attack being made on the ship by the images makes the quarrel of the scientists traitorous and unforgivable." He paused, then said thoughtfully, "Here's my plan." The plan involved heat projectors, muscle-straining acceleration, and partial extermination of both groups of scientists. Captain Leeth failed even to mention the aliens, nor did it seem to occur to him that he was describing his intentions to an emissary of what he regarded as the enemy. He

finished, "Where your services will be important, Mr. Grosvenor, is in the science department. As a Nexialist, with a coordinative knowledge of many sciences, you can play a decisive role against the other scientists—"

Weary and disheartened, Grosvenor gave up. The chaos was too great for one man to overcome. Everywhere he looked were armed men. All together, he had seen a score or more of dead bodies. At any moment the uneasy truce between Captain Leeth and Director Morton would end in a burst of projector fire. And even now he could hear the roaring of the fans where Morton was holding off Kent's attack. He sighed as he turned back to the Captain. "I'll need some equipment from my own department," he said. "Can you pass me through to the rear elevators? I can be back here in five minutes."

As he guided his machine into the back door of his department a few minutes later, it seemed to Grosvenor that there was no longer any doubt about what he must do. What had seemed a far-fetched idea when he first thought of it was now the only plan he had left. He must attack the alien women through their myriad images, and with their own

hypnotic weapons.

As he made his preparations, Grosvenor kept wiping the perspiration from his face, and yet it was not warm. The room temperature stood at normal. Unwillingly, he paused finally to analyze his anxiety. He just didn't, he decided, know enough about the enemy. It was not sufficient that he had a theory about how they were operating. The great mystery was an enemy who had curiously woman-like faces and bodies, some partly doubled, some single. Uneasily, Grosvenor tried to imagine how Korita might analyze what was happening. In terms of cyclic history, what stage of culture could these beings be in?—The fellahin stage, he thought finally. It was actually an inevitable conclusion. A race that controlled hypnotic phenomena as did this one would be able to stimulate each other's minds, and so would have naturally the kind of telepathy that human beings could obtain only through the encephalo-adjuster. Such beings would flash through the early stages of their culture and arrive at the fellah stage in the swiftest possible time. The ability to read minds without artificial aids would stultify any culture.

Swiftly, Grosvenor went back mentally to the various civilizations of Earth history that had run their courses, apparently exhausted themselves, and then stagnated into fellahdom-Babylon, Egypt, China, Greece, Rome and parts of west Europe. Then there were the Mayan, Toltec and Aztec cultures of early America, the East Indies, Ceylon and the mid-Pacific islanders, with their strange relics of by-gone glories-endlessly the pattern repeated itself. Fellah folk resented newness and change, resisted it and fought it blindly. The coming of this ship could have stirred these beings to just that kind of resistance. It seemed to Grosvenor that he had to act as if the analysis was correct. He had no other hypothesis. With such a theory as a starting point, he could try to obtain verification from one of the images. With pursed lips, he considered how it might be done. They wanted to conquer him also, of that he was sure; so, accordingly, he must appear to play into their hands. A quick glance at the chronometer tensed him, as he saw he had less than seven hours to save the ship!

Hastily, he focused a beam of light through the encephaloadjuster. With quick movements, he set a screen in front of the light, so that a small area of glass was thrown into shadow except for the intermittent light that played on it

from the adjuster.

Instantly, an image appeared. It was one of the partially doubled ones, and because of the encephalo-adjuster, he was able to study it in safety. That first clear look astounded him. It was only vaguely humanoid, and yet it was understandable how his mind had leaped to the woman identification earlier. Its overlapping double face was crowned with a neat bun of golden feathers, but its head, though unmistakably bird-like now, did have a human appearance. There were no feathers on its face, which was covered with a lacework of what seemed to be veins. The human appearance resulted from the way those veins had formed into groups. They gave the effect of cheeks and nose. The second pair of eyes, and the second mouth, were in each case nearly two inches above the first. They almost made a second head, which was literally growing out of the first. There was also a second pair of shoulders, with a doubled pair of short arms that ended in beautifully delicate, amazingly long hands and fingers—and the overall effect was still feminine. Grosvenor

found himself thinking that the arms and fingers of the two bodies would be likely to separate first; then the second body would be able to help support its weight. Parthenogenesis, he thought. Here were genuine hymenopters.

The image in the wall before him showed vestigial wings, and tufts of feathers were visible at the wrists. It wore a bright blue tunic over an astonishingly straight and superficially human-like body. If there were other vestiges of a feathery past, they were hidden by the clothing. What was clear was that this bird didn't and couldn't fly under its own power.

Grosvenor completed his study swiftly. His first move seemed as obvious as it was necessary. Somehow, he must convey to these beings that he would let himself be hypnotized in exchange for information. Tentatively, he drew a picture of the image and of himself on a blackboard. Fortyseven precious minutes and scores of drawings later, the bird image suddenly faded from the wall. And a city scene appeared in its place. It was not a large community, and his first view of it was from a high vantage point. He had an impression of very tall, very narrow buildings clustered so close together that all the lower reaches must be lost in gloom for most of each day. Grosvenor wondered, in passing, if that might possibly reflect nocturnal habits in some primeval past. His mind leaped on. He ignored individual buildings in his desire to obtain a whole picture. Above everything else he wanted to find out the extent of their machine culture. how they communicated, and if this was the city from which the attack on the ship was being launched.

He could see no machines, no aircraft, no cars, nor anything corresponding to the interstellar communication equipment used by human beings. On Earth, such communication required stations spaced over many square miles of land. It seemed likely, therefore, that this was not the origin of the attack. He had guessed, of course, that they would not show him anything vital. Even as he made his negative discovery, the view changed. He was no longer on a hill, but on a building near the center of the city. Whatever was taking that perfect color picture moved forward, and he looked down over the edge. His primary concern was with the whole scene. Yet he found himself wondering how they were showing it to him. The transition from one scene to another had

been accomplished in the twinkling of an eye. Less than a minute had passed since his blackboard illustration had

finally made known his desire for information.

That thought, like the others, was a flashing one. Even as he had it, he was gazing avidly down the side of the building. The space separating it from the nearby structures seemed no more than ten feet. But now he saw something that had not been visible from the hillside. The buildings were connected on every level by walks only inches wide. Along these moved the pedestrian traffic of the bird city. Directly below Grosvenor, two individuals strode towards each other along the same narrow walk, seemingly unconcerned by the fact that it was a hundred feet or more to the ground. They passed casually, easily. Each swung his outside leg wide around the other, caught the walk, bent his inside leg far out, and then they were by, without having broken pace. There were other people on other levels going through the same intricate maneuvers in the same nonchalant manner. Watching them, Grosvenor guessed that their bones were thin and hollow, and that they were lightly built.

The scene changed again, and then again. It moved from one section of the street to another. He saw, it seemed to him, every possible variation of the reproductive condition. Some were so far advanced that the legs and arms and most of the body were free. Others were as he had already seen them. In every instance, the "parent" seemed unaffected by

the weight of the new body.

Grosvenor was trying to get a glimpse inside one of the dim interiors of a building when the picture began to fade from the wall. In a moment, the city had disappeared completely. In its place grew the double image. The image-fingers pointed at the encephalo-adjuster. Its motion was unmistakable. It had fulfilled its part of the bargain. It was time for him to fulfill his. Its naïve expectation that he would do so was typically fellah. Unfortunately, he had no alternative but to carry out his obligation.

"I am calm and relaxed," said Grosvenor's recorded voice. "My thoughts are clear. What I see is not necessarily related to what I am looking at. What I hear may be meaningless to the interpretive centers of my brain, but I have seen their city as they think it is. Whether what I actually see and hear

makes sense or nonsense, I remain calm, relaxed and at

Grosvenor listened carefully to the words, and then nodded. The time might come, of course, when he would not consciously hear the message. But it would be there. Its patterns would impress ever more firmly on his mind. Still listening, he examined the adjuster for the last time, and all was as he wanted it. Carefully, he set the automatic cut-off for five hours. At the end of that time, unless he were dead. the limited cross connection would be broken. He would have preferred his first break to be in seconds, or minutes, but what he was about to do was not merely a scientific experiment-it was a life-and-death gamble. Ready for action, he put his hand on the control dial, and there he paused. For this was the moment. Within a few seconds the group mind of perhaps thousands of individual birdfolk would be in possession of parts of his nervous system. They would undoubtedly try to control him as they were controlling the other men on the ship.

He was fairly positive that he would be up against a group of minds working together. He had seen no machines, not even a wheeled vehicle, that most primitive of mechanical devices. For a short time, he had taken it for granted that they were using television-type cameras. Now, he guessed that he had seen the city through the eyes of individuals, as, with these beings, telepathy was a sensory process as sharp as vision itself. The enmassed mindpower of millions of birdpeople could hurdle light years of distance. They didn't need

machines.

On Earth, and elsewhere, nearly all lower-order life forms that reproduced by parthenogenesis worked together in a curious unity of purpose. It suggested an interrelation that

could dispense with actual physical contact.

Fellahdom must be a long-standing condition of this race. There would be no doubt in the mind of the individual about the "truth" of what it saw and heard and felt. It would be only too easy for them to settle into an inflexible pattern of existence. That pattern was now going to feel the sledgehammer impact of new ideas. He couldn't hope to foresee the result.

Still listening to the recorder, Grosvenor manipulated the dial of the encephalo-adjuster, and slightly modified the rhythm of his own thoughts. It had to be slight. Even if he had wanted to, he could not offer the aliens complete attunement. In those rhythmic pulsations lay every variation of sanity, unsanity and insanity. He had to restrict his reception to waves that would register "sane" on a psychologist's graph.

The adjuster superimposed them on a beam of light which in turn shone directly on the image. If the individual behind the image was affected by the pattern in the light, it didn't show it yet. Grosvenor did not expect overt evidence, and so he was not disappointed. He was convinced that the result would become apparent only in the changes that occurred in the patterns they were directing at him. And that, he was sure, he would have to experience with his own nervous system.

It was hard for him to concentrate on the image, but he persisted. The encephalo-adjuster began to interfere markedly with his vision, and still he stared steadily at the image.

"... I am calm and relaxed. My thoughts are clear...."

One instant the words were loud in his ears, and the next they were gone. In their stead was a roaring sound as of distant thunder.

The noise faded slowly. It became a steady throbbing like the murmur in a large sea shell. Grosvenor was aware of a faint light. It was far away, and had the hazy dimness of a lamp seen through thick fog.

"I'm still in control," he assured himself. "I'm getting sense impressions through its nervous system. It's getting impres-

sions through mine."

He could wait. He could sit here and wait until the darkness cleared, until his brain started to make some kind of interpretation of the sense phenomena that were being telegraphed from that other nervous system. He could sit here and—

He stopped. "Sit!" he thought. Was that what it was doing? He poised intent and alert. He heard a distant voice say, "Whether what I actually see and hear makes sense or nonsense, I remain calm—" The sound of his recorded voice relieved him anew. The danger would come if his body were forced away from that reassuring sound, and away from the encephalo-adjuster. Until that threatened, he could let the alien impressions seep into him.

His nose began to itch. He thought: "They don't have noses; at least I didn't see any. Therefore, it's either my own nose, or a random stimulation." He started to reach up to scratch it, and felt a sharp pain in his stomach. He would have doubled up with the hurt of it if he had been able. He couldn't. He couldn't scratch his nose or put his hands on his abdomen.

He realized then that the itch and the pain stimuli did not derive from his own body, nor did they necessarily have any corresponding meaning in the other's nervous system. Two highly developed life forms were sending signals to each other—he hoped that he was sending signals to it also—which neither could interpret. His advantage was that he had expected it. The alien, if it was fellah, and if Korita's theory was valid, hadn't and couldn't expect it. Understanding that, he could hope for adjustment. It could only become more confused.

The itch went away, and the pain in his stomach became a feeling of satiation, as if he had eaten too much. A hot needle stabbed at his spine, digging at each vertebra. Half way down, the needle turned to ice, and the ice melted and ran in a freezing stream down his back. Something—a hand? a piece of metal? a pair of tongs?—snatched at a bundle of muscles in his arm, and almost tore them out by the roots. His mind shrieked with pain messages and he almost lost consciousness.

Grosvenor was a badly shaken man when that sensation faded into nothingness. These were all illusions. No such things were happening anywhere, not in his body, not in that of the bird-being. His brain was receiving a pattern of impulses through his eyes, and was misinterpreting them. In such a relationship, pleasure could become pain, any stimulus could produce any feeling. He hadn't counted on the misinterpretations being so violent.

He forgot that as his lips were caressed by something soft and squishy. A voice said, "I am loved—" Grosvenor rejected the meaning. "No, not loved." It was, he believed, his own brain again trying to interpret sense phenomena from a nervous system that was experiencing a reaction different from any comparable human emotion. Consciously, he substituted the words: "I am stimulated by . . ." and then let the feeling run its course. In the end, he still didn't

know what it was that he had felt. The stimulation was not unpleasant. His taste buds were titillated by a sense of sweetness, and his eyes watered. It was a relaxing process. A picture of a flower came into his mind. It was a lovely, red, Earth carnation, and thus could have no connection with the flora of the Riim world. "Riim!" He thought. His mind poised in tense fascination. Had that come to him across the gulf of space? In some irrational way, the name seemed to fit. Yet no matter what came through, a doubt would remain in his mind.

The final series of sensations had all been pleasant. Nevertheless, he waited anxiously for the next manifestation. The light remained dim and hazy—then once more his eyes seemed to water, his feet suddenly itched intensely. The sensation passed, leaving him unaccountably hot and weighted by a sufficient plack of air.

"False!" he told himself. "Nothing like that is happen-

ing.'

The stimulations ceased. Again there was only the steady throbbing sound, and the all-pervasive blur of light. It began to worry him. It was possible that his method was right and that, given time, he would eventually be able to exercise some control over a member or a group of members of the enemy. Time was what he could not spare. Every passing second brought him a colossal distance nearer personal destruction. Out there—here (for an instant he was confused)—in space; one of the biggest and costliest ships ever built by men was devouring the miles at a velocity that had almost no meaning.

He knew which parts of his brain were being stimulated. He could hear a noise only when sensitive areas at the side of the cortex received sensations. The brain surface above the ear, when titillated, produced dreams and old memories. In the same way, every part of the human brain had long ago been mapped. The exact location of stimulation areas differed slightly for each individual, but the general structure, among humans, was always the same.

The normal human eye was a fairly objective mechanism. The lens focussed a real image on the retina. Judging by the pictures of their city, as transmitted by the Riim-folk, they also possessed objectively accurate eyes. If he could

coordinate his visual centers with their eyes, he would receive dependable pictures.

More minutes went by. He thought, in sudden despair: "Is it possible that I'm going to sit here the full five hours with-out ever making a useful contact?" For the first time, he questioned his good sense in committing himself so completely to this situation. When he tried to move his hand over to the control lever of the encephalo-adjuster, nothing seemed to happen. A number of vágrant sensations came, among them, unmistakably, the odor of burning rubber. For a third time, his eyes watered. And then, sharp and clear, a picture came. It flashed off as swiftly as it had flashed on. To Grosvenor, who had been trained by advanced tachistoscopic techniques, the after-image remained as vivid in his mind as if he had had a leisurely look. It seemed as if he were in one of the tall, narrow buildings. The interior was dimly lighted by the reflections from the sunlight that came through the open doors, as there were no windows. Instead of floors, the residence was fitted with catwalks. A few bird people were sitting on these walks. The walls were lined with doors, indicating the existence of cabinets and storage areas.

The visualization both excited and disturbed him. Suppose he did establish a relationship whereby he was affected by its nervous system, and it by his. Suppose he reached the point where he could hear with its ears, see with its eyes, and feel to some degree what it felt. These were sensory impressions only. Could he hope to bridge the gap, and induce motor responses in the creature's muscles? Would he be able to force it to walk, turn its head, move its arms, and, generally, make it act as his body? The attack on the ship was being made by a group working together, thinking together, feeling together. By gaining control of one member of such a

group, could he exercise some control over all?

His momentary vision must have come through the eyes of one individual. What he had experienced so far did not suggest any kind of group contact. He was like a man imprisoned in a dark room with a hole in the wall in front of him covered with layers of translucent material. Through this filtered a vague light. Occasionally, images penetrated the blur, and he had glimpses of the outside world. He could be fairly certain that the pictures were accurate, but that did not apply to the sounds that came through another

hole on a side wall, or the sensations that came to him through still other holes in the ceiling and floor.

Humans could hear frequencies up to twenty thousand a second. That was where some races started to hear. Under hypnosis, men could be conditioned to laugh uproariously when they were being tortured, and shriek with pain when tickled. Stimulation that meant pain to one life form could mean nothing at all to another.

Mentally, Grosvenor let the tensions seep out of him. There was nothing for him to do but to relax and wait. He

waited.

It occurred to him presently that there might be a connection between his own thoughts and the sensations he received. That picture of the inside of the building—what had he thought just before it came? Principally, he recalled, he had visualized the structure of the eye. The connection was so obvious that his mind trembled with excitement. There was another thing, also. Until now, he had concentrated on the notion of seeing and feeling with the nervous system of the individual. Still the realization of his hopes depended on his establishing contact with, and control of, the group of minds that had attacked the ship.

He saw his problem, suddenly, as one that would require control of his own brain. Certain areas would have to be virtually blacked out, kept at minimum performance levels. Others must be made extremely sensitive, so that all incoming sensations found it easier to seek expression through them. As a highly trained auto-hypnotic subject, he could accomplish both objectives by suggestion. Vision came first, of course. Then muscular control of the individual through

whom the group was working against him.

Flashes of colored light interrupted his concentration. Grosvenor regarded them as evidence of the effectiveness of his suggestions. He knew that he was on the right track when his vision cleared suddenly, and stayed clear. The scene was the same. His control still sat on one of the roosts inside one of the tall buildings. Hoping fervently that the vision was not going to fade, Grosvenor began to concentrate on moving the Riim's muscles. The trouble was that the ultimate explanation of why a movement could occur at all was obscure. His visualization had to be on a level that was already

gross. Nothing happened. Shocked but determined, Grosvenor tried symbol hypnosis, using a single cue word to cover the

entire complex process.

Slowly, one of the attenuated arms came up. Another cue, and his control stood up cautiously. Then he made it turn its head. The act of looking reminded the bird-being that that drawer and that cabinet and that closet were "mine." The memory barely touched the conscious level. The creature knew its own possessions and accepted the fact without concern.

Grosvenor had a hard time fighting down his excitement. With tense patience, he had the bird-being get up from a sitting position, raise its arms, lower them, and walk back and forth along the roost. Finally, he made it sit down again. He must have been keyed up, his brain responsive to the slightest suggestion. Because he had barely started to concentrate again when his whole being was flooded by a message that seemed to affect every level of his thought and feeling. More or less automatically, Grosvenor translated the anguished thoughts into familiar verbalisms.

"... The cells are calling, calling. The cells are afraid. Oh, the cells know pain! There is darkness in the Riim world. Withdraw from the being—far from Riim. . . . Shadows, darkness, turmoil . . . the cells must reject him to try to destroy the being who came out of the great dark. The night deepens. All cells withdraw . . . but they cannot. . . ."

Grosvenor thought exultantly: "I've got them!" After a minute of tremendous excitement, he grew sober. His problem was greater than theirs. If he broke his connection with them, they would be free. By avoiding him thereafter, they could go on to achieve the purpose of their disruptive attack . . . destruction of the Space Beagle. He would still have the problem of overcoming Morton and the others. He had no alternative but to go on with his plan.

He concentrated first on what seemed the most logical

intermediate stage: the transfer of control to another alien.

The choice, in the case of these beings, was obvious.

"I am loved!" he told himself, deliberately producing the sensation which had confused him earlier. "I am loved by my parent body, from which I am growing to wholeness. I share my parent's thoughts, but already I see with my own eyes, and know that I am one of the group. . . ."

The transition came suddenly, as Grosvenor had expected it might. He moved the smaller, duplicate fingers. He arched the fragile shoulders. Then he oriented himself again to the parent Riim. The experiment was so completely satisfactory that he felt ready for the bigger jump that would take him into association with the nervous system of a more distant alien. That, also, proved to be a matter of stimulating the proper brain centers. Grosvenor came to awareness standing in a wilderness of brush and hill. Directly in front of him was a narrow stream, and beyond it, an orange sun rode low in a dark purple sky that was spotted with fleecy clouds. Grosvenor made his new control turn completely around. He saw that a small roost building, the only habitation in sight, nestled among the trees farther along the stream. He walked toward the building and looked inside. In the dim interior, he made out several roosts, one with two birds sitting on it, both with eyes closed. It was quite possible, he decided, that they were participating in the group assault on the Space Beagle.

From there, by a variation of the stimulus, he transferred his control to an individual on a part of the planet where it was night. The transition this time was even faster. He was in a lightless city, with ghostly buildings and catwalks. Swiftly, Grosvenor moved on to association with other nervous systems. He had no clear idea why the "rapport" was established with one Riim and not with another who fitted the same general requirement. It could be that the stimulation affected some individuals slightly faster than it affected others. It was even possible that these were descendants or body-relatives of his original parent-control. When he had been associtated with more than two dozen Riim all over the planet, it seemed to Grosvenor that he had

a good overall impression.

It was a world of brick and stone and wood, and of a neurological community relationship that would probably never be surpassed. A race had bypassed the entire machine age of man with its penetration of the secrets of matter and energy. Now, he felt, he could safely take the next-to-the-last step of his counterattack. He concentrated on a pattern which would characterize one of the beings who had projected an image to the *Space Beagle*. (He had, then, a sense of a small but noticeable lapse of time.) Then he was looking

forth from one of the images, seeing the ship through an image.

His first concern was with how the battle was progressing, but he had to restrain his will to know because to come aboard was only part of his necessary pre-conditioning. He wanted to affect a group of perhaps millions of individuals, and had to affect them so powerfully that they would have to withdraw from the Space Beagle and have no recourse but to stay away from it.

He had proved that he could receive their thoughts, and that they could receive his. His association with one nervous system after another would not have been possible unless that was so. Now he was ready. He thought into the darkness:

"You live in a Universe; and within you, you form pictures of the Universe as it seems to you. Of that Universe you know nothing and can know nothing except for the pictures, but the pictures within you of the Universe are not the Universe. . . ."

How could you influence another's mind?—by changing his assumptions. How could you alter another's actions?—by changing his basic beliefs, his emotional certainties.

Carefully, Grosvenor went on: "And the pictures within you do not show all about the Universe, for there are many things which you cannot know directly, not having senses to know. Within the Universe there is an order, and if the order of the pictures within you is not as the order of the Universe, then you are deceived..."

In the history of life, few thinking beings had ever done anything illogical—within their frame of reference. If the frame was falsely based, if the assumptions were untrue to reality, then the individual's automatic logic could lead him to disastrous conclusions.

The assumptions had to be changed. Grosvenor changed them, deliberately, coolly, honestly. His own basic hypothesis behind what he was doing was that the Riim had no defense. These were the first new ideas they had had in countless generations and he did not doubt that the impact would be colossal. This was a fellah civilization, rooted in certainties that had never before been challenged. There was ample historical evidence that a tiny intruder could influence decisively the future of entire fellahin races.

Huge old India had crumbled before a few thousand Englishmen. Similarly, all the fellah people of ancient Earth were taken over with ease, and did not revive till the core of their inflexible attitudes was forever shattered by the dawning realization that there was more to life than they had been taught under their rigid systems. The Riim were peculiarly vulnerable. Their method of communication, unique and wonderful though it was, made it possible to influence them all in a single intensive operation. Over and over, Grosvenor repeated his message, adding, each time, one instruction that had to do with the ship. The instruction was:

"Change the pattern you are using against those on the ship, and then withdraw it. Change the pattern, so that they can relax, and sleep... then withdraw it... do not attack

again. . . ."

He had only a vague notion as to how long he actually poured his commands into that tremendous neural circuit. He guessed about two hours. Whatever the time involved, it ended as the relay switch on the encephalo-adjuster automatically broke the connection between himself and the image in the wall of his department. Abruptly, he was aware of the familiar surroundings of his own department. He glanced at where the image had been and tensed as he saw that it was still there, but shook his head slightly. He could hardly expect a definite reaction this soon. The Riim, also, were recovering from a connection that had just been broken.

As Grosvenor watched, the pattern of light from the image changed subtly. Grosvenor's head drooped sleepily. He sat up jerkily, remembering. The instructions he had given—to relax and sleep—this was the result. All over the ship, men would be sleeping as the new hypnotic pattern extended its inhibitory paralysis over the hemispheres of the brain.

About three minutes went by. Suddenly, the double image of the Riim vanished from the glistening wall in front of him. A moment later, Grosvenor was out in the corridor. As he raced along, he saw that unconscious men lay everywhere but that the walls were bright and clear. Not once on his journey to the control room did he see an image.

Inside the control room, he stepped gingerly over the sleeping form of Captain Leeth, who lay on the floor near

the control panel. With a sigh of relief, Grosvenor threw the switch that energized the outer screen of the ship.

Seconds later, Elliott Grosvenor was in the control chair, altering the course of the *Space Beagle*.

ND NOW "THE RULL," A STORY IN which the science-fiction reader is asked to make a creative contribution at high speed to an alien—that is, nonhuman—reality.

THE RULL

PROFESSOR JAMIESON SAW THE OTHER SPACE boat out of the corner of one eye. He was sitting in a hollow about a dozen yards from the edge of the precipice, and some score of feet from the doorway of his own lifeboat. He had been intent on his survey book, annotating a comment beside the voice graph to the effect that Laertes III was so close to the invisible dividing line between Earth-controlled and Rull-controlled space that its prior discovery by man was in itself a major victory in the Rull-human war.

It was at that point that he saw the other boat, above and somewhat to his left, approaching the tableland. He glanced up at it—and froze where he was, torn between two

opposing purposes.

His first impulse, to run for the lifeboat, yielded to the realization that the movement would be seen instantly by the electronic reflexes of the other ship. For a moment, then, he had the dim hope that if he remained quiet enough, neither he nor his ship would be observed.

Even as he sat there, perspiring with indecision, his tensed eyes noted the Rull markings and the rakish design of the other vessel. His vast knowledge of things Rull enabled him

to catalogue it instantly as a survey craft.

A survey craft. The Rulls had discovered the Laertes sun. The terrible potentiality was that behind this small craft might be fleets of battleships, whereas he was alone. His own lifeboat had been dropped by the Orion nearly a parsec away while the big ship was proceeding at antigravity speeds. That was to insure that Rull energy traces did not record its passage through this area of space.

The Orion was to head for the nearest base, load up with planetary defense equipment, and return. She was due in

ten days.

Ten days. Jamieson groaned inwardly, and drew his legs under him and clenched his survey book in the fingers of one hand. But still the possibility that his ship, partially hidden under a clump of trees, might escape notice if he remained quiet, held him there in the open. His head tilted up, his eyes glared at the alien, and his brain willed it to turn aside.

Once more, flashingly, while he waited, the implications of the disaster that could be here struck deep. In all the universe there had never been so dangerous an intelligence as the Rull. At once remorseless and immune to all attempts at establishing communication, Rulls killed human beings on sight. A human-manned warship that ventured into Rull-patrolled space was attacked until it withdrew or was destroyed. Rull ships that entered Earth-controlled space never withdrew once they were attacked. In the beginning, man had been reluctant to engage in a death struggle for the galaxy. But the inexorable enemy had forced him finally to match in every respect the tenacious and murderous policies of the Rull.

The thought ended. The Rull ship was a hundred yards away, and showed not signs of changing its course. In seconds, it would cross the clump of trees that half-hid the lifeboat.

In a spasm of a movement, Jamieson launched himself from his chair. Like a shot from a gun, with utter abandon, he dived for the open doorway of his machine. As the door clanged behind him, the boat shook as if it had been struck by a giant. Part of the ceiling sagged; the floor staggered

toward him, and the air grew hot and suffocating.

Gasping, Jamieson slid into the control chair and struck at the main emergency switch. The rapid-fire blasters huzzaed into automatic firing positions and let go with a hum and deep-throated ping. The refrigerators whined with power; a cold blast of air blew at his body. The relief was so quick that a second passed before Jamieson realized that the atomic engines had failed to respond, and that the lifeboat, which should already have been sliding into the air, was still lying inert in an exposed position.

Tense, he stared into the visiplates. It took a moment to locate the Rull ship. It was at the lower edge of one plate, tumbling slowly out of sight beyond a clump of trees a quarter of a mile away. As he watched, it disappeared; and then the crash of the landing came clear and unmistakable from the sound board in front of him.

The relief that came was weighted with an awful reaction. Jamieson sank back into the cushions of the control chair, weak from the narrowness of his escape. The weakness ended abruptly as a thought struck him. There had been a sedateness about the way the enemy ship fell. The crash hadn't killed the Rulls aboard.

He was alone in a damaged lifeboat on an impassable mountain with one or more of the most remorseless creatures ever spawned. For ten days, he must fight in the hope that man would still be able to seize the most valuable planet discovered in a century.

He saw in his visiplate that it was growing darker outside.

Jamieson took another antisleep pill and made a more definitive examination of the atomic motors. It didn't take long to verify his earlier diagnosis. The basic graviton pile had been thoroughly frustrated. Until it could be reactivated on the *Orion*, the motors were useless.

The conclusive examination braced Jamieson. He was committed irrevocably to the battle of the tableland, with all its intricate possibilities. The idea that had been turning over in his mind during the prolonged night took on new meaning. This was the first time in his knowledge that a Rull and a human being had faced each other on a limited field of action, where neither was a prisoner. The great battles in space were ship against ship and fleet against fleet. Survivors either escaped or were picked up by overwhelming forces. Actually, both humans and Rulls, captured or facing capture, were conditioned to kill themselves. Rulls did it by a mental willing that had never been circumvented. Men had to use mechanical methods, and in some cases that had proved impossible. The result was that Rulls had had occasional opportunities to experiment on living, conscious men.

Unless he was bested before he could get organized, here was a priceless opportunity to try some tests on Rulls—and

without delay. Every moment of daylight must be utilized to the uttermost limit.

By the time the Laertes sun peered palely over the horizon that was the northeast cliff's edge, the assault was under way. The automatic defensors, which he had set up the night before, moved slowly from point to point ahead of the mobile blaster.

Jamieson cautiously saw to it that one of the three defensors also brought up his rear. He augmented that basic protection by crawling from one projecting rock after another. The machines he manipulated from a tiny hand control, which was connected to the visiplates that poked out from his headgear just above his eyes. With tensed eyes he watched the wavering needles that would indicate movement or that the defensor screens were being subjected to energy opposition.

Nothing happened.

As he came within sight of the Rull craft, Jamieson stalled his attack while he seriously pondered the problem of no resistance. He didn't like it. It was possible that all the Rulls aboard had been killed, but he doubted it mightily. Rulls were almost boneless. Except for half a dozen strategically linked cartilages, they were all muscles.

With bleak eyes, Jamieson studied the wreck through the telescopic eyes of one of the defensors. It lay in a shallow indentation, its nose buried in a wall of gravel. Its lower plates were collapsed versions of the originals. His single-energy blast the evening before, completely automatic though it had been, had really dealt a smashing blow to the Rull ship.

The overall effect was of utter lifelessness. If it were a trick, then it was a very skillful one. Fortunately, there were tests he could make, not absolutely final but evidential and indicative.

He made them.

The echoless height of the most unique mountain ever discovered hummed with the fire-sound of the mobile blaster. The noise grew to a roar as 'the unit's pile warmed to its task and developed its maximum kilo-curie activity.

Under that barrage, the hull of the enemy craft trembled a little and changed color slightly, but that was all. After ten

minutes, Jamieson cut the power and sat baffled and indecisive.

The defensive screens of the Rull ship were full on. Had they gone on automatically after his first shot of the evening before? Or had they been put up deliberately to nullify just such an attack as this?

He couldn't be sure. That was the trouble; he had no positive knowledge. The Rulls could be lying inside dead. They could be wounded and incapable of doing anything against him. They could have spent the night marking up the tableland with *elled* nerve-control lines—he'd have to make sure he never looked directly at the ground—or they could simply be waiting for the arrival of the greater ship that had dropped it onto the planet.

Jamieson refused to consider the last possibility. That way

was death, without qualification or hope.

Frowningly, he studied the visible damage he had done the ship. All the hard metals had held together so far as he could see, but the whole bottom of the ship was dented to a depth that varied from one to four feet. Some radiation must have got in, and the question was, what would it have damaged?

He had examined dozens of captured Rull survey craft, and if this one ran to the pattern, then in the front would be the control center, with a sealed-off blaster chamber. In the rear the engine room, two storerooms, one for fuel and equipment, the other for food and—

For food. Jamieson jumped, and then with wide eyes noted how the food section had suffered greater damage than

any other part of the ship.

Surely, surely, some radiation must have got into it, poisoning it, ruining it, and instantly putting the Rull, with

his swift digestive system, into a deadly position.

Jamieson sighed with the intensity of his hope, and prepared to retreat. As he turned away, quite accidentally, he glanced at the rock behind which he had shielded himself from possible direct fire.

Glanced at it, and saw the elled lines in it. Intricate lines, based on a profound and inhuman study of the human nervous system. Jamieson recognized them, and stiffened in horror. He thought in anguish: Where, where am I supposed to fall? Which cliff?

With a desperate will, with all his strength, he fought to retain his senses a moment longer. He strove to see the lines again. He saw, briefly, flashingly, five vertical and above them three lines that pointed east with their wavering ends.

The pressure built up, up, up inside him, but still he fought to keep his thoughts moving. Fought to remember if there were any wide ledges near the top of the east cliff.

There were. He recalled them in a final agony of hope. There, he thought. That one, that one. Let me fall on that one. He strained to hold the ledge image he wanted, and to repeat, repeat the command that might save his life. His last, dreary thought was that here was the answer to his doubts. The Rull was alive.

Blackness came like a curtain of pure essence on night.

Somberly, the Rull glided toward the man's lifeboat. From a safe distance, he examined it. The defense screens were up, but he couldn't be sure they had been put up before the attack of the morning, or had been raised since then, or had come on automatically at his approach.

He couldn't be sure. That was the trouble. Everywhere, on the tableland around him, was a barrenness, a desolation unlike anything else he had ever known. The man could be dead, his smashed body lying at the remote bottom of the mountain. He could be inside the ship badly injured; he had, unfortunately, had time to get back to the safety of his craft. Or he could be waiting inside, alert, aggressive, and conscious of his enemy's uncertainty, determined to take full advantage of that uncertainty.

The Rull set up a watching device that would apprise him when the door opened. Then he returned to the tunnel that led into his ship, laboriously crawled through it, and settled himself to wait out the emergency.

The hunger in him was an expanding force, hourly taking on a greater urgency. It was time to stop moving around. He would need all his energy for the crisis.

The days passed.

Jamieson stirred in an effluvium of pain. At first it seemed all-enveloping, a mist of anguish that bathed him in sweat from head to toe. Gradually, then, it localized in the region of his lower left leg.

The pulse of the pain made a rhythm in his nerves. The minutes lengthened into an hour, and then he finally thought: Why, I've got a sprained ankle! He had more than that, of course. The pressure that had driven him here clung like a gravitonic plate. How long he lay there, partly conscious, was not clear, but when he finally opened his eyes, the sun was still shining on him, though it was almost directly overhead.

He watched it with the mindlessness of a dreamer as it withdrew slowly past the edge of the overhanging precipice. It was not until the shadow of the cliff suddenly plopped across his face that he started to full consciousness with a

sudden memory of deadly danger.

It took a while to shake the remnants of the *elled* "take" from his brain. And, even as it was fading, he sized up, to some extent, the difficulties of his position. He saw that he had tumbled over the edge of a cliff to a steep slope. The angle of descent of the slope was a sharp fifty-five degrees, and what had saved him was that his body had been caught in the tangled growth near the edge of the greater precipice beyond.

His foot must have twisted in those roots, and sprained.

As he finally realized the nature of his injuries, Jamieson braced up. He was safe. In spite of having suffered an accidental defeat of major proportions, his intense concentration on this slope, his desperate will to make *this* the place where he must fall, had worked out.

He began to climb. It was easy enough on the slope, steep as it was; the ground was rough, rocky, and scraggly with brush. It was when he came to the ten-foot overhanging cliff that his ankle proved what an obstacle it could be.

Four times he slid back, reluctantly; and then, on the fifth try, his fingers, groping desperately over the top of the cliff, caught an unbreakable root. Triumphantly, he dragged

himself to the safety of the tableland.

Now that the sound of his scraping and struggling was gone, only his heavy breathing broke the silence of the emptiness. His anxious eyes studied the uneven terrain. The tableland spread before him with not a sign of a moving figure anywhere.

To one side, he could see his lifeboat. Jamieson began to crawl toward it, taking care to stay on rock as much as pos-

sible. What had happened to the Rull he did not know. And since, for several days, his ankle would keep him inside his ship, he might as well keep his enemy guessing during that time.

Professor Jamieson lay in his bunk, thinking. He could hear the beating of his heart. There were the occasional sounds when he dragged himself out of bed. But that was almost all. The radio, when he turned it on, was dead. No static, not even the fading in and out of a wave. At this colossal distance, even subspace radio was impossible.

He listened on all the more active Rull wave lengths. But the silence was there, too. Not that they would be broad-

casting if they were in the vicinity.

He was cut off here in this tiny ship on an uninhabited planet, with useless motors.

He tried not to think of it like that. "Here," he told himself, "is the opportunity of a lifetime for an experiment."

He warmed to the idea as a moth to flame. Live Rulls were hard to get hold of. About one a year was captured in the unconscious state, and these were regarded as priceless treasures. But here was an even more ideal situation.

We're prisoners, both of us. That was the way he tried to picture it. Prisoners of an environment, and, therefore, in a curious fashion, prisoners of each other. Only each was free of the conditioned need to kill himself.

There were things a man might discover. The great mysteries—as far as men were concerned—that motivated Rull actions. Why did they want to destroy other races totally? Why did they needlessly sacrifice valuable ships in attacking Earth machines that ventured into their sectors of space when they knew that the intruders would leave in a few weeks anyway? And why did prisoners who could kill themselves at will commit suicide without waiting to find out what fate was intended for them? Sometimes they were merely wanted as messengers.

Was it possible the Rulls were trying to conceal a terrible weakness in their make-up of which man had not yet found

an inkling?

The potentialities of this fight of man against Rull on a lonely mountain exhilarated Jamieson as he lay on his bunk, scheming, turning the problem over in his mind.

There were times during those dog days when he crawled over to the control chair and peered for an hour at a stretch into the visiplates. He saw the tableland and the vista of distance beyond it. He saw the sky of Laertes III, bluish pink sky, silent and lifeless.

He saw the prison. Caught here, he thought bleakly. Professor Jamieson, whose appearance on an inhabited planet would bring out unwieldly crowds, whose quiet voice in the council chambers of Earth's galactic empire spoke with final authority—that Jamieson was here, alone, lying in a bunk, waiting for a leg to heal, so that he might conduct an experiment with a Rull.

It seemed incredible. But he grew to believe it as the days passed.

On the third day, he was able to move around sufficiently to handle a few heavy objects. He began work immediately on the mental screen. On the fifth day it was finished. Then the story had to be recorded. That was easy. Each sequence had been so carefully worked out in bed that it flowed from his mind onto the visiwire.

He set it up about two hundred yards from the lifeboat, behind a screening of trees. He tossed a can of food a dozen feet to one side of the screen.

The rest of the day dragged, It was the sixth day since the arrival of the Rull, the fifth since he had sprained his ankle.

Came the night.

A gliding shadow, undulating under the starlight of Laertes III, the Rull approached the screen the man had set up. How bright it was, shining in the darkness of the tableland, a blob of light in a black universe of uneven ground and dwarf shrubbery.

When he was a hundred feet from the light, he sensed the food—and realized that here was a trap.

For the Rull, six days without food had meant a stupendous loss of energy, visual blackouts on a dozen color levels, a dimness of life-force that fitted with the shadows, not the sun. That inner world of disjointed nervous system was like a run-down battery, with a score of organic "instruments" disconnecting one by one as the energy level fell. The yeli recognized dimly, but with a savage anxiety, that

only a part of that nervous system would ever be restored to complete usage. And even for that speed was essential. A few more steps downward, and then the old, old conditioning of mandatory self-inflicted death would apply even to the high Aaish of the Yeell.

The worm body grew quiet. The visual center behind each eye accepted light on a narrow band from the screen. From beginning to end, he watched the story as it unfolded, and then watched it again, craving repetition with all the ardor

of a primitive.

The picture began in deep space with a man's lifeboat being dropped from a launching lock of a battleship. It showed the battleship going on to a military base, and there taking on supplies and acquiring a vast fleet of reinforcements, and then starting on the return journey. The scene switched to the lifeboat dropping down on Laertes III, showed everything that had subsequently happened, suggested the situation was dangerous to them both—and pointed out the only safe solution.

The final sequence of each showing of the story was of the Rull approaching the can to the left of the screen and opening it. The method was shown in detail, as was the visualization of the Rull busily eating the food inside.

Each time that sequence drew near, a tension came over the Rull, a will to make the story real. But it was not until the seventh showing had run its course that he glided forward, closing the last gap between himself and the can. It was a trap, he knew, perhaps even death—it didn't matter. To live, he had to take the chance. Only by this means, by risking what was in the can, could he hope to remain alive for the necessary time.

How long it would take for the commanders cruising up there in the black of space in their myriad ships—how long it would be before they would decide to supersede his command, he didn't know. But they would come. Even if they waited until the enemy ships arrived before they dared to act

against his strict orders, they would come.

At that point they could come down without fear of suffering from his ire.

Until then he would need all the food he could get.

Gingerly, he extended a sucker, and activated the automatic opener of the can.

It was shortly after four in the morning when Professor Jamieson awakened to the sound of an alarm ringing softly. It was still pitch dark outside—the Laertes day was twenty-six sidereal hours long; he had set his clocks the first day to coordinate—and at this season dawn was still three hours away.

Jamieson did not get up at once. The alarm had been activated by the opening of the can of food. It continued to ring for a full fifteen minutes, which was just about perfect. The alarm was tuned to the electronic pattern emitted by the can once it was opened, and so long as any food remained in it. The lapse of time involved fitted with the capacity of one of the Rull's suckers in absorbing three pounds of pork.

For fifteen minutes, accordingly, a member of the Rull race, man's mortal enemy, had been subjected to a pattern of mental vibrations corresponding to its own thoughts. It was a pattern to which the nervous system of other Rulls had responded in laboratory experiments. Unfortunately, those others had killed themselves on awakening, and so no definite results had been proved. But it had been established by the ecphoriometer that the unconscious and not the conscious mind was affected.

Jamieson lay in bed, smiling quietly to himself. He turned over finally to go back to sleep, and then he realized how excited he was.

The greatest moment in the history of Rull-human warfare. Surely, he wasn't going to let it pass unremarked. He climbed out of bed and poured himself a drink.

The attempt of the Rull to attack him through his unconscious mind had emphasized his own possible actions in that direction. Each race had discovered some of the weaknesses of the other.

Rulls used their knowledge to exterminate. Men tried for communication, and hoped for association. Both were ruthless, murderous, pitless, in their methods. Outsiders sometimes had difficulty distinguishing one from the other.

But the difference in purpose was as great as the difference between black and white, the absence as compared to the presence of light.

There was only one trouble with the immediate situation.

Now that the Rull had food, he might develop a few plans of his own.

Jamieson returned to bed, and lay staring into the darkness. He did not underrate the resources of the Rull, but since he had decided to conduct an experiment, no chance must be considered too great.

He turned over finally, and slept the sleep of a man determined that things were working in his favor.

Morning. Jamieson put on his cold-proof clothes and went out into the chilly dawn. Again he savored the silence and the atmosphere of isolated grandeur. A strong wind was blowing from the east, and there was an iciness in it that stung his face. Snow? He wondered.

He forgot that. He had things to do on this morning of mornings. He would do them with his usual caution.

Paced by defensors and the mobile blaster, he headed for the mental screen. It stood in open high ground where it would be visible from a dozen different hiding places, and so far as he could see it was undamaged. He tested the automatic mechanism, and for good measure ran the picture through one showing.

He had already tossed another can of food in the grass near the screen and he was turning away when he thought: That's odd. The metal framework looks as if it's been polished.

He studied the phenomena in a de-energizing mirror, and saw that the metal had been varnished with a clear substance. He felt sick as he recognized it.

He decided in agony, If the cue is not to fire at all, I won't do it. I'll fire even if the blaster turns on me.

He scraped some of the "varnish" into a receptacle, began his retreat to the lifeboat. He was thinking violently: Where does he get all this stuff? That isn't part of the equipment of a survey craft.

The first deadly suspicion was on him that what was happening was not just an accident. He was pondering the vast implications of that, narrow-eyed, when, off to one side, he saw the Rull.

For the first time in his many days on the tableland, he saw the Rull.

What's the cue?

Memory of purpose came to the Rull shortly after he had eaten. It was dim at first, but it grew stronger.

It was not the only sensation of his returning energy.

His visual centers interpreted more light. The starlit tableland grew brighter—not as bright as it could be for him, by a very large percentage, but the direction was up instead of down. It would never again be normal. Vision was in the mind, and that part of his mind no longer had the power of interpretation.

He felt unutterably fortunate that it was no worse.

He had been gliding along the edge of the precipice. Now, he paused to peer down. Even with his partial night vision, the view was breathtaking. There was distance below and distance afar. From a spaceship, the height was almost minimum. But gazing down that wall of gravel into those depths was a different experience. It emphasized how completely he had been caught by an accident. And it reminded him of what he had been doing before the hunger.

He turned instantly away from the cliff and hurried to where the wreckage of his ship had gathered dust for days. Bent and twisted wreckage, half buried in the hard ground of Laertes III. He glided over the dented plates inside to one in which he had the day before sensed a quiver of antigravity oscillation. Tiny, potent, tremendous minutiae of oscillation, capable of being influenced.

The Rull worked with intensity and purposefulness. The plate was still firmly attached to the frame of the ship. And the first job, the heartbreakingly difficult job, was to tear it completely free. The hours passed.

R-r-i-i-i-pp! The hard plate yielded to the slight rearrangement of its nucleonic structure. The shift was infinitesimal, partly because the directing nervous energy of his body was not at norm, and partly because it had better be infinitesimal. There was such a thing as releasing energy enough to blow up a mountain.

Not, he discovered finally, that there was danger in this plate. He found that out the moment he crawled onto it. The sensation of power that aura-ed out of it was so dim that, briefly, he doubted if it would lift from the ground.

But it did. The test run lasted seven feet, and gave him

But it did. The test run lasted seven feet, and gave him his measurement of the limited force he had available. Enough for an attack only. He had no doubts in his mind. The experiment was over. His only purpose must be to kill the man, and the question was, how could he insure that the man did not kill him while he was doing it? The varnish!

He applied it painstakingly, dried it with a drier, and then, picking up the plate again, he carried it on his back to

the hiding place he wanted.

When he had buried it and himself under the dead leaves of a clump of brush, he grew calmer. He recognized that the veneer of his civilization was off. It shocked him, but he did not regret it.

In giving him the food, the two-legged being was obviously doing something to him. Something dangerous. The only answer to the entire problem of the experiment of the table-

land was to deal death without delay.

He lay tense, ferocious, beyond the power of any vagrant thoughts, waiting for the man to come.

It looked as desperate a venture as Jamieson had seen in Service. Normally, he would have handled it effortlessly. But he was watching intently—intently—for the paralysis to strike him, the negation that was of the varnish.

And so, it was the unexpected normal quality that nearly ruined him. The Rull flew out of a clump of trees mounted on an antigravity plate. The surprise of that was so great that it almost succeeded. The plates had been drained of all such energies, according to his tests the first morning. Yet here was one alive again and light again with the special antigravity lightness which Rull scientists had brought to the peak of perfection.

The action of movement through space toward him was, of course, based on the motion of the planet as it turned on its axis. The speed of the attack, starting as it did from zero, did not come near the eight-hundred-mile-an-hour velocity of the spinning planet, but it was swift enough.

The apparition of metal and six-foot worm charged at him through the air. And even as he drew his weapon and fired at it, he had a choice to make, a restraint to exercise: Do not kill!

That was hard, oh, hard. The necessity exercised his capacity for integration and imposed so stern a limitation

that during the second it took him to adjust the Rull came to within ten feet of him.

What saved him was the pressure of the air on the metal plate. The air tilted it like a wing of a plane becoming airborne. At the bottom of that metal he fired his irresistible weapon, seared it, burned it, deflected it to a crash landing in a clump of bushes twenty feet to his right.

Jamieson was deliberately slow in following up his success. When he reached the bushes, the Rull was fifty feet beyond it gliding on its multiple suckers over the top of a hillock. It

disappeared into a clump of trees.

He did not pursue it or fire a second time. Instead, he gingerly pulled the Rull antigravity plate out of the brush and examined it. The question was, how had the Rull degravitized it without the elaborate machinery necessary? And if it was capable of creating such a "parachute" for itself why hadn't it floated down to the forest land far below where food would be available and where it would be safe from its human enemy?

One question was answered the moment he lifted the plate. It was "normal" weight, its energy apparently exhausted after traveling less than a hundred feet. It had obviously never been capable of making the mile-and-a-half trip to the forest and plain below.

Jamieson took no chances. He dropped the plate over the nearest precipice and watched it fall into distance. He was back in the lifeboat when he remembered the varnish.

Why, there had been no cue, not yet.

He tested the scraping he had brought with him. Chemically, it turned out to be a simple resin, used to make varnishes. Atomically, it was stabilized. Electronically, it transformed light into energy on the vibration level of human thought.

It was alive, all right. But what was the recording?

Jamieson made a graph of every material and energy level, for comparison purposes. As soon as he had established that it had been altered on the electronic level—which had been obvious, but which, still, had to be proved—he recorded the images on a visiwire. The result was a hodgepodge of dreamlike fantasies.

Symbols. He took down his book, "Symbol Interpretations

of the Unconscious," and found the cross reference: "Inhibitions, Mental."

On the referred page and line, he read: "Do not kill!"

"Well, I'll be—" Jamieson said aloud into the silence of the lifeboat interior. "That's what happened."

He was relieved, and then not so relieved. It had been his personal intention not to kill at this stage. But the Rull hadn't known that. By working such a subtle inhibition, it had dominated the attack even in defeat.

That was the trouble. So far he had got *out* of situations, but had created no successful ones in retaliation. He had a hope, but that wasn't enough.

He must take no more risks. Even his final experiment

must wait until the day the Orion was due to arrive.

Humans beings were just a little too weak in certain directions. Their very life cells had impulses which could be stirred by the cunning and the remorseless.

He did not doubt that, in the final issue, the Rull would

try to stir.

On the ninth night, the day before the *Orion* was due, Jamieson refrained from putting out a can of food. The following morning he spent half an hour at the radio, trying to contact the battleship. He made a point of broadcasting a detailed account of what had happened so far, and he described what his plans were, including his intention of testing the Rull to see if it had suffered any injury from its period of hunger.

Subspace was as silent as death. Not a single pulse of

vibration answered his call.

He finally abandoned the attempt to establish contact and went outside. Swiftly, he set up the instruments he would need for his experiment. The tableland had the air of a deserted wilderness. He tested his equipment, then looked at his watch. It showed eleven minutes of noon. Suddenly jittery, he decided not to wait the extra minutes.

He walked over, hesitated, and then pressed a button. From a source near the screen, a rhythm on a very high energy level was being broadcast. It was a variation of the rhythm pattern to which the Rull had been subjected for

four nights.

Slowly, Jamieson retreated toward the lifeboat. He wanted

to try again to contact the *Orion*. Looking back, he saw the Rull glide into the clearing and head straight for the source of the vibration.

As Jamieson paused involuntarily, fascinated, the main alarm system of the lifeboat went off with a roar. The sound echoed with an alien eeriness on the wings of the icy wind that was blowing, and it acted like a cue. His wrist radio snapped on, synchronizing automatically with the powerful radio in the lifeboat. A voice said urgently:

"Professor Jamieson, this is the battleship *Orion*. We heard your earlier calls but refrained from answering. An entire Rull fleet is cruising in the vicinity of the Laertes sun.

"In approximately five minutes, an attempt will be made

to pick you up. Meanwhile—drop everything."

Jamieson dropped. It was a physical movement, not a mental one. Out of the corner of one eye, even as he heard his own radio, he saw a movement in the sky. Two dark blobs that resolved into vast shapes. There was a roar as the Rull super-battleships flashed by overhead. A cyclone followed their passage that nearly tore him from the ground, where he clung desperately to the roots of intertwining brush.

At top speed, obviously traveling under gravitonic power, the enemy warships turned a sharp somersault and came back toward the tableland. Expecting death, and beginning to realize some of the truth of the situation on the tableland, Jamieson quailed. But the fire flashed past him, not at him. The thunder of the shot rolled toward Jamieson, a colossal sound that yet did not blot out his sense awareness of what had happened. His lifeboat. They had fired at his lifeboat.

He groaned as he pictured it destroyed in one burst of intolerable flame. And then, for a moment, there was no time

for thought or anguish.

A third warship came into view, but, as Jamieson strained to make out its contours, it turned and fled. His wrist radio clicked on:

"Cannot help you now. Save yourself. Our four accompanying battleships and attendant squadrons will engage the Rull fleet and try to draw them toward our great battle group cruising near the star, Bianca, and then re—"

A flash of vivid fire in the distant sky ended the message.

A flash of vivid fire in the distant sky ended the message. It was a full minute before the cold air of Laertes III echoed to the remote thunder of the broadside. The sound

died slowly, reluctantly, as if endless little overtones of it were clinging to each molecule of air.

The silence that settled finally was, strangely, not peaceful, but like the calm before a storm, a fateful, quiescent stillness, alive with unmeasurable threat.

Shakily, Jamieson climbed to his feet. It was time to assess the immediate danger that had befallen him. The greater danger he dared not even think about.

Jamieson headed first for his lifeboat. He didn't have to go all the way. The entire section of the cliff had been sheared away. Of the ship there was no sign.

It pulled him up short. He had expected it, but the shock of the reality was terrific.

He crouched like an animal and stared up into the sky, into the menacing limits of the sky. It was empty of machines. Not a movement was there, not a sound came out of it, except the sound of the east wind. He was alone in a universe between heaven and earth, a mind poised at the edge of an abyss.

Into his mind, tensely waiting, pierced a sharp understanding. The Rull ships had flown once over the mountain to size up the situation on the tableland, and then had tried to destroy him.

Who was the Rull here with him, that super-battleships should roar down to insure that no danger remained for it on the tableland?

Well, they hadn't quite succeeded. Jamieson showed his teeth to the wind. Not quite. But he'd have to hurry. At any moment they might risk one of their destroyers in a rescue landing.

As he ran, he felt himself one with the wind. He knew that feeling, that sense of returning primitiveness during moments of excitement. It was like that in battles, and the important thing was to yield one's whole body and soul to it. There was no such thing as fighting efficiently with half your mind or half your body. All, all, was demanded.

He expected falls, and he had them. Each time he got up, almost unconscious of the pain, and ran on again. He arrived bleeding—but he arrived.

The sky was silent.

From the shelter of a line of brush, he peered at the Rull. The captive Rull, his Rull to do with as he pleased. To

watch, to force, to educate—the fastest education in the history of the world. There wasn't any time for a leisurely exchange of information.

From where he lay, he manipulated the controls of the screen.

The Rull had been moving back and forth in front of the screen. Now, it speeded up, then slowed, then speeded up again, according to his will.

Some thousands of years before, in the twentieth century, the classic and timeless investigation had been made of which this was one end result. A man called Pavlov fed a laboratory dog at regular intervals, to the accompaniment of the ringing of a bell. Soon, the dog's digestive system responded as readily to the ringing of the bell without the food as to the food and the bell together.

Pavlov himself never did realize the most important reality behind his conditioning process. But what began on that remote day ended with a science that could control animals and aliens—and men—almost at will. Only the Rulls baffled the master experimenters in the later centuries when it was an exact science. Defeated by the will to death of all Rull captives, the scientists foresaw the doom of Earth's galactic empire unless some beginning could be made in penterating the minds of Rulls.

It was his desperate bad luck that he had no time for real penetrations.

There was death here for those who lingered.

But even what he had to do, the bare minimum of what he had to do, would take precious time. Back and forth, back and forth; the rhythm of obedience had to be established.

The image of the Rull on the screen was as lifelike as the original. It was three dimensional, and its movements were like an automaton. The challenger was actually irresistible. Basic nerve centers were affected. The Rull could no more help falling into step than it could resist the call of the food impulse.

After it had followed that mindless pattern for fifteen minutes, changing pace at his direction, Jamieson started the Rull and its image climbing trees. Up, then down again, half a dozen times. At that point, Jamieson introduced an image of himself.

Tensely, with one eye on the sky and one on the scene before him, he watched the reactions of the Rull—watched them with narrowed eyes and a sharp understanding of Rull responses to the presence of human beings. Rulls were digestively stimulated by the odor of man. It showed in the way their suckers opened and closed. When, a few minutes later, he substituted himself for his image, he was satisfied that this Rull had temporarily lost its normal automatic hunger when it saw a human being.

And now that he had reached the stage of final control, he hesitated. It was time to make his tests. Could he afford

the time?

He realized that he had to. This opportunity might not occur again in a hundred years.

When he finished the tests twenty-five minutes later, he was pale with excitement. He thought: This is it. We've got it.

He spent ten precious minutes broadcasting his discovery by means of his wrist radio—hoping that the transmitter on his lifeboat had survived its fall down the mountain, and was picking up the thready message of the smaller instrument and sending it out through subspace.

During the entire ten minutes, there was not a single

answer to his call.

Aware that he had done what he could, Jamieson headed for the cliff's edge he had selected as a starting point. He looked down and shuddered, then remembered what the *Orion* had said: "An entire Rull fleet cruising . . ."

Hurry!

He lowered the Rull to the first ledge. A moment later he fastened the harness around his own body, and stepped into space. Sedately, with easy strength, the Rull gripped the other end of the rope, and lowered him down to the ledge beside it.

They continued on down and down. It was hard work,

although they used a very simple system.

A long plastic rope spanned the spaces for them. A metal climbing rod, used to scale the smooth vastness of a space-ship's side, held position after position while the rope did its work.

On each ledge, Jamieson burned the rod at a downward slant into solid rock. The rope slid through an arrangement

of pulleys in the metal as the Rull and he, in turn, lowered each other to ledges farther down.

The moment they were both safely in the clear of one ledge, Jamieson would explode the rod out of the rock, and it would drop down ready for use again.

The day sank towards darkness like a restless man into sleep—slowly, wearily. Jamieson grew hot and tired, and filled with the melancholy of the fatigue that dragged at his muscles.

He could see that the Rull was growing more aware of him. It still cooperated, but it watched him with intent eyes each time it swung him down.

The conditioned state was ending. The Rull was emerging from its trance. The process should be completed before night.

There was a time, then, when Jamieson despaired of ever getting down before the shadows fell. He had chosen the western, sunny side for that fantastic descent down a blackbrown cliff the like of which did not exist elsewhere in the known worlds of space. He found himself watching the Rull with quick, nervous glances. When it swung him down onto a ledge beside it, he watched its blue eyes, its staring blue eyes, come closer and closer to him, and then as his legs swung below the level of those strange eyes, they twisted to follow him.

The intent eyes of the other reminded Jamieson of his discovery. He felt a fury at himself that he had never reasoned it out before. For centuries man had known that his own effort to see clearly required a good twenty-five per cent of the energy of his whole body. Human scientists should have guessed that the vast wave compass of Rull eyes was the product of a balancing of glandular activity on a fantastically high energy level. A balancing which, if disturbed, would surely affect the mind itself either temporarily or permanently.

He had discovered that the impairment was permanent.

What would a prolonged period of starvation diet do to such a nervous system?

The possibilities altered the nature of the war. It explained why Rull ships had never attacked human food sources or supply lines; they didn't want to risk retaliation. It explained why Rull ships fought so remorselessly against Earth ships that intruded into their sectors of the galaxy. It explained their ruthless destruction of the other races. They lived in terror that their terrible weakness would be found out.

Jamieson smiled with a savage anticipation. If his message had got through, or if he escaped, Rulls would soon feel the pinch of hunger. Earth ships would concentrate on that basic form of attack in the future. The food supplies of entire planetary groups would be poisoned, convoys would be raided without regard for casualties. Everywhere at once the attack would be pressed without letup and without mercy.

It shouldn't be long before the Rulls began their retreat to their own galaxy. That was the only solution that would be acceptable. The invader must be driven back and back,

forced to give up his conquests of a thousand years.

Four P.M. Jamieson had to pause again for a rest. He walked to the side of the ledge away from the Rull and sank down on the rock. The sky was a brassy blue, silent and windless now, a curtain drawn across the black space above, concealing what must already be the greatest Rullhuman battle in ten years.

It was a tribute to the five Earth battleships and their escort that no Rull ship had yet attempted to rescue the Rull

on the tableland.

Possibly, of course, they didn't want to give away the presence of one of their own kind.

Jamieson gave up the futile speculation. Wearily, he compared the height of the cliff above with the depth that remained below. He estimated they had come two-thirds of the distance. He saw that the Rull was staring out over

the valley. Jamieson turned and gazed with it.

The scene which they took in with their different eyes and different brains was fairly drab and very familiar, yet withal strange and wonderful. The forest began a quarter of a mile from the bottom of the cliff, and it almost literally had no end. It rolled up over the hills and down into the shallow valleys. It faltered at the edge of a broad river, then billowed out again and climbed the slopes of mountains that sprawled mistily in the distance.

His watch showed four-fifteen. Time to get going again. At twenty-five minutes after six, they reached a ledge a hundred and fifty feet above the uneven plain. The dis-

tance strained the capacity of the rope, but the initial operation of lowering the Rull to freedom and safety was achieved without incident. Jamieson gazed down curiously at the worm. What would it do now that it was in the clear?

It looked up at him and waited.

That made him grim. Because this was a chance he was not taking. Jamieson waved imperatively at the Rull, and took out his blaster. The Rull backed away, but only into the safety of a gigantic rock. Blood-red, the sun was sinking behind the mountains. Darkness moved over the land. Jamieson ate his dinner. It was as he was finishing it that he saw a movement below.

He watched as the Rull glided along close to the edge of the precipice.

It disappeared beyond an outjut of the cliff.

Jamieson waited briefly, then swung out on the rope. The descent drained his strength, but there was solid ground at the bottom. Three quarters of the way down, he cut his finger on a section of the rope that was unexpectedly rough.

When he reached the ground, he noticed that his finger was turning an odd gray. In the dimness, it looked strange

and unhealthy.

As Jamieson stared at it, the color drained from his face. He thought in a bitter anger, The Rull must have smeared it on the rope on his way down.

A pang went through his body. It was knife sharp, and it was followed instantly by a stiffness. With a gasp, he grabbed at his blaster, to kill himself. His hand froze in midair. He fell to the ground. The stiffness held him there, froze him there motionless.

The will to death is in all life. Every organic cell ecphorizes the inherited engrams of its inorganic origin. The pulse of life is a squamous film superimposed on an underlying matter so intricate in its delicate balancing of different energies that life itself is but a brief, vain straining against that balance.

For an instant of eternity, a pattern is attempted. It takes many forms, but these are apparent. The real shape is always a time and not a space shape. And that shape is a curve. Up and then down. Up from the darkness into the light, then down again into the blackness.

The male salmon sprays his mist of milt onto the eggs of

the female. And instantly he is seized with a mortal melancholy. The male bee collapses from the embrace of the queen he has won back into that inorganic mold from which he climbed for one single moment of ecstasy. In man, the fateful pattern is repressed into quadrillions of individual cells.

But the pattern is there. Waiting.

Long before, the sharp-minded Rull scientists, probing for chemical substances that would shock man's system into its primitive forms, found the special secret of man's will to death.

The yeli, Meeesh, gliding back toward Jamieson, did not think of the process. He had been waiting for the opportunity. It had occurred. He was intent on his own purposes.

Briskly, he removed the man's blaster; then he searched for the key to the lifeboat. And then he carried Jamieson a quarter of a mile around the base of the cliff to where the man's ship had been catapulted by the blast from the Rull warship.

Five minutes later, the powerful radio inside was broadcasting on Rull wave lengths an imperative command to the Rull fleet.

Dimness. Inside and outside his skin. He felt himself at the bottom of a well, peering out of night into twilight. As he lay, a pressure of something swelled around him, lifted him higher and higher and nearer to the mouth of the well.

He struggled the last few feet, a distinct mental effort, and

looked over the edge. Consciousness.

He was lying on a raised table inside a room which had several large mouselike openings at the floor level, openings that led to other chambers. Doors, he realized, odd-shaped, alien, unhuman. Jamieson cringed with the stunning shock of recognition.

He was inside a Rull warship.

There was a slithering of movement behind him. He turned his head and rolled his eyes in their sockets.

In the shadows, three Rulls were gliding across the floor toward a bank of instruments that reared up behind and to one side of him. They pirouetted up an inclined plane and poised above him. Their pale eyes, shiny in the dusk of that unnatural chamber, peered down at him.

Jamieson tried to move. His body writhed in the confines of the bonds that held him. That brought a sharp remembrance of the death-will chemical that the Rull had used. Relief came surging. He was not dead. Not dead. NOT DEAD. The Rull must have helped him, forced him to move, and so broken the downward curve of his descent to dust.

He was alive-for what?

The thought slowed his joy. His hope snuffed out like a flame. His brain froze into a tensed, terrible mask of anticipation.

As he watched with staring eyes, expecting pain, one of the Rulls pressed a button. Part of the table on which Jamieson was lying lifted. He was raised to a sitting position.

What now?

He couldn't see the Rulls. He tried to turn, but two head shields clamped into the side of his head and held him firmly.

He saw that there was a square of silvery sheen on the wall which he faced. A light sprang onto it, and then a picture. It was a curiously familiar picture, but at first because there was a reversal of position Jamieson couldn't place the familiarity.

Abruptly, he realized.

It was a twisted version of the picture that he had shown the Rull, first when he was feeding it, and then with more weighty arguments after he discovered the vulnerability of man's mortal enemy.

He had shown how the Rull race would be destroyed unless

it agreed to peace.

In the picture he was being shown it was the Rull that urged cooperation between the two races. They seemed unaware that he had not yet definitely transmitted his knowledge to other human beings. Or perhaps that fact was blurred by the conditioning he had given to the Rull when he fed it and controlled it.

As he glared at the screen, the picture ended—and then started again. By the time it had finished a second time, there was no doubt. Jamieson collapsed back against the table. They would not show him such a picture unless he was to be used as a messenger.

He would be returned home to carry the message that

man had wanted to hear for a thousand years. He would also carry the information that would give meaning to the offer.

The Rull-human war was over.

PEOPLE FACING PROBLEMS ARE OFten told, "It's time you faced a little reality, kid."

On the level where such advice is given, the problems involved go something like the following:

"The real truth for you to face up to, baby, is that your husband has been twotiming you for years."

"Take a look at yourself in the mirror,

hon. You're not getting any younger."

"Face up to the facts, Joe. You've become a big, overgrown slob with a filthy mind."

Etc.

The reality I have described so briefly in the foregoing involves a strictly human point of view, and includes an awesome number of unnoticed and unspoken assumptions about life. The implied considerations about the world and the way it should be obviously derive from sources that are never logically examined by the individuals who speak their colloquialisms with such absolutely immense knowingness.

So let us, here, face something. What is the reality that goes on around us? Is there any way it can be accurately depicted?

Well . . .

A few years ago, the *Psychology Today* people took over *Saturday Review*, a magazine that had been doing business as long as I can remember. Their plan was to modernize *SR*, by which, it developed, they meant they were going to turn it into four monthly magazines, one of which would be issued every week. One of these four was titled *Saturday Review-Science*.

In late December, 1971, I received a phone call from a senior editor of the science version of Saturday Review. He asked me if I would write an article for them on general semantics. Payment was to be one-third down and an additional two-thirds if they used the article. Fair enough. I wrote up a speech that I had given a few times called "Semantics of the Twenty-first Century," sent it off, and waited.

First, a letter came from the senior editor that stated that he had enjoyed the article a great deal. Then the advance check arrived.

In a subsequent issue of Saturday Review-Science, I noticed on the masthead that a new science editor had taken over. My senior editor was now in a subordinate role.

The magazine's policy altered; it began to feature a dull version of Sunday-supplement-level science. The graphics were good, but they were accompanied by deadly dull, written-down science text. It must have been a from-the-top editorial policy, because the other three magazines with the Saturday Review label on them were also featuring the same type of stodgy writing with excellent art work. (There were a few exceptional articles, of course, but not many.)

It was not the kind of writing that the long-time readers of Saturday Review could be interested in. And Madison Avenue evidently also shook its collective head as I and other readers were doing, for advertising revenue dropped drastically. All four magazines collapsed, and they were then sold to a syndicate headed by Norman Cousins, who had been the editor before the Psychology Today people took over. The magazine was renamed Saturday Review-World, and the writing style reverted to what it had been—light, sprightly, old-fashioned but good enough.

There was no place for an article on general semantics in

Saturday Review-World, so you are now going to be privileged to see this piece for the first time.

What does this have to do with reality? General semantics is a systematic approach to reality, that's what.

I'll have an additional comment in the afterword.

THE SEMANTICS OF TWENTY-FIRST-CENTURY SCIENCE

Today's society acts as if young minds need to have as much of the accumulated knowledge of mankind as they can quickly ingest. Practically, this has meant that the individual gets his education in one lump at the beginning of his life. Included with the genuine information is what might be termed a simplistic summary of morality and of the nature of things, to wit, a very small number of approval ideas about people and a very large number of judgmental decisions about people and objects. In the case of objects, the young person is supplied with their names and with a superficial understanding of what they are or do.

Such judgments and superficialities were delivered to most of us in what in general semantics are called overdefined words.

The italicized terms in the foregoing paragraphs are GS—general semantic—ways of using the English language. Some years ago I wrote two science-fiction novels The World of Null-A and The Players of Null-A in which, in thousands and thousands of paragraphs, I employed the various GS recommend usages for rectifying what might be called the shortcomings of English.

A colloquial example of a judgmental word is "lazy." Lazy is an overdefined word. "He's a lazy bum." Bum is an overdefined word. Lazy and bum purport to describe a human condition, and of course they're not up to the job. No one

knows completely what factors are involved in the making of a so-called lazy person. In some instances, a medical examination shows glandular imbalances. In others, excessive enforcement during childhood seems to have evoked "resistance." The "lazy" person cannot, it is said, be "motivated" to "cooperate" in the world's work. In fact, some of his "type" have done an "inversion." They can only be stimulated to activities that are against the "establishment."

In the foregoing sentences, "resistance," "cooperate," "motivated," "inversion," and "establishment" are overdefined words, and "type" is an allness (implying that people can be typed). The general meaning in those sentences brings us to another overdefined word that is used a lot to describe a kind of human condition. We say of a "resistant type" that he is "alienated." "Alienated" is an overdefined word

It is very likely that no method now exists to prevent such colloquial usages from being carried over into the twenty-first century. This is too bad, because they are what Count Alfred Korzybski, who originated the term general semantics, called elementalistic ways of referring to complex processes and conditions.

For my second semantics-oriented novel, The Players of Null-A, I wrote a twenty-two paragraph explanation of GS, and used one paragraph as the heading of each chapter. The summation took three weeks to do. When it was out of the way, I had essentially completed my eight-year study of general semantics.

I nevertheless remained a member of ISGS (the International Society for General Semantics). In reading the society's publication, Etc., I noticed that some psychiatrists were taking on GS, that a number of colleges were using portions of it for English courses, and that S. I. Hayakawa. who is probably Korzybski's principal intellectual heir, was coming "up" in the academic world. (This though I understand that the IGS—the Institute of General Semantics, the late Count Korzybski's own organization and teaching center -is not completely happy with Hayakawa.)

Etc. was interesting, but I concentrated on other studies: hypnotism, the nature of the violent male and of woman, the sort of person you have to be to make money, and, for a novel, Red China's type of Communism. In addition, I spent bits and pieces of weeks researching for the information that science fiction writers need in quantity for every story they write. An example: for a novel titled *Mission to the Stars*, I laboriously located the facts about the kind of light that *most likely* permeates the atmosphere of a planet habitable (by man) of the colossal star S. Doradus in the Greater Magellanic Cloud.

My GS training stayed with me even though I had turned to other things. In talking to people I would automatically hold up two sets of two fingers to indicate quotations. I used dates. (John Smith held a belief in 1955; maybe in 1957 he no longer held it.) I indexed (girl one is not girl two). I was careful not to label people or things. I noticed when I was referring to the object (the territory)—then I pointed—and when to the word that described it (map or symbol). I differentiated the rituals in which most of us engage in some areas from the individual himself. And I was nearly always aware of self-reflexive sentences. Etc. Pretty precise. Sometimes irritating to other people.

What has what I've already said got to do with the semantics

of twenty-first-century "science"?

In looking back over these years, I now realize that I casually combined my GS habits with that brain-straining that science-fiction writers do. We take a scientific concept and try to extrapolate it creatively for use in a story about the future. I have done this thousands of times for the ideas in about forty books.

Thus, almost accidentally, I viewed the twenty-first century and beyond in terms of general semantics. After I've clarified the subject matter a little more, I propose to tell you what

I think I saw.

(At this point I shall cease to underline GS usages, which have so far consisted essentially of phrases or words that modify what, without them, would be allness statements, or unconditional assertions.)

One thing I observed was that the turn of the twenty-first century is no further ahead of me than my first meeting with a genuine scientist in the United States is behind me. (The scientist is still energetically scientizing, but now he has more responsibility and makes a lot more money.)

Part of what this meant to me was that young people who graduate from high school this year will not even be

fifty in 2000 A.D. And, statistically speaking, they will carry with them into the twenty-first century whatever was good in their training as well as what was not.

The majority of these young people are still expected to fit into the degree system, adjust to laboratory employment requirements, do research that pays off, and, if they become

professors, to publish or perish.

This all looks very binding and not easy to alter, so the change, if any, will have to take place inside the skins of trained scientists. If the implications of general semantics are correct, a part of this inward transformation can come from each individual's once more examining with minute care the semantic tools of his field.

Where shall we begin?

Let me first make one of Korzybski's principal points: The "something-going-on that we call the world" is so complex that we can only abstract qualities and observations from it. We cannot at present or in the foreseeable future describe the entire event. Therefore, we must be careful about the words we use to name various on-goings of the universe. A word must not presume to know everything about anything.

I'm sure that definition needs further development. Some of these concepts are unusual, and if you have never heard

them before, your brain may expand too suddenly.

So let me try to explain "overdefined" from another point of view.

A defining word has a description of a process implicit in it. By defining a process at all, we impose a limited meaning on a dynamic condition of the material universe. That dynamic behavior may be very complex; yet the word that describes it says it is a certain, restricted thing. The word bears weightily down upon the territory of which it is supposed to be a map. It might be said that the word overdefines the condition to such an extent that part of the truth is concealed by being ignored.

"Overdefined" could be correlated with the meaning of

"too narrowly defined."

With that out of the way for the moment, let's dip our semantic toes into a major science and observe how the meaning applies in one instance.

In physics, we find the words "wave" and "wavelength" applied to a description of light. As used, these words define

the nature of a process. In effect, the term "light wave" implies that the wave condition is the natural state of light.
"Wave" and "wavelength" were originally taken over by

"Wave" and "wavelength" were originally taken over by physicists from a highly questionable source—the gross world of water reacting to outside forces. In water, waves are created by wind and tides by the gravitational action of the moon and the sun. To carry such a concept over to the electromagnetic phenomena we call light, we would have to have in what appears to be empty space an invisible medium that corresponds to water. Thus, light, radio, and other waves would simply be a disturbance or programming of this unseen space water by "forces" that haven't yet been detected—space equivalents of winds and lunar and solar gravitation.

There is a word from old physics describing such a watersubstitute. The physicists of yesteryear postulated a medium which no one then (or since) has been able to detect, and

they named it . . . ether.

One of the early "proofs" of wave theory was the Compton Effect. Observed in 1923 by the famous British physicist after whom it is named, the effect consists, in summary, of homogenous X-rays altering the frequency of particles emitted by carbon atoms. Recently, someone pointed out that the higher energy X-rays were in the Compton Effect programming the lesser energy of carbon atoms. The resultant frequency step-up is here looked at through the transforming terminology of computer science. The meaning alters immediately.

This brings us back to what I'm writing about. It would seem that a phenomenon we call "force" (a defining word, alas) can act on a medium- or a lower-energy "force" and change its previous—please note assumption—programming. This may or may not eventually lead us to a basic under-

standing of how light is propagated.

Before I continue this discussion, I must call the reader's attention to the fact that the author of this article carries the label of science-fiction writer, not the label of scientist. My impression is that scientists are positive. A scientist has an immense amount of practical know-how about his specialty, and it is my experience that every scientist's audiences have a craving to hear their positivities. It is not uncommon for me, as an s-f writer, to consider the universe from the view-

point of a particle with a half-life of three seconds. To the particle (in my imaginary personification), its duration as an event in space-time could appear to be the equivalent, subjectively speaking, of the seventy-year span of human life. And so, as the particle "looks around" in a leisurely fashion, it may come to a lot of practical conclusions about existence, discovering—among other truths—many laws of physics. On the particle level, billions and billions of small motions can take place in each one of three seconds. And within that framework of multitudinous activities, some extremely positive ideas about the way things are might be evolved.

Why am I offering this exaggerated analogy? Because, in terms of universe time, man also has a short life span. One estimate has it that our universe has existed for twelve billion years, and it may exist even longer than that in the

future.

A human life in the cosmic scheme, then, endures only three seconds. During those seconds, when we look around, things seem very stable. For practical purposes of everyday living, that's all right. It's not optimum, you understand—people tend to make wrong decisions when they operate on purely practical considerations that seem relevant to the moment. But in that practical meaning it's okay to buy that house, invest in commodities, marry Ruth instead of Joan or Peter instead of Henry. You'll probably never in our time know what love is, but there's a feeling you get from some unknown judgmental complexity inside your skin, and that feeling points at you and Peter getting together and maybe raising children.

However, if you are a scientist and hope to be creative,

you'd better not operate on that level in your work.

This is one of my points: The theories we may evolve to explain seventy years of a phenomenon we might modify if we were capable of grasping their meaning in terms of what the universe has been up to, really, in its first twelve billion years. Consider this example. If the big-bang theory of creation is correct—if, that is, the entire sidereal universe as we know it exploded into existence from a point and started to expand outward, and is now slowing in its expansion—then the real "purpose" of the universe may be to collapse back into a hole, and all particle motions should be evaluated accordingly.

Readers who are unacquainted with general semantics by now may be wondering if there is such a thing as an *under-defined* word.

"Water," "ocean," "chair," "bird," "lion," "apple," "red," and "blanket" are names of objects, attributes, creatures. A name of itself can never completely describe an object, a color, or a being. When you say of an object that it is a chair, you mean a chair different from all the other chairs in the universe. In discussing that chair, you can, as Korzybski said, abstract qualities from it. But it has more qualities than you can ever discuss—and, unless you are scientist, then you will ever wish to discuss.

What's the difference between an underdefined and an overdefined word? That needs to be made crystal clear. First, let's abstract a few similarities. Both are words. Both are names or descriptions of objects, creatures, processes, etc. Because of the way the human mind deals with words, neither is an optimum way of labeling anything.

The principal difference is that an underdefined word is just a label. What is intellectually dangerous about it is that thousands of complex phenomena become so familiar that, as a result of being named, they are virtually ignored. "Oh, that's just an old *chair*." "Bring that *table* over here." "Lions eat meat."

The overdefined word, on the other hand, tells us, in effect, that a limited meaning is *all* there is. It definitely points in a direction and subtly plants a glib explanation in our minds. Thereafter, when we use that word, most of us do not even notice that we have been sold a certainty at a stage of man's knowledge at which we may still be far from knowing the truth of things.

When I took high-school chemistry, there were ninety-two elements. Since then the controlled use of nuclear fission and fusion has produced more than a dozen others.

"Element" is a defining word. It claims in its meaning that the territory referred to by the word is a building block of matter, a basic unit of the universe.

Chemistry is based on thousands of experiments so thoroughly proved that they are the daily stuff of industry and manufacture. Molecules combine and separate according to a whole series of laws that support the idea that the theory about the existence of elements is correct. In confronting a well-tried word like "element," I could pretend that I'm an expert from another discipline who has been invited to be a part of a research team. I could consider my contribution made as soon as I pointed at the word "element" and stated my objection.

However, I have a feeling that I'd better not conclude that that's a sufficient explanation for a reader who is not accustomed to thinking in extremely intellectual terms. So let

me say it again in a different fashion.

The fact that machines work and chemical processes take place is interesting, but not as significant as it might appear. It depends on how you look at the world. In its beginnings, the universe may have been one big glop of matter with no distinguishing features. In that mush may have been not only all the elements we now identify, but also a spectrum of isotopes filling in the spaces between elements. It is not too much to say that the discovery of the first isoptope caused the Table of Elements to lose some of its purity.

The measuring instruments and methods of science are useful in a practical way. They give information useful for most everyday activities. However, if we ever act as if what we learn from them is the truth, progress may suffer a mortal blow, and twenty-first-century science may never discover more than we knew when we decided we had "the

truth." An example follows.

The word "source" might be reconsidered in this way. Long ago, as I've already mentioned, the universe was probably very different from what it is now. Today, a certain thing on the object level that looks to us like a chemical compound is stimulated into giving us something that—example only—we call "light." We say of this object that it is a "light source." Yet the elements that produce the light were originally captured while they were en route somewhere else. And now having emitted the light, they are off to another part of the universe where they will "temporarily" (for another billion years) wait patiently until they achieve another release.

My point is that the scientists who hope to make the discoveries and observations that will constitute the advance in twenty-first-century science must not allow their minds to become fixed on any one explanation for an event in the space-time continuum.

Reminder: A science-fiction writer is writing this. But subject matter is general semantics, and it has a currency of its own. A dollar does not lose its value because you give it and I get it, though I may now spend it on something you wouldn't think of buying and, similarly, though the ideas of general semantics are presented in a slightly different fashion by every writer who deals with them, this does not make the ideas less valid.

Permit me to recapitulate once more. An implication of general semantics is that words that contain assumptions that are only partially true interfere with reasoning at subawareness levels. The contention is that no matter how smart or highly trained you are, if there are enough such words—and there are—your mind will slide over key meanings. It would seem particularly true that overdefined words passing their significations through the brains of millions of scientists will do a lot of "damage" en route. The likelihood is that, for the majority, there will be reduced creativity. And the major discoveries of science will continue to be made by a comparative handful of scientific supermen who, by some kind of mental energy, will overcome semantic and other confusions.

Let us now consider other examples of overdefined words. The psychoanalytic term "repression" describes the way a type of compulsive forgetting occurs. "Projection," in psychology, means that a person imputes to others feelings that he himself is having (though this may be only the surface appearance and may not be what he is actually doing). "Hysteria" implies—in a derogatory way—that the condition named is an emotional outburst in which someone has apparently gone out of control. And then, it is believed that people are, or can be, "motivated." Such words define and, in doing so, overdefine.

Defining words like "wave" and "wavelength" and "force" and "particle" in physics have their counterparts in equally "loaded" terms in most other sciences. As a result, I read science articles in English almost as if I were translating a foreign language—I take time to note the over- and underdefined words; I pause each time I come to one of the ten or so conventions by which modern scientists are trained to

modify their statements, and I take time to consider whether it does its job.

Since these remarks imply that today's highly trained scientists could use some help from semanticists, I'd better expand on them as quickly as possible.

Scientific writing is essentially reporting.

The science writer begins by stating what he will discuss. He sets limits on the subject matter.

The science writer then attempts to make clear the nature of related subject matter-which he is not planning to dis-

The science writer occasionally mentions in his article that his treatment is not exhaustive.

If he himself is the experimenter, the science writer establishes the corrections that had to be made in the experiment itself in order for it to be continued or completed.

He gives credit to previous studies that bear on the subiect at hand.

He mentions definitely unproved aspects.

He occasionally refers to the work as a study.

In the actual writing, he employs phrases like "it seems" and "it appears" and "probably."

Where required, he employs the language of modern logic, particularly the following: "and, or," "if, then," "if and only if," etc.

"What's wrong with the foregoing?

Nothing, really.

Yet when it's examined through the systematic approach of GS, it's not enough.

We discover an astonishing thing. What might be called a human transformation now takes place. Most of the words (maps) in the report or article are good enough. The sciencereport method is excellent. Yet we are destined to discover that the author assumes that he had, in fact, made an authoritative contribution.

The presentation method, so unassuming, so expertly qualified in terms of the recognized conventions, has abruptly been escalated into a certainty. This is one of today's scientific magic acts. And it's my guess that this is mindlulling for the individual and defeating for science, in the long run.

It is possible that the technique of science writing should

have another convention added to it. Perhaps the author ought to say at the end, "Ladies and gentlemen, notwith-standing the implications in this article of self-effacement and scientific detachment, the fact is that I have now published—as required by the 'publish or perish' academic requirement—and my wife and I are hoping that this will now get me a full professorship and a bigger salary."

Now, I grant that a scientific experiment is probably a proof of something, but most likely in a middling way. Man

may not be the measure of all things. Etc.

The problem is that on almost every occasion when I have listened to a talk by a scientist, he's said something like, "... We now know that ..."

The as if usage of GS denies the word "know." The statement would be much more accurate as something like, "We now have a working system from which we can deduce the following . . ."

I've stated that the scientists who do those carefully worded reports seem to expect that they will be regarded as new authorities. As for book publishers, they show no visible shame. Jacket copy and science-book advertising cater to the public's need for certainty. The other day I read an ad for a book on sexuality and homosexuality. "A definitive study," it said. "Definitive" is an overdefined word! It implies, in this case, that all possible abstractions have been made in these two interrelated but not exactly similar or simple human conditions.

(Of course, such people are not expecting to make contributions to the science of the twenty-first century. Awhile back, an editor told me, "Let's face reality. Only certainty sells to the public of the twentieth century. Let the twenty-first century find its own way out of that morass.")

Just for the sake of argument, permit me to pick up the two words "sexual" and "homosexual." The former implies something fairly generalized. It's close to being just a name for something that is going on. The latter word—"homosexual"—is an unfortunate descriptive term. It is very likely that the male-to-male relationship, which is the principal behavior attributed to this word, may actually include both "conscious" and "subconscious" dynamic factors.

I have questioned so-called "homosexuals," and it is my

understanding that there is a moment in each individual's struggle against his impulse to be this way when the hidden chemistry and psychic pressures overwhelm the self finally and irrevocably. If the person has been resisting his compulsion (which is what they say it feels like), he ceases to resist at that moment. The "conscious" mind agrees that the unknown underlying complexities will henceforth produce a certain sexual behavior pattern, and that this will be the outward manifestation.

It is surely a mistake to use the symptom term "homosexual" as an operational description of this multi-level process. As for words like "fag" and "queer," they no doubt have their colloquial place in the language of the street and of certain literature, but people who use them will, in my opinion, contribute very little to an ultimate solution of either the symptoms or the condition.

Korzybski, in his book (Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics), has quite a diagram showing what he calls a "ladder of abstraction." Essentially, however, what he means is the follow-

ing:

EVALUATION CHART FORM

- 7. Generalization level
- 6. Inference level
- 5. Description level
- 4. Symbol level
- 3. Objective level
- 2. Image and sensory level
- 1. Vibratory energy and process level

It could be argued that levels 4, 6, and 7 cause most of the trouble human beings experience when they attempt to understand the universe. With 2 as a tag-along troublemaker, the perceptive system can be distorted.

In the chart, the vibratory energy and process level (1) is the universe, whatever that is. A good portion of that level is perceived by human beings by way of the five known senses as well as by such other awareness methods as we may have. At the symbol level (4), man names what he

perceives. At the inference level (6), man is busy trailing his past history into just about every situation. Example: "I see a man walking along the street. He is staggering as he walks." That's a good enough description-level (5) account; it's accurate in a practical way. But when the inference is, "He must be drunk," the observer may easily be wrong. Suppose the man was very sick and died two days later of a stroke he'd suffered while he was out for a walk. Nevertheless, the same observer might generalize, "If people are going to get drunk, they should stay at home."

Alfred Korzybski, a mathematician and a genuine Polish count who came to this country after World War I, did not, of course, originate all the GS ideas. However, he claims in Science and Sanity that he is the first to systematize the concepts. His book, which can be obtained from both the IGS and the ISGS,* is an enormously capable work. Every sentence shows his mastery of his ideas and his understanding of the implications of what he is saying—and the book was first published in 1930. (Korzybski died in 1950.)

With these thoughts in mind, let us observe a student in the year 2024 A.D. He is one of two or three hundred seated at a rectangular table that goes all the way around a room. He and his companions wear headphones with attached microphones, and have at their fingertips a number of channels with which they can connect.

They listen to and talk to a computer, listen to and record on tape, write answers on programmed sheets, and occasionally consult the single ultra-professor who supervises all this learning from a dais.

These are science students. The language they use consists

primarily of compound words.

We peer over our student's shoulder as he writes: "Wavelength-in-relation-to-whatever force is, etc." "Element-complex, etc." "An-event-once-recorded-in-the-mind-but-later-forgotten-possibly-for-a-reason-of-not-wanting-to-remember, etc." "An-event-possibly-forgotten-for-the-reason-that-it-was-of-little-interest, etc." "An-event-possibly-forgotten-because-of-

^{*} The Institute of General Semantics is in Lakeville, Connecticut. The address of the International Society for General Semantics is: P.O. Box 2469, San Francisco, California 94126.

an-hypnotic-type-of-amnesia, etc." "Process-involving-particlecomplex-called-a-force-whatever-that-is, etc."

Will such langage defeat itself? Its purpose is to continually remind our suggestible brains. I trust that the scientist-instructors of the twenty-first century will do better than I in coining multiword terms. But general semantics theory certainly requires that they do something. The mind needs signals to indicate insistently that our universe is an incredibly dynamic complex.

Since there are many sciences, it is obvious that I cannot in a short article give examples from them all. So I asked a group of people to whom I had given a talk on GS to ask me test questions. My preliminary statement to them was that a GS analysis could probably be made of the terminology of any science. What I wanted from them was something that interested them. I said I would give one example only in each instance.

A woman said, "What about a general semantic solution for the man-woman relationship?"

My reply: It was probable that most of the words used to describe male-female feelings actually defined complex processes, but that my attention had been drawn to her term—"relationship." One variation of that had in recent years acquired a new meaning—the word "relate" as used in psychotherapy. Not too long ago, a man and a woman became "involved," which by definition (and the understanding of both parties) included a commitment. Today, many women can look back and observe that they have "related" to a number of men. If they did not notice each time that they were merely relating, and if instead in each instance they tried to get involved, we may confidently conclude that each woman suffered exactly as many traumas as there were men. Part of the solution-that is, recovery-would be to become aware that it was merely a "relating" association and not truly an involvement. Finally, I pointed out that "solution" was itself an overdefined word, and that I considered "relate" to be a key word leading to the casualness that has been observed in the sexual revolution.

"Why did we lose in Vietnam?" asked a man.

My reply: The question had political-science as well as military-science implications. In Vietnam, our high com-

mand used the word "guerrilla" to describe the Viet Cong. On the other hand, the Communists called the Cong a "people's army." When I was studying Chinese Communism preparatory to writing a novel, I decided that an operational description of a people's army was "a collection of the most

trapped dupes in the history of the world."

A typical Viet Cong was a teen-ager who had about as much knowledge of Communism as he had of America. Usually he had been captured in a Viet Cong raid on his village. At once, he'd had to justify why he hadn't volunteered long ago. To his terror, he had discovered that failure to explain his dereliction could result in his being tried by a "people's court" and condemned to death. In learning to survive in a group where such psychic pressure never ceased, he swiftly measured "up" to all the grim requirements. A people's army, I observed, cannot be defeated on its own ground, because when it comes right down to it the entire population is in the system. In a crisis, or when invaded, they must act. Bombs are tied to babies. Little kids come apparently begging for candy and drop a bomb in the center of a group of men. By this means, a small nation operating on its own ground acquires a kind of equality with a great power. The Germans ran into this in a small way during the invasion of Russia in World War II. Mao Tse-tung, the Chinese leader, perfected it. What it requires from Red leaders is that they be merciless, and that they be prepared to regard an entire small nation, like Vietnam (South and North), as being expendable. To call something like that a guerrilla force is really straining at the meaning of things. I wouldn't be surprised if our military men refused to use the term "people's army" for ideological reasons. And it didn't occur to them to devise an operational term for what they were fighting, and thus maybe devise a better method of fighting it. Instead, they counted bodies apparently without feeling any mercy for a new class of helpless dupes, whose like may be seen in ever greater numbers in the future, but who cannot be exterminated.

Third question—from a man speaking with a faint smile: "It's already apparent what people in this group are concerned about—the things that affect them most. My question will take us to a purer realm. What about a general semantic

analysis of logic?"

My reply: Presumably he meant what is called modern logic. One of the semantic difficulties with modern logic was probably the word "set." A "set" of Italians referred to a collection or group of Italians. No one would ever assume that (aside from certain rituals, etc.) any two Italians were duplicates. But make it a "set" of transistors with the same numeral on them, and somehow we expected them to work with uniform efficiency.

One consequence, which I witnessed, occurred when an electronic engineer was giving a demonstration. The machine wouldn't work. He quickly spotted the difficulty as being a "defective" integrated circuit, and replaced same. Still the machine didn't operate. Fuming now, he removed the recalcitrant circuit, handed it to a subordinate, and thereupon made a reaction that revealed his assumption. He said in an enraged tone, "Get me one of these g-d-things that works!"

In a recent sci-fi novel, The Darkness on Diamondia, I called the anger he manifested "the modern logic rage." The predicted computer utopia of the future has many disappointments and delays in store for people whose maps about what science can do are too rigid.

There were several more test questions, but the only other one I shall include here mentioned GS specifically. A woman said, "You seem to act and talk as if general semantics is

infallible. Is it?"

My answer was twofold.

First I said that GS was a system, an orderly way of looking at the world that prescribed, essentially, being acutely aware of the symbols that man used to describe said world and think about it.

The second part of my answer was an example. Years ago, a GS'er said to me that the first atomic bomb, by exploding at all, had performed as if nuclear theories up to that time were correct. At first listen, I saw nothing wrong with that statement. But subsequently I decided it was not properly worded.

Anticipating fabulous energies, atomic scientists tried their best to understand in advance what might happen. Yet in the end, a lump of U-235 was fired by the equivalent of a cannon into another lump of U-235. By this crude device, critical mass was abruptly achieved.

In the 1940s the real problem was getting enough U-235. Had the scientists once had enough, they could have experimented cautiously with large and small lumps, without ever having to make all those discoveries about slow and fast particles.

So a better way for the GS'er to have stated his GS logic would have been, "The first atomic bomb, by exploding at all, performed as if U-235 is one of the metals that can achieve critical mass."

Or, as someone else said "... As if from now on atomic scientists will be on the government payroll."

That, too, is a reality.

My point in answering the woman was that CS'ers were capable of making illogical statements, and even foolish ones, but that the system itself had value for thinking people—and that general semantics has a role to play if there is to be optimum scientific progress into and beyond the twenty-first century.

Afterword

What is reality? General semantics may not bring you any closer to a positive answer. But it is a systematic approach, a series of methods that, as a starter, may restrain you from jumping to hasty conclusions about people and the world we live in.

Unfortunately, a very small part of the scientific and educational community has felt the impact of general semantics. The resistance to it that academicians display is motivated largely by the fact that it would mean change, and growth, and new thought. This is particularly true in fields like law and economics and politics and journalism, which over the centuries have evolved practical techniques for dealing with the human equation, and operate on almost endless false or questionable assumptions—and at this date show few signs of ever becoming scientific in the general semantic meaning of the term, or progressive in any meaningful way.

For example, "criminal" is an overdefined word. The con-

For example, "criminal" is an overdefined word. The condition in terms of general semantics is a complex human behavior that, because of its "aggresisve" characteristics, needs to be dealt with in a practical way until we learn

to understand the underlying processes. Meanwhile, the word "criminal" should be eliminated, and a compound descriptive term applied to the condition.

As you can see, all men desperately need to understand how to deal with reality, and to find out what it is. But we may certainly deduce from the foregoing arguments that reality is not yet available in literature except intuitively, and then only in the works of a few geniuses.

HE WORLD SWARMS WITH WELL-meaning people. Young persons, particularly, are so determined to right the wrongs of society that victims are beginning to receive short shrift—all the uproar and good feeling is expended on behalf of the individual who did the damaging act.

And, of course, this is an area in which a science-fiction writer can make his most important contribution to philosophy, if he can be said to make any at all. He can take some of these emotional solutions and extrapolate them into a future society where the "bleeding hearts"—a term used by a friend of mine—have won, and all the half-baked schemes of half-cocked types have become the law of the land.

By having them in a story, the reader has a chance to look over this future "establishment" and decide if he likes that. It would be an exaggeration to say that, by this type of extrapolation, science-fiction readers have had a look at all possible economic and political systems. But if they haven't it isn't because the writers haven't tried.

The extrapolation to which I now introduce you is strictly that. But "Future Per-

fect" does have a feature that is just a little special—readers have said to me that they sure wish it could come true. Alas, it should be regarded as a science-fictional concept and not be confused with a plan for a real solution. The only reality in the story has been criticized as being a message, and as I've already told you, the new breed of critic utterly detests anything that is not pure story, but my systematic thought on unreality writing required that I put this story in.

FUTURE PERFECT

ON THE DAY THAT STEVEN DALKINS WAS EIGHTeen years old, he received an advisory letter from United Governments Life Credit that a million-dollar drawing account had been opened in his name. The congratulatory cover note contained the usual admonitions for eighteen-year-olds. It gravely explained that the money being made available to him—the million dollars—constituted his anticipated life earnings.

Spend it carefully; this may be all you will ever receive: that was the summation.

Dalkins was ready. In nine days, beginning on his birthday, he spent \$982,543.81. And he was wracking his brain as to where he could dispose of the other seventeen thousand when a treasury officer walked into his lavish apartment and arrested him.

Dalkins put out his cigarette in a convenient ashtray—he was surprised to find one in the psychiatrist's office—and then walked to the door the girl had indicated. He entered and paused with cynical respect, waiting to be noticed.

The man behind the desk was about fifty, gaunt, hair still without gray, and he was busy drawing lines on a chart. Without looking up, he said, "Find yourself a chair."

There were only two chairs to choose from. A hard-backed affair and a comfortable lounge type. With a sigh, Dalkins settled himself into the easy chair.

Without glancing up, Dr. Buhner said, "Wondered if you'd pick that one."

He made another line on the chart. Dalkins watched him despisingly. He was not alarmed. He had come to this interview expecting stereotyped responses. He was prepared for the verdict, whatever it might be. But the trivia was insulting.

He said with sardonic respect, "You sent for me, Dr.

Buhner."

That was an understatement. He had been delivered into this office by the law. His words received no answer. Dalkins shrugged, and leaned back prepared to wait.

The older man said, "Your reaction to that was quite

interesting." He made a line on his chart.

Dalkins glared at the bent head. "Look here," he said

angrily, "is this the way you treat human beings?"

"Oh, no." Promptly. "For legal purposes, we define a human being as an unalienated person. You are an alienated person. Therefore, legally you are not a human being."

Dalkins bristled, then caught himself. Cynically, he quoted, "Have I not hands, organs, dimensions, sense, affections, passions? fed with the same food . . . subject to the same diseases? . . ." He felt pleased with himself.

As before, Dr. Buhner spoke without looking up. "Strong word associations." The chart received its inevitable mark.

The older man straightened. For the first time now he raised his head. Bright, gray eyes gazed at Dalkins. "I have one question," he said. "Did you have a reason for spending that money within a ten-day period?"

The small, scrubbed-looking face of the boy sneered at him. "Wouldn't you like to know?" he asked sarcastically.

Dr. Buhner stood up. "Well, I think that does it. I shall recommend that you be fined whatever you purchased except two suits and accessories, and fined the seventeen thousand dollars of the balance remaining in your account. This will leave you a few hundred, and you may also keep your apartment. I should advise you that human beings may be sued for, or fined, as much as one hundred thousand dollars in any five-year period. Alienated persons of course lose everything when convicted. In your case, I plan to requisition one hundred dollars each week from the fine, to be paid to you if you show up at my office for therapy. No show, no one hundred dollars."

Dalkins laughed derisively. "You'll not ever see me again,"

he said, "unless you have me brought here by police action to listen to your phony analysis and stupid judgments."

The psychiatrist stood gazing at him. If there was an expression on his hollow-cheeked face, it was not recognizable. Yet his next words seemed to indicate that Dalkins had penetrated his professional neutrality. He said, almost curtly, "All right, what is in your mind? What do you want?"

Dalkins was at the door, contemptuous. He stood there and he felt in himself a renewal of the greatness feeling that had made him act so decisively. For brief hours after his arrest the feeling had dimmed. There had even been a shadowy agreement in him with all the people who would regard as madness what he had done.

Never would he sink to such a doubt again.

The reaffirmation of his own rightness was in his voice now as he said, "You had your chance. Next time tell Big Brother to use a man for a man's job. You muffed it, baby."

"Still," argued Dr. Buhner, who was very happy that this free-swinging dialogue had been triggered while the instruments were still focused and recording, "if I understood it, I could make things easier. I picture you as luxury-loving. No ascetic is Steven Dalkins."

Steven laughed. "I chose that easy chair because you expected me to. I got mad because you thought I would. I consciously fitted into your preconceptions. I don't fit them."

"Everybody fits in somewhere. Man's enduring structure permits only minor variations of personality and even of experience."

Steven shrugged.

Dr. Buhner hastily tried another tack. "What's wrong with every normal person receiving a million dollars on his eighteenth birthday? Everybody else thinks that and a number of similar developments are the millennium."

"Rumble on, little boy," said Steven Dalkins. "But when you're through, let me out of here. You're too late for this conversation. In future I talk only to the big boys."

Without waiting for a reply, Dalkins now opened the door, As he did so, the older man said, "As you leave, pause before the mirror in the anteroom and take a good look at who's talking about little boys."

"Okay, okay," said Dalkins. "So I'm only five feet six. So I don't even look eighteen."

"Maybe fifteen," interjected Buhner.
"In this instance," said Steven, "courage comes in a small package."

Pause, into which Steven projected: "And for your information, I am not an alienated person. And it's you that will have to make the decision to change, and not me."

Buhner smiled like a man who is accustomed to talking to people who think that it is thee not me who is irrational. He said, "If you're not alienated, I don't know who is."

He was talking to a closed door.

When the youth had gone, the psychiatrist sat down in his chair with that faint smile still on his face. He was joined by another man, who silently settled into the chair where Dalkins had sat a few minutes before.

"Well, you heard it all," said Buhner.

The other man pursed his rather full lips and nodded.

"What do you make of it?"

The second man's answer was to stroke his jaw thoughtfully.

"He sounded sincere in the alienated fashion," said the psychiatrist.

Before his visitor could reply or make a move, the door opened. The girl who had been in the anteroom came in with two copies of a computer printout. She handed one to each of the man and went out.

There was a faint rustling of paper as Dr. Buhner and his guest scanned the information on the printout. Then the visitor folded his in a deliberate fashion and for the first time spoke. "His physiologic reactions when you asked him that question," he said in a soft baritone, "establish that he did know about the ten-day lag between the time a lot of money is spent and a human being finds out about it."

"The information," was the reply, "is merely classified as special knowledge. It is not secret, but simply is not publicized. Tens of thousands of individuals learned of the delay

in specific training they took."

The second man tapped the printout, which now lay on his lap. "I notice," he said, "he spent most of the money on the rapid production of a film. Any chance of it being worth anything?"

The gaunt man shook his head. "I had a committee of film people of diverse backgrounds look it over. Their report reinforced my own impression. It's a disjointed piece of junk. Apparently none of the hastily assembled cast ever saw the whole script. They acted it out in bits and pieces. Clearly, the project was intended to spend the kind of large sum you can put into a film."

The visitor seemed nonplussed. "Have you ever had a case

like this before?" he asked, bewildered.

"Once, with the difference that, when we traced down the expenditures, we discovered that he had tried to hide about fifty thousand and had paid another fifty out as a bribe."

"For heaven's sake"—in astonishment—"to whom?" When Dr. Buhner smilingly shook his head, the other man apologized. "Of course, the recipient was penalized and the incident is no longer on his record."

He broke off. "What's your next move with Dalkins?"

"We'll just have to wait and see. He has no hidden money. Therefore, the moment of truth should come rapidly."

"Still"—the visitor was thoughtful—"it says in the printout that his apartment is paid up for two months in advance. What's the state of the larder?"

"Lots of food."

"So he can live in total luxury for two months."

The specialist tapped the printout. "What bothers me," he said, "is that the computer agrees that he is not an alienated person."

Steven Dalkins came out of Dr. Buhner's office into a gleaming corridor, and went along that corridor to an elevator, and so down to the ground floor. From there he sallied forth into a world that had not in fifty years changed much in appearance. There were the same buildings, or at least the same types of buildings. Glass, stone, brick, and plastic cast into various high-rise configurations. It differed from earlier eras in that it had told him every day in his conscious recollection that it was perfect.

The millenium had arrived. True, the eighteen-year-old recipient of a million dollars had to work until that sum was paid off. But then, work was good for people; normal individuals didn't question that.

Most people never succeeded in paying off the debt; they

simply didn't earn enough money. But they also, being unalienated, seldom spent all the money.

When an individual died, what was left of the million reverted to the state. The work debt, if any, was simultaneously wiped off the books. The children could only inherit a few personal effects, not money or property. There were no loose ends. Everybody started with a clean slate—and one million dollars. Legally, that sum could not be paid twice to anyone, nor could any portion thereof. The law did not provide alleviations for the condition in which Steven found himself. If he worked, his salary would automatically go to pay off his already existing debt.

Apparently unconcerned by any of this, Steven climbed

into an electric taxi and was on his way.

In due course, the taxi turned onto the street beside the river and pulled into the driveway of a high-rise apartment building. Steven climbed out into the warm day, paid the driver, and then sauntered to the glittering front entrance. As he did so, he was aware of another car pulling to a stop across the road next to the river. The man in it got out and pretended to be interested in the river view.

The spy later reported to Dr. Buhner, "Mr. Dalkins entered the building in which is his apartment, and after two hours has not emerged."

The days went by, and he continued not to emerge.

After a week of nothing, the watchers out there shrugged, and said, in effect, "Well, why don't we just let things happen as they normally would for an eighteen?"

Accordingly, there arrived at Dalkins's apartment a notice from Computer-Mate. It informed him that a young woman,

Stacy Aikens, age twenty-three, had been selected as a suit-

able marriage partner for him.

"As you probably know," the communication concluded, "after a computer selection, both parties have fourteen days to meet and either accept or not accept the selected person. If one selectee is willing and the other not, the willing individual is free and has three more opportunities to accept a marriage partner. On the other hand, the one who refused to accept the computer selectee has only two more chances.

"When the candidate has used up all three choices, one year must pass before another three opportunities are avail-

able. If in private life the candidate meets a potential life partner whose personal qualifications come within the frame of the computer programming for each of them, a marriage may also take place. It should be noticed that in this special situation Stacy Aikens has already waived the requirement that her alter-mate must have money.

"A potential candidate who does not wish to be married

at this time should so advise Computer-Mate."

Dalkins did nothing. Neither objected, nor asked for his name to be withdrawn. He did not call the girl, and when she finally phoned him on the twelfth day he informed her that she was acceptable to him.

Apprised of these details, Dr. Buhner had another meeting with the representative of the Treasury Department. The man asked, "Do you think he'll marry the woman?"

Buhner smiled. "There we have him. To get his sex organs unlocked, he's got to. Evidently, whatever his plan, that much is important to him."

"Maybe all he wants is an opportunity to use up her cash."

The grim smile did not leave the psychiatrist's face. "No, we've already limited her withdrawals to exactly double what she has been living on up to now, with extra money available on special request for specific purposes. No, no"—he shook his head—"when biology solved the problem of locking up the male sex organ, and later opening it up so that it could function only with one woman—his wife—the entire course of family relations and in fact human history was altered in a positive fashion. And of course since women live an average of seven years longer than men, we naturally set it up so that our youths must marry girls who are four to seven years older than they are."

He concluded, "My bet is, he shows up for the wedding

ceremony."

The sign above the doors read: HORMONIC COMPENSATION CENTER and ALTERNATE MARRIAGE REGISTRATION. There was a lineup in front of the doors when Dalkins arrived. A group of males stood on one side of a long, narrow, fencelike barrier, and a group of women on the other. With one exception, the males were all boys in their late teens and the females all young women in their early twenties. The exception among the men was an individual of about forty.

When Dalkins arrived, no women of corresponding age had shown up among the females; so he assumed that the man was there to spy on him. Dalkins smiled contemptuously.

He took his place at the rear of the male lineup and glanced over at the women on the other side of the fence. At once he saw Stacy Aikens. The young woman had already seen him and was gazing eagerly in his direction. Their gazes met. It was the first time they had seen each other in the flesh, and it occured to Dalkins that he had better smile. He smiled. She smiled back, revealing rather large teeth.

Stacy left her place in the lineup—she was in third position from her door—and, as required by the rules, came back opposite him in tenth position. The way she walked back toward him indicated that she had very short legs.

Dalkins was not critical of her physical appearance. The new-style thinking about such things had been around for more than forty years, and in spite of his antagonism to part of the world around him, that one he had not noticed. The new-style thinking required that all normal girls, women, boys, and men be considered beautiful without exception.

So appearance, in terms of what old-style thinking would have called beauty, was not a factor in computer mating. Height was. Weight was. Age was. And so the young woman who now stood just across the barrier from Steven was 5 feet, 1 inch tall (to his 5 feet, 6 inches), 100½ pounds to his 128, and 5 years older than he.

All over the world fatties married fatties, thinnies thinnies, and intermediates other middlings. And of course the ridiculous tendency that men had once had to marry females younger than themselves was nullified by an exact opposite system based on good sense and the findings of biochemistry. Sexually, as economically, it was the millennium.

Soon they were inside the building and were seated in adjoining booths, visible to each other and to the boys and young women in other booths through thick, transparent plastic. Since, at Steven's insistence, they had opted for the alternate marriage, they signed a plastic plate with a special type of pen. Their signature was automatically transferred by the computer to the distant department of vital statistics in the state capitol. The signature, of itself, was the marriage ceremony, requiring only the medical recompensation of the

male and the second step of hormonic alignment to make it legal and permanent.

At the computer's request, Dalkins unzipped the right hip of his special marriage trousers. Then he leaned back, also by request, and waited while he was strapped in by two mechanical hands. As the hands withdrew, a glasslike structure fronted by a needle and a beam of light focused on his exposed thigh just below the hip. The needle moved slowly and entered the flesh. The red fluid visible in the transparent needle disappeared inside him. The needle withdrew.

The computer said, "Hold your arm steady for Step two."

Dalkins, who had located the older man, saw that he was standing a few feet away watching the "marriage ceremony," and saw that in fact the man seemed so convinced that all was going well that he had half-turned away.

Now! thought Dalkins.

The pix-phone rang. Dr. Buhner pressed the button that connected the tiny receiver in his ear, and said, "Dr. Buhner here."

The picture that formed on the pix-plate was that of his erstwhile visitor and confidante. The man said in a fretful voice, "Roosley at this end. What went wrong?"

Buhner could not fail to notice the accusing tone of blame, and he said, "We must first of all have an understanding, you and I."

"About what?" Astonished voice and face.

"I had no control over that situation. The law does not permit it."

"You had your observer on the scene."

Buhner ignored the second assignment of blame. "Have I made my position clear?"

"Yes, yes." Resignedly.

"What happened," said Dr. Buhner in a brisker tone, "is that again our Steven seems to have taken the trouble to discover in advance the deails of a process that most people go through without preknowledge."

"When it was done to me," said Roosley, "I was in a locked room strapped into a chair. I didn't have a chance

to get away."

"If," said Dr. Buhner, "you had brought along a com-

puter repairman's key and an automatic pistol to shoot your way through a locked door—"

There was an impressed expression on the face in the pix screen. Finally: "What are you going to do?"

"Nothing."

"Why not?" Sharply.

"There's no law against what Steven did."

"You mean you can deactivate a machine and shoot your way out of a locked building?"

"Hormonic Compensation may sue him for damages, but

since he has no money it will do them no good."

"B-but," his caller protested, "isn't it illegal to be in the condition Steven is in now, a sexually free male?"

"No."

"But—" the other man groped.

"It is required by law that a male child reaching the age of puberty have his sex-performance capacity placed under control. It is required by law that he can get married, since marriage is a man-made relationship, only if he goes through the process of being recompensated and aligned with his future wife. If this does not happen, then no marriage has legally taken place. You see," Dr. Buhner continued, "the technique for all this has been taken from the old Chinese Communist People's Army concept, except of course there's no death penalty. But it's simply now, as then, a trap for the unwary individual who, in both the Communist and in our situation, was a teenage male still in a naïve stage. Before he can think, we capture him sexually. Before he can grow up, we align him sexually with his future wife, and the law states that once this is done it cannot be undone. The state is justified in taking these arbitrary steps because its goal is a peaceful, hard-working populace."

Pause.

"Where is Steven's wife now?"

"She's not married. The final step was not completed. She has returned to her own apartment."

"And where is Steven?"

"He has not yet returned to his apartment."

Roosley said after a pause, "As I understand it, for the first time in a quarter of a century a male is out there"—he made a vague gesture with his arm, taking in half the horizon

—"who is able to perform the sex act with more than one woman?"

"That used to be the way every male was."

"And that is not illegal?"

"No, it is merely undesirable. But it's a natural state. No natural human state has ever been specifically declared to be illegal."

The face on the pix screen, in the course of a few moments of contemplating the potentialities of the situation, had acquired a distinct mottled look. The man muttered, "But good God, one man and all those unmarried girls and women between eighteen and twenty-three!"

"It could be," soothed Dr. Buhner, "that seduction is not his purpose. For that he didn't have to get rid of his money."

Roosley said blankly, "But what could be his purpose?" "My assistants," said the psychiatrist, "are continuing to check into Steven's background, trying to find a clue."

"What do you think he will do now?"

"He seems to have covered his tracks well," the older man admitted reluctantly. "I have no report on him. Maybe he's woman-chasing."

Roosley made a choking sound in his throat and broke the connection.

Buhner hesitated, then dialed a very special number. This time, when there was a click, no face came on the pix screen, but a man's voice—deep, determined, interested—said, "I've read your report, Doctor. I agree that Steven should receive publicity. If your prediction about him does not come true, at least we'll have made our first try this decade. Good luck."

Steven sat on his buttocks on the grass, his back against a tree at the edge of the park, and stared up into the sky. It was a pose. Actually, he was keeping a sharp lookout for possible spies. He was not entirely certain that he had got away without being seen. He presumed that the treasury lords would like to find out how he proposed to survive without money.

"It's easy," he called out to four suspicious-looking men who walked by while he sat there (as if they would understand his meaning). "The world pays more for creativity and most for rebellion. Tell that to your masters."

One of the four, a puzzled individual of about thirty,

came over and said, "Hey, you're the fellow who gave away your million, according to the news report. Why?"

Steven said, dazzled and delighted, "You mean they're giving me publicity?" He caught himself, shrugged, said, "Move along, bub. If you don't know why, telling you wouldn't do any good."

About dusk, Steven came lazily to his feet, Sauntering-in case there was a watcher—he walked back into the park to where a tiny stream flowed into a culvert. Bending, he reached into the darkness of the culvert, groped, and then straightened. In one hand he now held a waterproof container. From its interior he drew a rolled-up sign. This, like a sandwich man of old, he slipped over his head. The front of the sign was a white canvas with a message on it. The message was:

> I'm Steve Dalkins, the nut who gave away his million dollars.

The back of the sign, also canvas, read:

I invite you to hear my story any night at West Park, eight o'clock.

That part didn't mean what it said. Maybe, if it could be arranged, he'd send somebody over there in case people showed. But the purpose would be to mislead possible observers.

Steven walked along, confident, smiling. The sky grew dark and the sidewalks began to give off the light they had accumulated during the day. Walls of stores glowed in the same way. People walked up, glanced at him and his sign, and moved past. Most gave some kind of disapproving indication, but the alert Dalkins noticed one here, one there, who had a different reaction.

To each of these, if it could be done, he spoke quietly in a low voice, "We've got to do something-right? Meet me any night at the . . ." And he named another park. The biggest moment of the evening occurred when a young man

with a flushed face briefly fell in step beside him and said, "You got a plan for beating these bastards?"

"Sure have," said Steven.

The young man did something twisty with his body. It was a gesture that had in it an infinite hostility. "I'm with you, and I'll bring the gang. My name is Jack."

"Good."

The group that first night at ten consisted of eight single responders, including two young women, and a surprisingly large group of seven intense young men and four equally sincere young women. This was Jack's "gang."

There were no questions of why. Each male and female knew that this had to be done. Each was relieved that some-

one had at last taken the step of no return.

It was as if they all understood the reality of things deep inside their viscera, and *that* part was taken for granted. Only the details of what to do needed to be worked out. And, of course, there Steven had his plan.

They organized Overthrow Associates that first night. It was agreed that Steven Dalkins would be recompensed for his lost million. Each person present at the founders meeting wrote him a check for one thousand dollars. All future members—it was authorized—would be assessed the same amount entirely on behalf of Steven.

"You may not get back your full million," said the flush-faced man, Jack Brooks, "but surely we can get together as many determined persons as were behind the assassins of Alexander the Second of Russia in the 1880s. Surely five hundred is not too much to expect."

"I think there'll be more than that," said Steven non-committally.

At the end of Month One, there were 2,782 members. Each member during Month Two was given the task of locating five more alienated persons. Since the receipts totaled more than a million, Steve said he would donate the difference to expenses. He had confided the first step of his plan to a small inner circle of the conspiracy, which included Jack. These individuals told inquiring members that the plan was "the greatest," but that it would be unwise to reveal its details to any but key figures.

Overthrow Associates had 53,064 members when, shortly

after the end of Month Four, it undertook its first act of total defiance.

The authorities had decided to publicize Steven's condition. Girls and women were urged, if they were approached by a small young man, to call the police if he manifested ulterior motives. Buhner, in his reports, doubted if any woman would be resistant to the charms of a sexually free male. However—he suggested—Steven couldn't be sure of that, and so he would be the careful one.

Nevertheless, the psychiatrist, when he lay awake at night, felt somewhat more restless than was usual for him.

Daytimes he monitored Steven's progress by the number of checks that were made out to him. As the total grew, a shiver of anxiety almost visibly oscillated through those members of the United Governments who, by agreement, had to be kept informed of such matters.

Whenever people got too nervous they contacted Buhner. This particular morning the caller had a beefy face with an edgy voice that said, "What are you doing about these rascals?"

"We're getting ready for a cleanup."

"How do you mean?"

Buhner explained. Police were turning their attention from routine and pointing toward an elemental force. Out of the woodwork of the society, a strange breed of human creatures was emerging. The tense, determined individuals were drawn into the light by a common impulse to smash an environment that, in some obscure way, had angered them.

Their nonconformist impulse to do violence had its own purity. They loved each other and were loyal to their group leaders. In earlier decades, there had been other dramatic actions to motivate affection for and obedience to one or more leaders. In this instance, this year, they were proud to be associated with someone who had had the will to give away his million dollars. After that, nobody vaguely questioned the right of Steven Dalkins to be "the boss."

That made it easy for the police. All the checks were made out to one man. The signatures were written plain to see. Every man, boy, girl, and woman was identified, and the computers sent printouts to police centers across the land. Quietly, detectives visited each person's neighborhood and located him or her exactly.

The society, of course, did not permit people to be arrested merely because they wrote a check to Steven Dalkins. There

had to be an association with an illegal action.

"But what can they do to a perfect world?" That was the question most often asked of Dr. Buhner, and here it was again. He made the same statement now as he had in the past. "Twelve years ago Charley Huyck led a revolt aimed at our computer-education system. Twenty-three years ago the rebellion of the Gilbert brothers had as its target the group method of electing politicians. After each outbreak, all of the participants were arrested, charged with being alienated persons, convicted, and disposed of."

"What," asked the heavy-faced VIP, "do you think

Dalkins will attack?"

"Something more basic, is my feeling."

"For God's sake," exploded the politician, "What could be more basic than an attack on the political system?"

"Well," temporized Buhner diplomatically.

The edgy voice calmed and said, "Do you think Dalkins is aware that you can follow up all those checks?"

"Yes, I think he knows, because he has transferred some

of the money over to a company."

"Oh, that! But, surely, in this special situation-"

Buhner shook his head firmly. "How companies spend their money cannot be checked on, because it might give a tip to their competition. The computer system would either have to be reprogrammed or a public statement would have to be made by the authorities. But we don't want to do that. We want to catch all of these people and get rid of them."

That night, as Buhner lay awake, he was disturbed to realize that slightly over four months had gone by. So if Roosley's fantasies had been even approximately true, then it was time for violated virgins to be showing up in small hordes. What was disturbing was the possibility that there weren't any . . . could it be, he asked himself, that Steven has been behaving like a responsible person all these months and has not been out there on a seduction spree?

But if not that, what had he been doing?

The next morning looked absolutely delightful when he glanced out the window of his high-rise apartment. The sky was as blue as a brightly lighted tidal pool . . . a little later, he was peacefully and unsuspectingly eating a delicious meat

substitute breakfast when the red emergency light flashed on his media set. The alarm buzzer sounded. Then a young man walked onto the stage at which the camera pointed. He said: "Ladies and gentlemen, do not be alarmed. This is a message from Overthrow Associates. We have temporarily taken over the principal broadcast centers of the American continent. We want to tell you something our leader, Steven Dalkins, believes you would like to know."

He thereupon explained and demonstrated (on himself and a girl who suddenly appeared) the chemical method whereby the sex alignment of a man and wife could be terminated. He named several locations where the chemical could be secured locally, and said that similar messages were being broadcast from the other stations across the land.

He urged: "Have your check for one thousand dollars ready, and remember this may be your only chance to get the little case of syringes with the compensating shots in them. You can buy them now and decide later if you'll actually use them. If you're a person of decision you'll act at once before there is any interference with the sale, and think later."

One of these locations named was about a mile from Buhner's apartment. In seconds he was out of the door and heading groundward in a high-speed elevator . . . outside, he ran for an electric taxi. En route, he wrote out his check. Even as it was, by the time he had paid the taxi fare several hundred men and about fifty women were crowding around a helicopter which stood at the edge of a small park. As Buhner pushed forward, waving his check as the others were doing with theirs, he saw that three girls and four men were passing out small boxes and another man and girl were taking the checks, examining them, and putting them into a metal container.

The psychiatrist was barely in time. He handed over his check, waited nervously while it was scrutinized, and then grabbed the box that was held out to him. He was still backing away, clutching the precious kit protectively, when one of the young people yelled a warning: "The police are coming. Beat it, everybody!"

In bare seconds, the nine were inside with their cartons and their checks. As the door started to close, the machine lifted into the sky like a scared falcon. Up there it looked

exactly like the dozens of other craft like it in which buyers had arrived and which had for many minutes been taking off from all the surrounding streets.

Buhner arrived at his office looking disheveled, but he made his report to Top Level feeling triumphant. The report from the government laboratory later that day confirmed that the seven syringes of the kit he had bought did indeed contain the dealignment chemical.

According to a still later report from the computer network, Overthrow Associates sold 883,912 kits that day at 6,224 locations for one thousand dollars each. And the checks were all made out to Steven Dalkins.

Power and money cast long shadows. The images in the minds of certain shocked persons flickered with the possibility that the next allotment of chemicals would bring in eight billion, or even eighty.

It was too much. The rumors came to Steven's ears. He thought: the turning point! That very day he dialed the computer code that connected him to his followers everywhere in a closed circuit. He placed himself in front of the pix camera.

There he stood. His eyes were small gray marbles bright with intelligence. His cheeks were flushed. His small body was tense. He glared into the eyepiece, striving to fix every viewer out there with his determined gaze.

He explained the views of the shocked members, whose leader was Jack Brooks, and he finished, "Jack's vision has proved greater than mine. Every man has his limitations. What has already happened seems to be just about what I'm capable of. So—"

He paused dramatically, then made his firm statement. "I hereby resign any control that I have had of Overthrow Associates in favor of my dear friend, Jack Brooks. I give you all my love and best wishes."

He finished graciously, "I'll still sign checks for all valid purchases for the next move of the organization. For that you can always reach me on the code. Good-bye to all you wonderful people."

As Steven's voice and face faded, in a distant apartment a young man with a red face that was positively scarlet grabbed his own pix-phone, dialed a number, and yelled

into it, "Steven, you so-and-so, what do you mean—valid purchases? I want a total power of attorney over the cash in your account, except for maybe ten million. Show your sincerity."

They were on a private line, so Steven said, "If I don't retain control of the money, you might be tempted to do

something against me."

"Sign over twenty-eight million right now to pay for the next allotment!" screamed Jack.

"Okay," said Steven.

When it was done, Jack Brooks paced the floor. "That s.o.b.," he said, "is going to get away with over eight hundred million dollars."

He stopped pacing, scowled, said, "Like hell he is." He walked to the pix-phone again. This time he called Dr. Buhner and said, "Every evening at dusk Steven Dalkins takes a walk in one of the parks."

The psychiatrist had at least three meetings to attend while he considered what he would do with the tipoff. . . .

First, with computer engineers and administrative staff. The question: Were the great thinking machines programmed to check out 883,000 names?

The answer: There were endless flows of exact logic, total information somewhere, every transaction of every person available, not a single natural barrier in the entire system—so, yes.

Buhner's second meeting was with the directors of the biochemist guild. They had an analysis for him on the basis of one clue. A long-time employee, who was not a member of the trust group that controlled the sexual dealignment ingredient (one of seven) manufactured at the plant where he worked, had quit his job a few months ago. Investigation had shown that he had made a secret, unofficial study of chemistry over many years.

"We may speculate," concluded the board, "that a group of seven or more persons either separately motivated or in a conspiracy sought employment in such laboratories long ago, and bided their information until someone like Dalkins

came along."

Buhner's third meeting was with a committee of the United Governments. A leading economist explained in a shaky voice to the distracted members of the committee

that the million-dollars-to-everybody system depended on the statistical reality that the needs of the populace be consistent. An additional expenditure of one thousand dollars per person by a sizable percentage of adults must not happen.

No question, thought Buhner, Steven has hit the perfect

world a blow below the belt-

The problem was, what to do about it? In his own speech he said cautiously, "It would appear as if the attempt to control mankind's genitalia has been nullified by Steven Dalkins as an incidental act in the accomplishment of a secret goal of his own."

He pointed out that when eight hundred thousand persons did a similar act of vandalism against a system, then by theory the system must be examined, and not the individual.

He made his recommendations and concluded, "I refrain from offering a solution for Steven himself. Vague rumor has it that he is trying to break off his connection with his followers. That may not be easy to do."

At noon the next day, the United Governments issued a determined-voiced statement through their elected secretary:

It has been deemed inadvisable to permit 883,000 males to prey on a hundred million unmarried young women. The United Governments accordingly authorize drug outlets to make available hormonic decompensation kits to those persons over eighteen who choose to unalign themselves with their spouses. The price of the kit shall be ten dollars. The names of all persons who make this choice will be publicly available. If individuals who have already purchased the kits turn them in before the end of the current month, their names will not be among those posted.

As Jack Brooks heard those fateful words, he leaped to his feet and charged against the nearest wall of his apartment, hitting it with one shoulder. Flung off by the force of his violent action, he threw himself at another wall. Presently, exhausted, he sank into a chair and brooded on the reality that no one who could pay ten dollars would buy the same product for one thousand dollars.

His fantasy of eight billion was now a mere foam of

rage in his clenched mouth. The rage was directed entirely at one person: Steven. Steven must have known this would happen . . . how can we get even with that—that—that?

Steven Dalkins, all fourteen of him, took his usual evening workout shortly after dusk. At least, those were the reports relayed back to Buhner by the agents he sent to each of the

city parks.

Could one of the fourteen be Steven himself? It didn't really matter for Buhner's purposes. He stood across the street from the public pathway of one of the parks and watched a five-foot-six-inch youth jog toward him. If it were Steven, he was well disguised. A good makeup job concealed every significant feature of his face.

As this particular Steven came opposite him, the psychiatrist walked rapidly across the street. "Please tell Mr. Dalkins," he said loudly, "that Dr. Buhner would like him to call. Tell him he's now going to have to admit why he did

all this—"

That was as far as he got. Dalkins turned in midstride, ran across the street and then along the sidewalk. Suddenly he seemed to see what he wanted. He darted to a car by the curb just as a woman was climbing into it. There seemed to be some struggle between them, which Dalkins won. The car started up. The last thing Buhner saw was the machine receding down the street, with Dalkins at the wheel and the woman lying back against the seat. Her head rolled limply and she slipped out of sight.

Buhner's men found the abandoned car twenty minutes later with the dead body of the woman owner lying on the

floor of the front seat.

"Let him get out of that!" said Jack Brooks when the news was phoned to him by the murderer. His flushed face smirked into a grimacing smile. "Sending out fourteen Stevens was the smartest idea I've had up to now."

He was feeling better for another reason. There was a possibility that a percentage of men would be willing to sign over a car or other property in exchange for the kit rather than pay ten dollars and be identifiable and on a list. It was too bad that there was no cash in the perfect world and that every money transaction had to be by computer credit, but still—he shrugged—there was always a way.

The murder was announced over the news media, the circumstances described.

It was a quarter of four when Steven phoned Dr. Buhner.

Carrying his equipment, the psychiatrist arrived at the prearranged rendezvous. A man at the door guided him to a large, tastefully decorated anteroom. The pretty girl there escorted him through a door to a large inner office and closed the door behind her as she departed.

Silently Buhner set up his equipment, then faced the youth who sat behind a gleaming desk. Steven Dalkins waved him at the two vacant chairs, one soft and one hard. The M.D.

settled into the hard chair.

"Hmm," said Steven, "I was wondering which one you would choose."

He leaned back with a twisted smile on his small face. "How does it feel, Doc, to have someone giving you that superior treatment?"

Dr. Buhner stared at him with his pale gray eyes and said, "Steven, slightly over forty thousand members of Overthrow Associates had been arrested by the time I started out for your place."

"This is only one of my places," said Steven.

The older man ignored the interruption. "Four out of five have already elected to go voluntarily to one of the space colonies. That way they can keep their money for sure." He smiled grimly. "Not everyone cares to gamble his million."

"So only I am in jeopardy?"

"Steven," said Buhner tensely, "who could have killed, or ordered the killing, of that woman?" As the silence lengthened, Buhner said, "Maybe we've already got him in custody and can verify your story in a few seconds." He indicated the machines that were focused on the genius boy in front of him and urged, "Steven, you mustn't be loyal to someone who's trying to pin a murder on you."

"What happens to a convicted murderer?" asked Steven,

after another pause.

"Nobody is convicted of murder in our day," was the reply. "The only crime is alienation."

"All right, what happens to a person convicted of alienation?"

"That's classified information."

"The rumor is that they're executed. Is that true?"

"I'm not a member of the board that handles that. I've heard the rumor." Buhner smiled his grim smile. "Now that you've met some of them, Steven, what would you do with alienated individuals?"

Steven hesitated. "It's unfair," he said finally, "for the unalienated to pass judgment on those persons who through some accident of childhood trauma got to be alienated."

"But you noticed?"

There was a faraway expression in the boy's eyes. "Many of them are exceptionally warmhearted," he temporized.

Buhner refused to be sidetracked. "Steven, how many murders that you heard about were committed by your followers in the past four months?"

The barest shadow of a sad smile was suddenly on Steven's face. "Most of them are alienated about other things," he said, "but those who are alienated that way killed about eight hundred persons."

"Why? Did you find out why they did it?"

"The victims said or did something that violated the ideals of the murderer."

"And so," said Buhner with the touch of grief in his voice that he always felt at such revelations, "in this great universe where a man's life so far as we know is only a tiny span of years, they in their inner fury of rightness denied even that short a time to nearly a thousand human beings. Tell me, what should be done with people like that?"

Once more, their gazes met. This time, the boy looked away quickly. And there seemed no question. The four months of close contact with the endless twists and distortions of truths of the alienated persons he had known had left their scarring marks.

On his face was consequent judgment. Steven said, "His name is Jack Brooks."

Buhner pressed some buttons on his machinery, watched the dials briefly, then said: "He's among the captured." Once more, manipulation, followed by the comment: "The computer is asking him if he ordered, or committed, the murder. He denies it. But his heart, his lungs, his liver, his blood vessels, tell a different story."

Their gazes met across the control instrument. "Well, Steven," said the older man, "I've been proceeding on the

assumption that you're an unalienated person, and that therefore—though it would be a little hard to imagine what it could be—you have some deep reason for what you have done."

Steven said, "I should like you to accompany me somewhere"

"Could you use some reliable witnesses?"

"Yes."

Buhner and the United Governments' secretary, and Roosley, and two other important persons stood behind a tree on one side of a tree-lined street as Steven walked across to a small suburban house on the other.

He stopped outside the gate and whistled twice long and twice short.

A minute went by. Then the door of the house opened.

Out of it there emerged a rapidly moving figure of a young girl. A child? No. She charged over to Steven Dalkins and flung her small body against his small body with an impact that sent him back several steps. The two—the dynamic girl and the high-energy boy—thereupon proceeded to hit one mouth against the other, and to squeeze their bodies together in a series of minor but definite blows.

"Good God!" said Buhner involuntarily. "He did all this

in order to marry a girl his own age."

As if he had heard the words, or deduced that they would be spoken or thought, Steven turned and called out into the gathering dusk, "But it's not illegal; not now."

"Love," mumbled the psychiatrist. "I haven't thought of anything like that since I gave up little Esther when I was

eighteen."

Suddenly, his legs wouldn't hold him. He lay down there on the grass, vaguely aware of the others bending over him anxiously.

It was ridiculous, of course, but the shameful tears streamed down his cheeks . . . after all, he chided himself, little Esther would now be big Esther, married and with a brood of Estherettes. And, besides, it was well known that people always outgrew age-eighteen attachments.

The arguments, so cogently true, flapped unheeded through his head. The feeling that had leaped at him out of his forgotten past somehow conveyed the wordless meaning that he had never been given the chance to grow through those emotions. Muttering, Buhner struggled to his feet, shook away helping hands, and hurried off along the darkening street.

He had important things to do, like recovering from thirty years of living without love.

Afterword

It should be noted that I fully believe that the "alienated" of my story would, indeed, do as I have described. They would be "against" that million.

An alienated person appears to be an automatic product of childhood trauma. Historically, he has not "thought things through." His condition is as subjective as that of any conformist.

People living in a culture are simply not capable of making comparisons with other cultures. The United States is today the most affluent country of all time. People at all levels of this affluence are equally alienated, equally critical, equally ungrateful.

Watching them, we must assume that they as a group have no ability at all to imagine what a really lower standard of living is like.

We are entitled to deduce that they will project a similar abysmal unawareness into the most fabulous future imaginable, and that in any foreseeable future we shall have the same percentage of alienated types as now.

Which is the enduring reality of my story.

F YOU ARE A PERSON WHO NOTICES the sometimes tiresome behavior patterns of individuals, a picture of me as a systemizer should at this stage have taken firm form in your mind.

For years I may mentally stare at something that has aroused my interest, and, in a manner of speaking, shake my head the entire time. This means that, for me, the pieces do not seem to be falling into a coherent shape. Years fater, I'm still looking, still patient, waiting for the insight that will bring it into focus.

Suddenly—and I do mean suddenly—the pattern flashes into view.

. . . Well, I'll be damned, so that's how you write plays.

. . . Yes, yes, that's the way to proper exercise.

... Hey that's how you make money.

Some of the patterns are for entertainment only, and are not to be taken too seriously. This transcript of a speech I made at the annual banquet of the Praed Street Irregulars in, I think, 1971, reflects such a pattern, and is offered just to show you how swiftly my mind seeks system.

The detective referred to, Solar Pons (an invention of the late August Derleth), is, in my opinion, the best of the imitations of

Sherlock Holmes.

BEING AN EXAMINATION OF PONSIAN AND HOLMESIAN SECRET DEDUCTIVE SYSTEMS

ONE OF THE ELECTRIFYING QUALITIES OF THE Sherlock Holmes stories was, and is, the great detective's ability to deduce revealing truths from a few clues. Solar Pons, like Sherlock Holmes before him, was a sharp observer in the Holmesian tradition—the chronicles of Dr. Parker claim for Pons an ability at least equal to that of Holmes.

It would take too long in this brief account to give my favorite example of Sherlock Holmes's deductive ability. This is from *The Sign of the Four*; in this adventure, Dr. Watson hands Sherlock a watch and asks him to make deductions from it. They are, in the highest Holmesian tradition, stunningly brilliant.

In "The Adventure of the Mazarine Blue," Solar Pons makes a shorter but equally startling set of deductions. Dr. Parker says "testily," "I suppose you have found the murderer." Pons's reply is, "We shall see when we have had a look at a heavy man of some five and a half foot in height, well past middle age, bearded, and very probably a lepidopterist."

This is in the best tradition of Ponsian observation and deduction, and reading such, we truly feel ourselves to be in the presence of a master detective.

Now, acute observations like these have always been of considerable interest to me, and so I propose to examine here what goes on in the brain of a person (Pons, or Holmes, or any lesser being) who is capable of making astounding

analyses on that level of genius.

At this time—eighty years after Doyle first wrote about Holmes, and nearly forty years after Derleth began his pastiches—the first question we are entitled to ask is: Are such things actually possible? Does deduction of this noble quality relate to reality?

Having asked such questions, we discover that they can only be answered if we put them aside and go into more

detail.

Thus, two more questions at this time: Do men observe according to a special talent with which they are born? Or do they act according to training?

Inherited ability? Or acquired ability?

At this point I wish to point out that Pons stories follow the best of the original Holmesian format. There are no oddities like *The Sign of the Four*; Dr. Parker, in his chronicles, moves unerringly to the basic short format—he tells briefly the story of the coming of the client; the mystery is presented; and then there is the visit to the scene and finally the rapid climax as Solar Pons draws his conclusions and confronts the murderer.

As Dr. Parker reports it, Pons makes no errors. When he deduces, he gets facts immediately. There is no time for shoddy guesswork. Like Holmes before him, he is unerringly correct the first time. The story moves in a straight line to its inevitable conclusion.

How can Solar Pons—and Holmes—be so right?

On examination, we observe that both men are possessed of an unusual store of detailed knowledge. In "The Adventure of the Six Silver Spiders," Pons asks Dr. Parker, "Have you ever heard of the library of the Count de Fortsas?"

Parker has not, but Pons knows all about it.

In "The Adventure of the Lost Locomotive," Inspector Jamieson brings over a portly man who offers Pons his hand. Shaking it, Pons says, "Sir Ernest McVeigh, I believe. Director of the Great Northern Railroad . . ." Now, I ask you, how many of us, confronted by the president of the Southern Pacific, would recognize him? (In still another story, Solar Pons is able to make a deduction because he knows the family name of the Serbian royal family.)

Are such extremes of special knowledge and information

possible? Yes, yes. Offhand, I myself could tell you the family names of three or four of the European royal lines of yesteryear. A few years ago, I was visited by a theneighteen-year-old nephew. Driving with him was a revelation. He knew the make and year of every car we passed on the street.

There is another, more interesting aspect to deduction. When we see a trained man thinking on his feet, we see an astonishing moment-by-moment performance. What he is doing is consulting an inner yardstick.

I have personal experience with a similar type of reaction in myself. I myself think systematically in several matters. When somebody talks to me about one of those matters, I soon find myself examining his remarks in relation to my system. Whatever questions I ask him relate entirely to my theories, and do *not* relate in any way whatsoever to casual impulses of the moment.

You can see that we are now within sight of our quarry: the nature of the deductions that Solar Pons and, earlier, Sherlock Holmes, made so brilliantly.

Both men undoubtedly possessed a natural motivation, or drive, to be interested in endless trivia. Once a datum got into their memories, it was never forgotten.

And both men possessed carefully calibrated inner yardsticks of judgment and evaluation. Each usually asked no more than three or four questions, but he *always* asked them. And when they had been answered, the detective could come unerringly to the right conclusion.

Naturally, you will wish me to tell you what those questions might be. Before I do so, let me hasten to say that you are probably not listening to a definitive evaluation. It could be that this paper will serve as a guidepost or an incentive to sharper brains than mine, which needed only to have a direction indicated to them to produce an even more precise analysis than I am now making.

The following set of questions is, perhaps, limited. Nevertheless, future detectives and detective-story writers should take note.

As I see it, when Solar Pons gazes out his window at a prospective client and makes a deduction about that person or, later, examines a clue, he asks himself—silently, first and

before anything else. "Exactly who or what am I looking at?"

"Oh, come now," you say. "Surely even Dr. Parker can be trusted to notice at a glance that the approaching visitor is a young woman (as in "The Adventure of the Circular Room").

But Solar Pons observed that it was indeed a young woman and *added*, "It is evident that you are a trained nurse, for your cuffs show under your jacket. . . ."

In asking himself the question "Exactly who or what am I looking at?" Solar Pons, in short, noticed that it was a young woman wearing her nurse's uniform—and from this drew the conclusion that she had come because of something that had happened in the course of her professional work. Had the matter been personal, a woman (unless there is reason, requiring haste—which would show in other ways) would certainly have changed from her uniform into a nice dress before coming to see Pons. Under such circumstances her profession would have been irrelevant.

The second question follows out of comments I have made earlier. It is: "Is there anything here (meaning in this circumstance, or what I am looking at—the person or the object) that requires special information, and, if so, what?"

In "The Adventure of the Broken Chessman," Solar Pons glances out of the window of his Praed Street flat and says, "Ah, we are about to have a visitor of some importance."

How did he know, and how did he identify the visitor a few moments later as M. Perenin, the Russian consul? The visitor was well-dressed and carried a walking stick and all that, but the revealing and identifying item was the ensign on his motor car. By having knowledge of what this particular ensign meant, Solar Pons unerringly identified his caller as a "visitor of some importance," and then named him.

The third question that Pons certainly has to ask of himself is: "Is there anything here that is obvious? And, if so, what?" Now he is secretly consulting his systematic thought, which all detectives do if they're good craftsmen.

For my example of this one, I'll draw on the test I've already mentioned. In *The Sign of the Four*, when Dr. Watson hands Sherlock Holmes a watch and asks him to tell him something about the owner, the thing immediately Holmes observes is that the initials carved on the watch are H. W.

He therefore—since the watch was handed to him by Dr. Watson, who has been carrying it and clearly owns it—draws the obvious conclusion that the "W" stands for Watson. And since "H" is not the initial of Dr. Watson's first name, Holmes further deduces that it belonged to another member of the Watson family.

The fourth question should be obvious to all persons who are deductively inclined. It is simply: "In what I am looking

at-person or thing-have I noticed everything?"

The corollary to that question would be: "Did I notice something but dismiss it as unimportant, perhaps by jumping to a conclusion about it based on some preconception?"

You will all readily agree that the question is so obvious

I do not need to give any examples.

And so I conclude my little analysis with the statement that in the wee hours of last night I thought of a fifth question, which seemed so obvious that I failed to write it down—and have forgotten it—and with the hope that in future when you reread your Solar Pons you will gain additional pleasure as you mentally keep pace with him and silently ask yourself the same questions he unquestionably does, since I have now set them down for future generations to Ponsder over. If I may be permitted a Puns.

THINK AT THIS POINT I SHOULD present the next story with a straightforward introduction. It is one of my Linn novelettes. These early Linn stories were to some extent unconsciously modeled on Robert Graves' I Claudius—I had this pointed out to me later. But I had done such a vast amount of reading in that particular Roman period that I really thought it was Roman history.

The Linn family tree paralleled the Medici line of Florence, so Clane is a combination of Claudius and Lorenzo. Transferred to 12,000 A.D. but retaining its historical reality, the whole thing acquired a life of its own—and even won a grudging accolade from one

of my principal critics.

This method of paralleling historical situations in science fiction has been used many times since "Home of the Gods" was first published in August, 1946. Paralleling history, when it's well done, provides the author with a special type of enduring reality.

HOME OF THE GODS

AT FIRST THE LAND BELOW WAS A SHADOW seen through mist. As the three spaceships of Lord Clane Linn's expedition settled through the two-thousand-mile atmosphere, the vagueness went out of the scene. Mountains looking like maps rather than territories took form. The vast sea to the north sank beyond the far horizon of swamps and marshes, hills and forests. The reality grew wilder and wilder, but the pit was directly ahead now, an enormous black

hole on a long narrow plain.

The ships settled to the ground on a green meadow half a mile from the nearest edge of the pit, which lay to the northeast. Some six hundred men and women, three hundred of them slaves, emerged from the vessels, and a vast amount of equipment was unloaded. By nightfall habitations had been erected for Clane and the three slave women who attended him, for two knights, and for three temple scientists and five scholars not connected with a religious organization. In addition a corral had been built for the slaves, and the two companies of soldiers were encamped in a half circle around the main camp.

Sentries were posted, and the spaceships withdrew to a height of about five hundred feet. All night long, a score of fires, tended by trusted slaves, brightened the darkness. Dawn came uneventfully, and slowly the camp took up the activities of a new day. Clane did not remain to direct it. Immediately after breakfast, horses were saddled, and he and twenty-five men, including a dozen armed soldiers, set out for the nearby

home of the gods.

They were all rank unbelievers, but they had proceeded only a few hundred yards when Clane noticed that one of the riders was as pale as lead. He reined up beside him.

"Breakfast upset you?" he asked gently. "Better go back to camp and rest today."

Most of those who were destined to continue watched the lucky man trot off out of sight into the brush.

The evenness of the land began to break. Gashes opened in the earth at their feet and ran off at a slant towards the pit, which was still not visible beyond the trees. Straight were those gashes, too straight, as if long ago irresistible objects had hurtled up out of the pit each at a different angle, each tearing the intervening earth as it darted up out of the hell below.

Clane had a theory about the pits. Atomic warfare by an immeasurably superior civilization. Atomic bombs that set up a reaction in the ground where they landed, and only gradually wore themselves out in the resisting soil, concrete and steel of vast cities. For centuries the remnants roiled and flared with deadly activity. How long? No one knew. He had an idea that if star maps of the period could be located an estimate of the time gap might be possible. The period involved must be very great, for several men that he knew had visited pits on Earth without ill effects.

The god fires were dying down. It was time for intellectually bold men to begin exploring. Those who came first would find the treasures. Most of the pits on Earth were absolutely barren affairs overgrown with weeds and brush. A few showed structures in their depth—half buried buildings, tattered walls, mysterious caverns. Into these a handful of men had ventured—and brought back odd mechanical creations, some obviously wrecks, a few that actually worked, all tantalizing in their suggestion of a science marvelous beyond anything known to the temple scholars.

It was this pit on Venus, which they were now approaching, that had always excited the imagination of the adventurers. For years visitors had crouched behind lead or concrete barriers and peered with periscopes into the fantastic depths below. The nameless city that had been there must have been built into the bowels of the earth. For the bottom was a mass of concrete embankments, honeycombed with black holes that seemed to lead down into remoter depths.

Clane's reverie died down. A soldier in front of him let out a shout, reined in his horse and pointed ahead. Clane urged his horse up to the rise on top of which the man had halted. And reined in his horse.

He was looking down a gently sloping grassy embankment. It ran along for about a hundred feet. And then there was a low concrete fence.

Beyond was the pit.

At first they were careful. They used the shelter of the fence as a barrier to any radiation that might be coming up from below. Clane was the exception. From the beginning he stood upright and peered downward through his glasses into the vista of distance below. Slowly the others lost their caution and finally all except two artists were standing boldly on their feet gazing into the most famous home of the gods.

It was not a clear morning. A faint mist crawled along hiding most of the bottom of the pit. But it was possible, with the aid of the glasses, to make out contours, and to see

the far precipice nearly seven miles away.

About midmorning, the mists cleared noticeably, and the great sun of Venus shone down into the hole, picking out every detail not hidden by distance. The artists, who had already sketched the main outlines, settled down to work in earnest. They had been selected for their ability to draw maps, and the watchful Clane saw that they were doing a good job. His own patience, product of his isolated upbringing, was even greater than theirs. All through that day he examined the bottom of the pit with his glasses and compared the reality with the developing drawings on the drawing boards.

By late afternoon, the job was complete. And the results satisfied every hope he had had. There were no less than three routes for getting out of the pit on foot in case of an emergency. And every tree and cave opening below was clearly marked in its relation to other trees and openings. Lines of shrubs were sketched in, and each map was drawn to scale.

That night, too, passed without incident. The following morning Clane signaled one of the spaceships to come down, and, shortly after breakfast, the two temple scientists, one knight, three artists, a dozen soldiers, a crew of fifteen and

himself climbed aboard. The ship floated lightly clear of the ground. And, a few minutes later, nosed over the edge of the pit and headed downward.

They made no attempt to land, but simply cruised around searching for radioactive areas. Round and round at a height that varied between five hundred feet and a daring two hundred feet. It was daring. The spaceship was their sole instrument for detecting the presence of atomic energy.

Long ago, it had been discovered that when a spaceship passed directly above another spaceship, the one that was on top suffered a severe curtailment of its motive power. Immediately it would start to fall. In the case of spaceships, the two ships would usually be moving along so swiftly that they would be past each other almost immediately: quickly, then, the disabled ship would right itself and proceed on its way.

Several attempts had been made by military scientists to utilize the method of bring down enemy spaceships. The attempts, however, were strictly limited by the fact that a ship which remained five hundred feet above the source of energy endured so slight a hindrance that it didn't matter.

Nine times their ship made the telltale dip, and then, for as long as was necessary, they would cruise over and over the radioactive area trying to define its limits, locating it on their maps, marking off first the danger zone, then the twilight zone and finally the safety zone. The final measure was the weakness or strength of the impulse.

The day ended with that phase of their work still uncompleted. And it was not until noon the next day that the details were finally finished. Since it was too late to make a landing, they returned to camp and spent the afternoon sleep-

ing off their accumulated fatigue.

It was decided that the first landing would be made by one hundred men, and that they would take with them supplies for two weeks. The site of the landing was selected by Clane after consultation with the knights and the scientists. From the air it looked like a large concrete structure with roof and walls still intact, but its main feature was that it was located near one of the routes by which people on foot could leave the pit. And it was surrounded by more than a score of cavelike openings.

His first impression was of intense silence. Then he

stepped out of the ship onto the floor of the pit. And there was a kind of pleasure in listening to the scrambling sounds of the men who followed him. The morning air quickly echoed to the uproar of a hundred men breathing, walking, moving—and unloading supplies.

Less than an hour after he first set foot onto the soft soil of the pit, Clane watched the spaceship lift from the ground and climb rapidly up about five hundred feet. At that safety height it leveled off and began its watchful cruise back and

forth above the explorers.

Once again no hasty moves were made. Tents were set up and a rough defense marked off. The food was sealed off behind a pile of concrete. Shortly before noon, after an early lunch, Clane, one knight, one temple scientist and six soldiers left the encampment and walked towards the "building" which, among other things, had drawn them to the area.

Seen from this near vantage point it was not a building at all, but an upjutment of concrete and metal, a remnant of what had once been a man-made burrow in the depths of the earth, a monument to the futility of seeking safety by mechanical rather than intellectual and moral means. The sight of it depressed Clane. For a millennium it had stood here, first in a seething ocean of unsettled energy, and now amid a great silence it waited for the return of man.

He paused to examine the door, then motioned to two soldiers to push at it. They were unable to budge it, and so, waving them aside, he edged gingerly past the rusted

door jamb. And was inside.

He found himself in a narrow hallway which ran along for about eight feet, and then there was another door. A closed door this time. The floor was concrete, the walls and ceiling concrete, but the door ahead was metal. Clane and the knight, a big man with black eyes, shoved it open with scarcely an effort, though it creaked rustily as they did.

They stood there, startled. The interior was not dark as they had expected, but dimly lighted. The luminous glow came from a series of small bulbs in the ceiling. The bulbs were not transparent, but coated with an opaque coppery substance. The light shone through the coating.

Nothing like it had ever been seen in Linn or elsewhere. After a blank period, Clane wondered if the lights had turned on when they opened the door. They discussed it

briefly, then shut the door. Nothing happened. They opened the door again, but the lights did not even flicker.

They had obviously been burning for centuries.

With a genuine effort, he suppressed the impulse to have the treasures taken down immediately and taken to the camp. The deathly silence, the air of immense antiquity brought the sane realization that there was no necessity to act swiftly here. He was first on this scene.

Very slowly, almost reluctantly, he turned his attention from the ceiling to the room itself. A wrecked table stood in one corner. In front of it stood a chair with one leg broken and a single strand of wood where the seat had been. In the adjoining corner was a pile of rubble, including a skull and some vaguely recognizable ribs which merged into a powdery skeleton. The relic of what had once been a human being lay on top of a rather long, all-metal rod. There was nothing else in the room.

Clane strode forward and eased the rod from under the skeleton. The movement, slight though it was, was too much for the bone structure. The skull and the ribs dissolved into powder, and a faint white mist hovered for a moment, then settled to the floor.

He stepped back gingerly, and, still holding the weapon, passed through the door and along the narrow hallway, and so out into the open.

The outside scene was different. He had been gone from it fifteen minutes at most, but in that interval a change had taken place. The spaceship that had brought them was still cruising around overhead. But a second spaceship was in the act of settling down beside the camp.

It squashed down with a crackling of brush and an "harumph!" sound of air squeezing out from the indentation it made in the ground. The door opened, and, as Clane headed for the camp, three men emerged from it. One wore the uniform of an aide-de-camp to supreme headquarters, and it was he who handed Clane a dispatch pouch.

The pouch contained a single letter from his elder brother, Lord Jerrin, commander-in-chief of Linnan armies on Venus. In the will of the late Lord Leader, Jerrin had been designated to become co-ruler with Tews when he attained the age of thirty, his sphere of administration to be the planets. His

powers in Linn were to be strictly secondary to those of Tews. His letter was curt:

Honorable brother:

It has come to my attention that you have arrived on Venus. I need hardly point out to you that the presence of a mutation here at this critical period of the war against the rebels is bound to have an adverse effect. I have been told that your request for this trip was personally granted by the Lord Adviser Tews. If you are not aware of the intricate motives that might inspire Tews to grant such permission, then you are not alert to the possible disasters that might befall our branch of the family. It is my wish and command that you return to Earth at once.

As Clane looked up from the letter, he saw the commander of the spaceship which had brought the messenger was silently signaling to him. He walked over and drew the captain aside.

"I didn't want to worry you," the man said, "but perhaps I had better inform you that this morning, shortly after your expedition entered the pit, we saw a very large body of men riding along several miles to the northeast of the pit. They have shown no inclination to move in this direction, but they scattered when we swooped over them, which means that they are Venusian rebels."

Clane stood frowning for a moment, then nodded his acceptance of the information. He turned away, into his spacious tent, to write an answer to his brother that would hold off the crisis between *them* until the greater crisis that had brought him to Venus shattered Jerrin's disapproval of his presence.

That crisis was due to break over Jerrin's still unsuspecting head in just about one week.

In high government and military circles in Linn and on Venus, the succession of battles with the Venusian tribesmen of the three central islands were called by their proper name: war! For propaganda purposes, the world rebellion was paraded at every opportunity. It was a necessary illusion. The enemy fought with the ferocity of a people who had

tasted slavery. To rouse the soldiery to an equal pitch of anger and hatred there was nothing that quite matched the term rebel.

Men who had faced hideous dangers in the swamps and marshes could scarcely restrain themselves at the thought that traitors to the empire were causing all the trouble. Lord Jerrin, an eminently fair man who admired a bold and resourceful opponent, for once made no attempt to discourage the false impression. He recognized that the Linnans were the oppressors, and at times it made him physically ill that so many men must die to enforce a continued subjection. But he recognized, too, that there was no alternative.

The Venusians were the second most dangerous race in the solar system, second only to the Linnans. The two peoples had fought each other for three hundred and fifty years, and it was not until the armies of Raheinl had landed on Uxta, the main island of Venus, some sixty years before, that a victory of any proportions was scored. The young military genius was only eighteen at the time of the battle of the Casuna marsh. Swift conquest of two other islands followed, but then his dazzled followers in Linn provoked the civil war that finally ended after nearly eight years in the execution of Raheinl by the Lord Leader. The latter proceeded with a cold ferocity to capture four more island strongholds of the Venusians. In each one he set up a separate government, revived old languages, suppressed the common language—and so strove to make the islanders think of themselves as separate peoples.

For years they seemed to—and then, abruptly, in one organized uprising they seized the main cities of the five main islands. And discovered that the Lord Leader had been

more astute than they imagined.

The military strongholds were not in the cities, as they had assumed and as their spies had reported. The centers of Linnan power were located in an immense series of small forts located in the marshes. These forts had always seemed weak outposts, designed to discourage raiders rather than rebellions. And no Venusian had ever bothered to count the number of them. The showy city forts, which were elaborately attacked, turned out to be virtual hollow shells. By the time the Venusians rallied to attack the forts in the marshes it was too late for the surprise to be effective. Re-

inforcements were on the way from Earth. What had been planned as an all-conquering coup became a drawn-out war. And long ago, the awful empty feeling had come to the Venusians that they couldn't win. Month after month the vise of steel weapons backed by fleets of spaceships and smaller craft tightened noticeably around the ever narrowing areas which they controlled. Food was becoming more scarce, and a poor crop year was in prospect. The men were grim and tense, the women cried a great deal and made much of their children, who had caught the emotional overtones of the atmosphere of fear.

Terror bred cruelty. Captive Linnans were hanged from posts, their feet dangling only a few inches from the ground. The distorted dead faces of the victims glared at the dis-

torted hate-filled faces of their murderers.

The living knew that each account would be paid in rape and death. They were exacting their own payments in advance.

The situation was actually much more involved than it appeared. Some six months before, the prospect of an imminent triumph for Jerrin had penetrated to the Lord Adviser Tews. He pondered the situation with a painful understanding of how the emotions of the crowd might be seduced by so momentous a victory. After considerable thought he resurrected a request Jerrin had made more than a year before for reinforcements. At the time Tews had considered it expedient to hasten the Venusian war to a quick end, but second thought brought an idea. With a pomp of public concern for Jerrin he presented the request to the patronate and added his urgent recommendations that at least three legions be assembled to assist "our hard-pressed forces against a skillful and cunning enemy."

He could have added, but didn't, that he intended to deliver the reinforcements and so participate in the victory. The patronate would not dare to refuse to vote him a triumph co-equal with that already being planned for Jerrin. He discussed his projected trip with his mother, the Lady Lydia, and, in accordance with her political agreement with Clane, she duly passed the information on to the mutation. Lydia had no sense of betraying her son. She had no such intention. But she knew that the fact that Tews was

going to Venus would soon be common knowledge, and so, sardonically, she reported to Clane less than two weeks before Tews was due to leave.

His reaction startled her. The very next day he requested an audience with Tews. And the latter, who had adopted an affable manner with the later Lord Leader's grandchildren, did not think of refusing Clane's request for permission to organize an expedition for Venus.

He was surprised when the expedition departed within one week of the request, but he thought that over too, and

found it good.

The presence of Clane on Venus would embarrass Jerrin. The birth of a mutation twenty-five years before into the ruling family of Linn had caused a sensation. His existence had dimmed the superstitions about such semi-humans, but the fears of the ignorant were merely confused. Under the proper circumstances people would still stone them—and soldiers would become panicky at the thought of the bad luck that struck an army if the rank and file saw a mutation just before a battle.

He explained his thoughts to Lydia, adding, "It will give me a chance to discover whether Jerrin was implicated in any way in the three plots against me that I have put down in the past year. And if he was, I can make use of the

presence of Clane."

Lydia said nothing, but the falseness of the logic disturbed her. She too had once planned against Jerrin. But for months now, she had questioned the blind impulse of mother love that had made her slave and conspire to bring Tews to power. Under Tews, the government creaked along indecisively while he writhed and twisted in a curious and ungraceful parody of modest pretense at establishing a more liberal government. His plans of transition were too vague. An old tactician herself, it seemed to her that she could recognize a developing hypocrite when she saw one.

"He's beginning to savor the sweetness of power," she

thought, "and he realizes he's talked too much."

The possibilities made her uneasy. It was natural for a politician to fool others, but there was something ugly and dangerous about a politician who fooled himself. Fortunately, little that was dangerous could happen on Venus. Her own investigations had convinced her that the conspiracies against

Tews had involved no important families, and besides, Jerrin was not a man who would force political issues. He would be irritated by the arrival of Tews. He would see exactly what Tews wanted, but he would do nothing about it.

After the departure of Tews and his three legions, she

settled herself to the routine tasks of governing for him. She had a number of ideas for re-establishing firmer control over the patronate, and there were about a hundred people whom she had wanted to kill for quite a long while.

During the entire period of the crisis on Venus, life in

Linn went on with absolute normalcy.

Tews took up his quarters in the palace of the long-dead Venusian emperor, Heerkel, across town from the military headquarters of Jerrin. It was an error of the kind that startles and starts history. The endless parade of generals and other officers that streamed in and out of Mered passed him by. A few astute individuals made a point of taking the long journey across the city, but even some of those were in obvious haste and could scarcely tolerate the slow ceremoniousness of an interview with their ruler.

A great war was being fought. Officers in from the front lines took it for granted that their attitude would be understood. They felt remote from the peaceful pomp of Linn itself. Only the men who had occasion to make trips to Earth comprehended the vast indifference of the populations to the war on Venus. To the people at home it was a faraway frontier affair. Such engagements had been fought continuously from the time of their childhood; only every once in a while the scene changed.

His virtual isolation sharpened the suspicions with which Tews had landed. And frightened him. He hadn't realized how widespread was the disaffection. The plot must be well advanced, so advanced that thousands of officers knew about it and were taking no chances on being caught with the man who, they must have decided, would be the loser. They probably looked around them at the enormous armies under the command of Jerrin. And knew that no one could defeat the man who had achieved the loyalty of so many legions of superb soldiers.

Swift, decisive action, it seemed to Tews, was essential. When Jerrin paid him a formal visit a week after his arrival,

he was startled at the cold way in which Tews rejected his request that the reinforcements be sent to the front for a final smashing drive against the marsh-bound armies of the Venusians.

"And what," said Tews, noting with satisfaction the other's disconcertment, "would you do should you gain the victory which you anticipate?"

The subject of the question, rather than the tone, encouraged the startled Jerrin. He had had many thoughts about the shape of the coming victory, and after a moment he decided that that was actually why Tews had come to Venus—to discuss the political aspects of conquest. The older man's manner he decided to attribute to Tews' assumption of power. This was the new leader's way of reacting to his high position.

Briefly, Jerrin outlined his ideas. Execution of certain leaders directly responsible for the policy of murdering prisoners, enslavement only of those men who had participated intimately in the carrying out of the executions. But all the rest to be allowed to live without molestation, and in fact to return to their homes in a normal fashion. At first each island would be administered as a separate colony, but even during the first phase the common language would be restored and free trade permitted among the islands. The second phase, to begin in about five years and be widely publicized in advance, should be the establishment of responsible government on the separate islands, but those governments would be part of the empire, and would support the occupation troops. The third phase should start ten years after that, and would include the organization of one central all-Venusian administration for the islands with a federal system of government. And this system, too, would have no troops of its own, and would be organized entirely within the framework of the empire.

Five years later, the fourth and final phase could begin. All families with a twenty-year record of achievement and loyalty could apply for Linnan-Venusian citizenship, with all the privileges and opportunities for self-advancement that

went with it.

"It is sometimes forgotten," said Jerrin "that Linn began as a city state which conquered neighboring cities and held

its power in them by a gradual extension of citizenship. There is no reason why this system should not be extended to the planets with equal success."

He finished, "All around us is proof that the system of absolute subjection employed during the past fifty years has been a complete failure. The time has come for new and more progressive statesmaship."

Tews almost stood up in his agitation as he listened to the scheme. He could see the whole picture now. The late Lord Leader had in effect willed the planets to Jerrin; and this was Jerrin's plan for welding his inheritance into a powerful military stronghold capable, if necessary, of conquering Linn itself.

Tews smiled a cold smile. Not yet, Jerrin, he thought. I'm still absolute ruler, and for three years yet what I say is what will happen. Besides, your plan might interfere with my determination to re-establish the republic at an opportune moment. I'm pretty sure that you, with all your liberalistic talk, have no intention of restoring constitutional government. It is that ideal which must be maintained at all costs.

Aloud, he said, "I will take your recommendations under advisement. But now, it is my wish that in future all promotions be channeled through me. Any commands that you issue to commanding officers in the field are to be sent here for my perusal, and I will send them on."

He finished with finality, "The reason for this is that I wish to familiarize myself with the present positions of all units and with the names of the men in charge of them. That is all. It has been a privilege to have had this conversa-tion with you. Good day, sir."

Move number one was as drastic as that,

It was only the beginning As the orders and documents began to arrive, Tews studied them with the assiduity of a clerk. His mind reveled in paper work, and the excitement of his purpose made every detail important and interesting.

He knew this Venusian war. For two years he had sat in a palace some hundred miles farther back and acted the role of commander-in-chief now filled by Jerrin. His problem, therefore, did not include the necessity of learning the situation from the beginning. He had merely to familiarize himself with the developments during the past year and a half. And, while numerous, they were not insurmountable.

From the first day, he was able to accomplish his primary purpose: replacement of doubtful officers with one after another of the horde of sycophants he had brought with him from Linn. Tews felt an occasional twinge of shame at the device, but he justified it on the grounds of necessity. A man contending with conspiring generals must take recourse to devious means. The important thing was to make sure that the army was not used against himself, the Lord Adviser, the only man whose ultimate purposes were not autocratic and selfish.

As a secondary precaution, he altered several of Jerrin's troop dispositions. These had to do with legions that Jerrin had brought with him from Mars, and which presumably might be especially loyal to him personally. It would be just as well if he didn't know their exact location during the next few critical weeks.

On the twelfth day he received from a spy the information he had been awaiting. Jerrin, who had gone to the front on an inspection tour two days before, was returning to Mered. Tews actually had only an hour's warning. He was still setting the stage for the anticipated interview when Jerrin was announced. Tews smiled at the assembled courtiers. He spoke in a loud voice:

"Inform his excellency that I am engaged at the moment but that if he will wait a little I shall be happy to receive him."

The remark, together with the knowing smile that went with it, started a flutter of sensation through the room. It was unfortunate that Jerrin had failed to wait for his message to be delivered but was already halfway across the room. He did not pause until he was standing in front of Tews. The latter regarded him with an indolent insolence.

"Well, what is it?"

Jerrin said quietly, "It is my unpleasant duty, my Lord Adviser, to inform you that it will be necessary to evacuate all civilians from Mered without delay. As a result of rank carelessness on the part of certain front-line officers, the Venusians have achieved a breakthrough north of the city. There will be fighting in Mered before morning."

Some of the ladies and not a few of the gentlemen who

were present uttered alarmed noises, and there was a general movement towards exits. A bellow from Tews stopped the disgraceful stampede. He settled heavily back in his chair. He smiled a twisted smile.

"I hope," he said, "that the negligent officers have been

properly punished."

"Thirty-seven of them," said Jerrin, "have been executed. Here is a list of their names, which you might examine at your leisure."

Tews sat up, "Executed!" He had a sudden awful suspicion that Jerrin would not lightly have executed men who had long been under his command. With a jerk he tore the seal from the document, and raced his gaze down the column. Every name on it was that of one of his satellite-replacements of the past twelve days.

Very slowly he raised his eyes and stared at the younger man. Their gazes met and held. The flinty blue eyes of Tews glared with an awful rage. The steel gray eyes of Jerrin were

remorseless with contempt and disgust.

"Your most gracious excellency," he said in a soft voice, "one of my Martian legions has been cut to pieces. The carefully built-up strategy and envelopment of the past year is wiped out. It is my opinion that the men responsible for that had better get off Venus and back to their pleasures in Linn—or what they have feared so foolishly will really transpire."

He realized immediately it was a wild statement. His words stiffened Tews. For a moment the big man's heavy face was a mask of tensed anger; then, with a terrible effort, he

suppressed his fury. He straightened.

"In view of the seriousness of the situation," he said, "I will remain in Mered and take charge of the forces on this front until further notice. You will surrender your head-quarters to my officers tomorrow morning."

"If your officers," said Jerrin, "come to my headquarters, they will be whipped into the streets. And that applies to

anyone from this section of the city."

He turned and walked out of the room. He had not a clear idea in his head as to what he was going to do about the fantastic crisis that had arisen.

Clane spent those three weeks, when the Venusian front

was collapsing, exploring a myriad of holes in the pit. And, although the threat from the wandering parties of Venusians did not materialize, he moved his entire party into the pit for safety's sake. Guards were posted at the three main routes leading down into the abyss, and two spaceships maintained a continuous vigil over the countryside around the pit and over the pit itself.

None of the precautions was an absolute guarantee of safety, but they added up fairly well. Any attempt of a large body of troops to come down and attack the camp would be so involved an affair that there would be plenty of time

to embark everyone in spaceships and depart.

It was not the only thing in their favor. After sixty years under Linnan rule, and although they themselves worshiped a sea god called Submerne, the Venusians respected the Linnan atom gods. It was doubtful if they would risk divine displeasure by penetrating into one of the pit homes of the gods.

And so the six hundred people in the pit were cut off from the universe by barriers of the mind as well as by the sheer inaccessibility of the pit. Yet they were not isolated. Daily one of the spaceships made the trip to Mered, and when it floated back into the depths of the pit Clane would go aboard and knock on door after door inside. Each time he would be cautiously admitted by a man or woman, and the two would hold a private conference. His spies never saw each other. They were always returned to Mered at dusk, and landed one by one in various parts of the city.

The spies were not all mercenaries. There were men in the highest walks of the empire who regarded the Linn mutation as the logical heir of the late Lord Leader. To them Tews was merely a stopgap who could be put out of the way at the proper time. Again and again such individuals who belonged to other groups had secretly turncoated after meeting Clane and become valuable sources of information for him.

Clane knew his situation better than his well-wishers. However much he might impress intelligent people, the fact was that a mutation could not become ruler of the empire. Long ago, accordingly, he had abandoned some early ambitions in that direction, retaining only two main political purposes.

He was alive and in a position of advantage because his

family was one of the power groups in Linn. Though he had no friends among his own kin, he was tolerated by them because of the blood relationship. It was to his interest that they remained in high position. In crises he must do everything possible to help them.

That was purpose number one. Purpose number two was to participate in some way in all the major political moves made in the Linnan empire, and it was rooted in an ambition that he could never hope to realize. He wanted to be a general. War in its practical aspects, as he had observed it from afar, seemed to him crude and unintelligent. From early childhood he had studied battle strategy and tactics with the intention of reducing the confusion to a point where battles could be won by little more than irresistible maneuver.

It was a pleasure to combine purposes number one and two.

He arrived in Mered on the day following the clash between Tews and Jerrin and took up residence in a house which he had long ago thoughtfully reserved for himself and his retinue. He made the move as unobtrusively as possible, but he did not delude himself that his coming would be unremarked.

Other men, too, were diabolically clever. Other men maintained armies of spies, as he did. All plans that depended upon secrecy possessed the fatal flaw of fragility. And the fact that they sometimes succeeded merely proved that a given victim was not himself an able man. It was one of the pleasures of life to be able to make all the preparations necessary to an enterprise within the sight and hearing of one's opponent.

Without haste he set about making them.

When Tews was first informed of Clane's arrival in Mered, about an hour after the event, his interest was dim. More important—or so they seemed—were reports arriving steadily from other sources about the troop dispositions Jerrin was making for the defense of the city. What puzzled Tews was that some of the information came from Jerrin in the form of copies of the orders he was sending out.

Was the man trying to re-establish relations by ignoring the fact that a break had taken place? It was an unexpected

maneuver, and it could only mean that the crisis had come before Jerrin was ready. Tews smiled coldly as he arrived at that conclusion. His prompt action had thrown the opposition into confusion. It should not be difficult to seize Jerrin's headquarters the following morning with his three legions, and so end the mutiny.

By three o'clock Tews had sent out the necessary orders. At four, a very special spy of his, the impoverished son of a knight, reported that Clane had sent a messenger to Jerrin, requesting an interview that evening. Almost simultaneously other spies reported on the activity that was taking place at Clane's residence. Among other things, several small round objects wrapped in canvas were brought from the spaceship into the house. More than a ton of finely ground copper dust was carried in sacks into a cement outhouse. And finally a cube of material of the type used to build temples was carefully lowered to the ground. It must have been hot as well as heavy, because the slaves who took it into the house used slings and lead-lined asbestos gloves.

Tews pondered the facts, and the very meaninglessness of them alarmed him. He suddenly remembered vague stories to which he had hitherto paid no attention.

It was not a moment to take chances.

Ordering a guard of fifty men to attend him, he set out for Clane's Mered home.

His first sight of the place startled Tews. The spaceship, which, according to his reports, had flown away, was back. Suspended from a thick cable attached to its lower beam was a large gondola of the type slung under spaceships when additional soldiers were to be transported swiftly. They were used in space to carry freight only.

Now it lay on the ground, and slaves swarmed over it. Not until he was on the estate itself did Tews see what they were doing. Each man had a canvas bag of copper dust suspended around his neck, and some kind of liquid chemical was being used to work the copper dust into the semi-transparent hull of the carrier.

Tews climbed out of his chair, a big, plump man with piercing blue eyes. He walked slowly around the gondola, and the longer he looked the more senseless was the proceeding.

And, oddly, nobody paid the slightest attention to him.

There were guards around, but they seemed to have received no instructions about spectators. They lounged in various positions, smoking, exchanging coarse jests, and otherwise acting quite unaware that the Lord Adviser of Linn was in their midst.

Tews did not enlighten them. He was puzzled and undecided as he walked slowly towards the house. Again, no effort was made to interfere with his passage. In the large inner hallway, several temple scientists were talking and laughing. They glanced at him curiously, but it did not seem to occur to them that he did not belong.

Tews said softly, "Is Lord Clane inside?"

One of the scientists half turned, then nodded over his shoulder, casually. "You'll find him in the den working on the benediction."

There were more scientists in the living room. Tews frowned inwardly as he saw them. He had come prepared for drastic action, if necessary. But it would be indiscreet to arrest Clane with so many temple scientists as witnesses. Besides, there-were too many guards.

Not that he could imagine any reason for an arrest. This looked like a religious ceremony being readied here.

He found Clane in the den, a medium-sized room leading onto a patio. Clane's back was to him, and he was bending intently over a cube of temple building material. Tews recognized it from the description his spies had given him as the "hot," heavy object that the sweating slaves had handled so carefully in transporting it from the spaceship.

On the table near the cube were six half balls of coppery substance.

Tews had not time to look at them closely, for Clane turned to see who had come in. He straightened with a smile.

"Your excellency," he said. He bowed. He came forward. "This is a pleasure."

Tews was disappointed. He had heard that the mutation could be surprised into a condition of extreme nervousness, as the result of his affliction. There was no nervousness. It was obvious that this pale, intense, fragile-looking young man had overcome his childish weakness. Or else he was calm with the calmness of a clear conscience. Tews began

to feel better. Whatever the explanation, there seemed nothing dangerous here.

"I was passing by," he said, "and having been informed of your presence in Mered, decided to, uh, drop in." He waved a hand. "What is all this? This gondola and such."

Clane bowed again, but his expression was grave when he

straightened, his eyes sorrowful.

"As your excellency is aware," he said, "some ten thousand officers and men of the fourth Martian legion were captured by the Venusians. This morning the Venusians were observed to be erecting thousands of posts on which they intend to hang these brave, unfortunate men, without"—he suddenly sounded indignant—"without so much as a religious ceremony."

He went on quietly, "The gondola will be towed over to the scene of the hanging, and a benediction will be spoken over it from the spaceship at the moment that the men are dying." He sighed heavily. "It is unfortunately all that we can do."

He finished: "I am going tonight to ask my brother Jerrin for permission to perform this merciful act, since I am informed that nothing else can be done."

All the vague fears that had troubled the Lord Adviser were gone as if they had never existed. He nodded sanctimoniously. "I am sure," he said, "that the noble Jerrin will grant your worthy request."

He hesitated, anxious now to leave; and yet— He looked around conscious that he should take nothing for granted. He walked over to the table and stared frowningly down at the hollow half balls that lay there. They were very possibly the round objects that had been brought in from the spaceship wrapped in canvas. And now they had been cut in half, or opened. The balls were not completely empty. Each one contained a fragile-appearing internal structure which seemed to come to a focus in the center. But whatever had been supported by the spidery web of transparent stuff was not now visible.

Tews did not look very hard. These were details for temple scientists.

Once more he turned away—and saw a metallic rod standing against the near wall. He walked over and picked it up. Its lightness startled him. It was, he estimated, about four

feet long, and the thin end was startlingly bright, with a jewel rather than a metallic brightness.

Tews turned to look questioningly at Clane. The young

man came over.

"We are all hoping," he said, "that this rod, which we found in the pit of the gods, is the legendary rod of fire. According to the legend, a basic requirement was that the wielder be pure in heart, and that, if he was, the gods would at their own discretion, under certain circumstances, activate the rod."

Tews nodded soberly, and put the thing back where he had found it.

"It is with pleasure," he said, "that I find you taking these interests in religious matters. I think it important that a member of our illustrious family should attain high rank in the temples, and I wish to make clear that no matter what happens"—he paused significantly—"no matter what happens, you may count me as your protector and friend."

He returned to Heerkel's palace, but, being a careful, thoughtful man who knew all too well that other people were not always as pure in heart as they pretended, he left his spies to watch out for possible subversive activity.

He learned in due course that Clane had been invited for dinner by Jerrin, but had been received with the cold formality which had long distinguished the relationship between the two brothers. One of the slave waiters, bribed by a spy, reported that once, during the meal, Clane urged that a hundred spaceships be withdrawn from patrols and assigned to some task which was not clear to the slave.

There was something else about opening up the battle lines to the northeast, but this was so vague that the Lord Adviser did not think of it again until, shortly after midnight, he was roused from sleep by the desperate cries of men, and the clash of metal outside his bedroom.

Before he could more than sit up, the door burst open, swarms of Venusian soldiers poured inside.

The battle lines to the northeast had been opened up.

It was the third night of his captivity, the hanging night. Tews quivered as the guards came for him about an hour after dusk and led him out into the fire-lit darkness. He was to be first. As his body swung aloft, twenty thousand

Venusians would tug on the ropes around the necks of ten thousand Linnan soldiers. The writhings and twistings that would follow were expected to last ten or more minutes.

The night upon which Tews gazed with glazed eyes was like nothing he had ever seen. Uncountably numerous fires burned on a vast plain. In the near distance he could see the great post upon which he was to be executed. The other posts began just beyond it. There were rows of them, and they had been set up less than five feet apart, with the rows ten feet from each other, to make room for the camp fires that lighted the scene.

The doomed men were already at their posts, tied hand and foot, the ropes round their necks. Tews could only see the first row with any clearness. They were all officers, that first line of victims, and they stood at ease almost to a man. Some were chatting with those near them as Tews was led up, but the conversation stopped as they saw him.

Never in his life had Tews seen such consternation flare into so many faces at once. There were cries of horror, groans of incredulous despair.

Tews did not expect to be recognized, but it was possible the men had been taunted with his identity. Their eyes were curious, but his three-day beard and the night with its flickering fire shadows gave them little opportunity to be sure.

No one said anything as he mounted the scaffold. Tews himself stood stiff and pale as the rope was fitted around his neck. He had ordered many a man to be hanged in his time. It was a different and thrilling sensation to be the victim, not the judge.

The passion of anger that came was rooted in a comprehension that had been gathering in his brain for three days: the comprehension that he wouldn't be where he was if he had actually believed that an insurrection was in progress. Instead, he had counted on Jerrin maintaining his forces against the enemy while his three legions seized control from Jerrin.

Deep down inside, he had believed in Jerrin's honesty.

He had sought to humiliate Jerrin so that he could nullify the rightful honors of a young man with whom he did not wish to share the power of the state. His desperate fury grew out of the consciousness—too late—that Jerrin had *in reality* been plotting against him.

That chaos of thought would have raged on but for one

That chaos of thought would have raged on but for one thing: at that moment he happened to glance down, and there, below the platform, with a group of Venusian leaders, stood Clane.

The shock was too great to take all in one mental jump. Tews glared down at the slim young man, and the picture was absolutely clear now. There had been a treasonable deal between Jerrin and the Venusians.

He saw that the mutation was in his temple-scientist fatigue gown, and that he carried the four-foot metal "rod of fire." That brought a memory. He had forgotten all about the benediction in the sky. He looked up, but the blackness was unrelieved. If the ship and the gondola were up there they were part of the night, invisible and unattainable.

His feverish gaze flashed down again at the mutation. He braced himself, but before he could speak, Clane said:

"Your excellency, let us waste no time with recriminations. Your death would renew the civil war in Linn. That is the last thing we desire, as we shall prove tonight, beyond all your suspicions."

Tews had hold of himself suddenly. With a flare of logic, he examined the chances of a rescue. There was none. If spaceships should try to land troops, the Venusians need merely pull on their ropes and hang the bound men—and then turn their vast, assembled army to hold off the scattered attacks launched from scores of spaceships. That was one maneuver they had undoubtedly prepared against, and since it was the only possible hope, and it couldn't take place, then Clane's words were a meaningless fraud.

He forgot that, for the Venusian emperor, a grim-faced man of fifty or so, was climbing the platform steps. He stood there for minutes while silence gradually fell on the enormous crowds. Then he stepped to the front group of megaphones and spoke in the common language of Venus:

"Fellow Venusians, on this night of our vengeance for all the crimes that have been committed against us by the empire of Linn, we have with us an agent of the commanding general of our vile enemy. He has come to us with an offer, and I want him to come up here and tell it to you, so that you can laugh in his face as I did."

There was a mass shriek from the darkness: "Hang him!

Hang him, too!"

Tews was chilled by that fierce cry, but he was forced to admire the cunning of the Venusian leader. Here was a man whose followers must many times have doubted his wisdom in fighting the war to a finish. His face, even in those shadows, showed the savage lines of obstinacy, of a badly worried general, who knew what criticism could be. What an opportunity this was for gaining public support.

Clane was climbing the steps. He waited until silence once more was restored, and then said in a surprisingly strong voice:

"The atom gods of Linn, whose agent I am, are weary of this war. I call upon them to end it NOW!"

The Venusian emperor started toward him. "That isn't what you were going to say," he cried. "You—"

He stopped. Because the sun came out.

The sun came out. Several hours had passed since it had sunk behind the flaming horizon of the northern sea. Now in one leap it had jumped to the sky directly overhead.

The scene of so many imminent deaths stood out as in the brightness of noon. All the posts with their victims still standing beneath them, the hundreds of thousands of Venusian spectators, the great plain with the now visible coastal city in the distance—were brilliantly lighted.

The shadows began on the other side of the plain. The city could only be seen by vague light reflections. The sea beyond to the north and the mountains to the south were as

deep as ever in blackness.

Seeing that darkness, Tews realized that it was not the sun at all above, but an incredible ball of fire, a source of light that, in this cubic mile of space, equaled the sun in magnitude of light.

The gods of Linn had answered the call made to them.

His realization ended. There was a cry from scores of thousands of throats, a cry stranger and more horrible than any sound that Tews had ever heard. There was fear in it, and despair, and an awful reverence. Men and women alike started to sink to their knees.

At that moment the extent of the defeat that was here penetrated to the Venusian leader. He let out a terrible cry of his own—and leaped toward the catch that would release the trap door on which Tews stood. From the corner of one eye, Tews saw Clane bring up the rod of fire.

There was no fire, but the emperor dissolved. Tews could never afterwards decide what actually happened, yet he had a persistent memory of a human being literally turning into liquid stuff. Liquid that collapsed onto the platform, and burned a hole through the wood. The picture was so impossible that he closed his eyes and never again quite admitted the reality to himself.

When he opened his eyes again, spaceships were coming down from the sky. To the now prostrate Venusians, the sudden appearance of fifty thousand Linnan soldiers among them must have seemed like a miracle as great as the two they had already witnessed.

An entire reserve army was captured that night, and, though the war on other islands dragged on and on, the great island of Uxta was completely captured within a few weeks.

Clane's words had been proved beyond all suspicions.

On a cloudy afternoon a week later, Clane was among the distinguished Linnans who attended the departure of the flotilla of ships which was to accompany the Lord Adviser Tews back to Earth.

Tews and his retinue arrived, and as he came up to the platform, a group of temple Initiates burst into a paroxysm of singing. The Lord Adviser stopped and stood for a minute, a faint smile on his face, listening.

The return to Earth, quietly suggested by Clane, suited him completely. He would take with him the first tidings of the Venusian victory. He would have time to scotch any rumors that the Lord Adviser himself had been humiliatingly captured. And above all, he would be the one who would insist upon full triumph honors for Jerrin.

He was amazed that he had temporarily forgotten his old cunning about things like that. As he climbed aboard the flagship, the Initiates broke into a new spasm of sound.

It was clear that the atom gods, too, were satisfied.

N MY TIME I HAVE BEEN A GREAT reader—for years two novels or plays a day, then science and history. The novels and plays were mostly mystery, suspense, historical, but included Wells. Arnold Bennett. Shaw, and a host of turn-of-the-century British writers. For some reason, my interest in French novelists seemed to begin with Balzac, and end with men like Flaubert in the 1850s; in French nonfiction, I concentrated on the de Goncourts and similar types. (I did read Anatole France and a couple of (works by Zola.) I got interested in the Germans through Carlyle, but Goethe was not for me, nor were the other Germans that Carlyle admired. The Russians were too hard to take, too, but with them as with the Germans I persisted long after my first confusion began.

Despite such an intensive program of reading, my intellectual development got off to a slow start. Possibily this is due to the fact that in my early teens I was interested in machines and was physically active. I rode horseback; I was the separator man on a threshing outfit; another year I drove a truck for a combine. I even wrote a letter of inquiry about learning to fly, and almost got

involved in a trapping expedition to northern Canada. I was a pretty good shot with a rifle—on several occasions I shot birds out of the air.

However, because of remorse at killing a small snake when I was seventeen, I suddenly felt a revulsion against all killing of wild creatures. Almost overnight that entire developing personality became submerged, and it has never really shown itself again. It was at this time that I became near-sighted.

My personality now tended toward the sedentary, toward the intellectual. Presumably the seeds of my science-fiction career were sown at this time, and my interest in what goes on inside human beings—their behavior—probably also had its beginnings here. At the time, of course, I was only interested as an observer and as a reader, and hoped for personal benefits.

The possibility of personal involvement did not occur to me until 1948. By that year I knew a number of psychologists, and in fact was working on a book on hypnotism (The Hypnotism Handbook, by C. E. Cooke and A. E. van Vogt). It eventually dawned on me that patients told their inner truths to psychologists, who (I was then convinced) could make literary use of the remarkable data they were privileged to receive.

It was this thought more than any other that finally got me to become involved in dianetics—after I, in California, had received seventeen long-distance phone calls from L. Ron Hubbard in New Jersey urging me to do so.

I have never regretted it. Difficult person though he is in many ways, Hubbard is a genius whose understanding of human behavior will someday replace most official pyschology.

Dianetics is only one of eight or so major studies that I have undertaken since the forties. Intellectually, I feel that I have come a long way since then. I could even call these studies my real education.

As a result of dianetics, I can listen to another person's point of view without mentally or otherwise arguing with him. If the matter under discussion involves male or female behavior, money, exercise, dreams, the meaning of meaning, Red China and Communism, certain psychotherapies, writing

technique, or hypnotism, I preface any remarks I make by saying that I have systematically thought about such, and that's all they'll get from me. On other subjects, I have come to no decision, and therefore what I have to say may include

anything from factual information to opinions.

How high-level were these studies of mine? Well, in January of 1972 I had the good luck to talk for an hour to a man who had accompanied Red China's U.N. mission to New York. All I did during that hour was to ask him questions. Afterwards he said to me, "You know more about China than any other person I've met since coming to the United States."

I hadn't thought of it in such laudable terms. But it pointed up for me that when I feel I have completed a study, it's good enough.

The foregoing is a preamble to a long study I made, beginning in 1954, of what I eventually came to call the violent male, or "Mr. Right."

Ten years later, in 1964, I gave a series of talks on radio station KPFK about the kind of person you have to be to make and keep money, and then eight talks outlining my systematic thought about women, and finally five talks about the violent male as I had observed him.

In England, Colin Wilson, the existentialist philosopher, read *The Violent Man* (my novel), became interested, and wrote me to ask if I had more data available. We corresponded, and eventually he used my violent male in one of his novels, Lingard. In his afterword to the book, he states that the main character is modeled on my violent male. In a later, nonfiction book, New Pathways in Psychology, he devotes a chapter to the van Vogt violent male.

What follows is the next to the last of the five talks I gave on radio KPFK in 1965 on the violent male.

THE VIOLENT MALE

ON MAY 20, 1931, RALPH BARTON, A FAMOUS caricature artist best known for his work in *The New Yorker*, wrote this:

I have run from wife to wife, from house to house, and from country to country in a ridiculous effort to escape from myself. In particular, my remorse is bitter over my failure to appreciate my beautiful lost angel Carlotta, the only woman I ever loved, and whom I respect and admire above all the rest of the human race. I do hope that she will understand what my malady was and forgive me a little. I kiss my dear children and Carlotta. . . .

Having written this, Barton shot himself in the head.

When we read anguished last words like these or realize in some other way that people can get *that* involved in a dark view of existence, the importance of understanding such matters is heightened.

Ralph Barton was, of course, expecting a great deal of his third wife, Carlotta, if he believed that she would "understand" his malady merely because he now regretted the nightmare existence he had led her while they were married.

What he did not realize—and what of course she could not possibly have been aware of—is what has now become apparent as a result of my long study of this type of man: that he was, in fact, what I call a violent male.

But Barton's great grief in those final moments of his life, and the sense of disaster and despair with himself that made him commit suicide, are but a few of many things that inspired my own developing sense of sympathy for the violent man. After my initial shocked outrage as I became aware of the violent male's pattern years ago, and realized how much more damage these men caused than I had ever previously comprehended—as I say, after the first sense of strong condemnation, I gradually began to feel another emotion: good will and a desire to help solve the problem presented by these tormented males.

I should tell you that the violent male is the hardest person in the world to help, since, in this one area, all his special ability and insight don't seem to be of any help to him in grasping his condition. His very need to be right, to which he clings until, as with Ralph Barton, he arrives at the twelfth hour of his life minus one minute, prevents him from understanding his own problem. And in that ultimate moment when he says, "I was wrong," it is of course too late.

Unfortunately, many violent males never come to such an awareness. Adolf Hitler—along with Genghis Khan, Joseph Stalin and a few dozen other mass murderers—maintained his rightness until the bitter end. In his last will and testament, Hitler blamed the German people for the defeat of Germany in World War II. He felt the need to be right to the last moment of his life.

So it's quite a problem. Yet it must be solved.

I have mentioned the suicide of Ralph Barton because Carlotta, his third wife, was at the time of his suicide the wife of Eugene O'Neill, who is recognized as America's greatest playwright. O'Neill is, in fact, a man whose entire life story clearly shows him to be the very kind violent male that I am describing and have described in my novel The Violent Man.

(As an aside, it is interesting that Carlotta divorced one violent male and then married another.)

Of O'Neill's final play, Long Day's Journey into Night, Brooks Atkinson of The New York Times wrote: "The characters are victims of fate. They cannot control dark forces that shape their destiny. . . . The play's creative contribution is the sense of doom that emerges from all parts of the story. . . ."

Croswell Bowen, the author of Eugene O'Neill's biography, titled his book about the playwright Curse of the Misbegotten. This was O'Neill's own description of himself and his family. Bowen sums up O'Neill's life as being exemplified by paradox.

... Private disaster linked with public triumphs.

In using Eugene O'Neill as a prime example of the violent man, I want to emphasize that dark, brooding aspect of his nature—his mysticism, his cosmology, his inner spiritual struggle. All violent men are either religious or not-religious in some way that's more than ordinarily meaningful. And if they do not have a religion or belief in an afterlife, they're often involved with something that is supposed to make the world over into a heaven.

Let me say here that I firmly believe there are normal people in the world—but the violent male is not one of them. Years ago, I read a suspense novel called The Orient Express. In it there was a young female character who had no religion; what was more, it didn't mean anything to her that she didn't. A male character who remembered the centuries-long struggle for religious freedom and who was keenly aware of what a hard-won victory it had been for mankind to reach the stage where she didn't have to have a religion was shocked by her attitude. But the truth is, hers was a normal state of irreligion. She was not obsessed by the matter. She simply was irreligious.

In the same unquestioning way, millions of people are Christians, Jews, Mohammedans, and followers of other creeds. They don't question it. They accept it. They make no issue of it. They're normal in this area.

No violent male can ever truly have that statement made about him. Whether he is religious or irreligious, he is concerned in some deep, dark way with the meaning of life and the universe.

If you think you are a violent male, or think you live with one, here in this obsession with the doom aspect of life and death is a way of telling whether you are or he is indeed, one of the 20 percent of males who are like this.

In his struggle in this area, he has an extreme thing going, and often it takes an unusual form.

Some years ago, I was introduced to a well-known entertainment personality who lived on the edge of alcoholism. As was sometimes my custom, I asked him such leading

questions about his philosophy—that was the word I used—that his wife became alarmed and told some other people present that I didn't seem to realize that I was in danger of arousing his rage against me. The reason for her fear was that I seemed to be questioning the validity of his belief.

He had picked up Mark Twain's philosophy (as expressed in one of those final dark moody volumes) about what a tiny blob of dust man was in the great universe, and he was scathing in his denunciation of people who believed that they were anything more than meaningless molecules.

With these words, and of course other behavior, he easily established himself for me as a violent male type, and so I knew very well that he, at some depth of his being somewhere, felt himself to be *more than a molecule*. So I took the opposite attitude. I said that he himself was a living example of man being at least the size of a mountain.

I said, "Here you are, with this enormous and justified reputation, and yet you're so humble that you can stand there and act as if you are nothing. You yourself," I said, "looking at the universe and being so aware, are a proof that the brain that can evaluate time and space is greater than that at which it gazes so perceptively. In fact, you are like a god."

He ranted and raved about my point of view, but I think his wife's fear that he would become violent toward me be-

cause I disagreed with him was not justified.

I could speak with such assurance to this man because I know that among the Mr. Rights—that is, the violent males—of this world, there are egos that soar to the greatest heights conceivable—even to the height considering themselves to be of gods. Historically, the role of a god has come natural to many men, and when you see these new leaders in Africa and Asia, you can see that they're at it again. All these men are violent males—but you don't have to look at leaders to find this god quality.

Talk to any male who fits the "Mr. Right" requirements as I have been outlining them, and, if you can draw him out, you will suddenly hear his cosmology. If what he is saying seems to deviate only slightly from the doctrine of an established religion—if you are precisionist enough to recognize tiny points of difference—remember that all the heretics of

the Middle Ages ever did was to differ from the Church in small details. But the heretics would not recant—always the proof of the violent male—and they were burned at the stake.

If you meet such a violent male, try to argue him out of his deviation. When you do this, you will discover that his interpretation of his fine point of difference is an ultimate truth to him, one that he cannot be persuaded to give up. (Fortunately, in our day he will not be burned for his belief.)

It has always been easy for this type of male to persuade himself that he has godlike attributes. This is true even when he is one of that vast majority of violent males who are failures. Most of them are failures, and the reason is that they won't compromise their ideal or their mystical belief.

Men with god complexes may, alternatively, get the feeling that "somebody up there likes me." What madness, eh?

But men do have such fantasies.

A good percentage of the violent males on my list deviate from the orthodox religions. They are devotees of Karma, they believe in past lives à la Bridey Murphy, something like that. Is it true? Is it false? I don't propose to sit in judgment on any church. All I'm saying is that 20 percent of the male membership of every church consists of violent males. And males who break away from an orthodox church and start being tormented about the meaning of things soon end up in one of the unorthodox groups.

From what some violent males have told me about conversations they've had with the ministers of their churches, I'll wager that these men of god are extremely conscious of the aberration of the violent males in their congregations without knowing exactly what the problem is. But each minister need only realize that while he is a 100-percent Christian, say, the violent male is a 200-percent Christian. Possibly the Catholic Church, with its hierarchical struc-

Possibly the Catholic Church, with its hierarchical structure, has its 20 percent of the Mr. Rights under control, but I'm not even sure of that. I've had strange conversations with Catholic males. The picture grows much clearer when we deal with men who have broken away from Catholic and similar churches, like the Russian and Greek Orthodox.

Adolf Hitler and Joseph Stalin are, of course, outstanding modern examples of the violent male, one having been born Catholic and the other Russian Orthodox. It is said that

Stalin even studied for the priesthood. And, of course, on the side of the Catholic Church we have one of the most monstrous egos of our day in Charles de Gaulle.

But now let me come down a step or two or three from these mass leaders to a man I have already mentioned— Eugene O'Neill, the playwright. O'Neill was born Catholic but left the Church, and was apparently without religion for the rest of his life.

I propose to take a close look at his irreligion, but first let me establish that he fits my picture of the violent male in other categories.

After a couple of early marriages, O'Neill met and married a good woman, Agnes Boulton. In his biography, Bowen quotes O'Neill as saying, "It's a strange thing-of all the women I treated badly, and there were many, I treated Agnes the worst. And she was the one who gave me the least trouble."

In his play, The Iceman Cometh, O'Neill has the man say, "God, can you picture all I made her suffer and all the guilt she made me feel and how I hated myself? If only she hadn't been so damned good-if she'd been the same kind of wife I was a husband . . . it isn't human for any woman to be so pitying and forgiving."

The biographer, Bowen, says that both O'Neill's children recognized in these words and in this story reference to their

mother.

When the play's character, Hickey, is explaining why he murdered her, he tells the other men in the barroom where he's making his confession that he couldn't bear to have her forgive him over and over again for his sins. And he never wanted her to wake up from her pipe dream that he, Hickey, would turn out all right.

Entirely apart from all this emotionalizing, O'Neill was a man who hit women with his fists. From the beginning, this has been one of my key questions in connection with the violent male. Has a man hit a woman for any reason? If so, he almost always fits the pattern.

The one, the only important, thing I have never been sure about in connection with the violent man is: Exactly how does he feel toward his children?

Many violent males profess to love their children. Yet it is hard for the deserted mother of three children to believe in this affection. If he really loves them, why is he willing to let them starve?

My best guess would be that it's an on-again, off-again

phenomenon. He loves them, he loves them not.

Eugene O'Neill deserted his family and went off on a tour around the world with a woman to whom he was not married. Clifford Odets writes of O'Neill's rejection of his daughter when she married Chaplin. "It was as if O'Neill could not forgive his children because he had abandoned them."

There's your violent male. These are some of the things

that point to his being this type.

Now, what about our ex-Catholic, Eugene O'Neill? What about his metaphysics? Does he show the dark obsession in this area that I have mentioned?

Well, let's go back to a tiny bar in New York where Eugene O'Neill was a semi-alcholic in his early twenties—a place called the Hell Hole. O'Neill was a beatnik before that word was ever coined, constantly proving that he was really a "man of the people." And, as he drank with the characters who frequented this dive, he quoted at them from a poem called "The Hound of Heaven" by Francis Thompson. If you know that poem, you'll remember that it is by another ex-Catholic who fled God—and God pursued him everywhere, and finally caught up to him. Odd, isn't it, that our atheist O'Neill would be quoting this poem while he was in his cups?

As I see it, religion, mysticism, and metaphysics constitute for the violent male a constant balancing force against the death that he senses within himself. Those of you who heard my first talk on this type of man may recall that I stated that he seemed to be aware, subconsciously, that he had a rendezvous with death, but that his feeling of the nearness of death waxed and waned. When it was on the wane, he was charming, delightful, attractive, worthwhile, full of good things. When it was strong, however, his tendency to violence showed itself—it particularly showed itself in three ways in relation to his wife. His need to push the death away from him caused him at such times to project the violence upon another person. In order to do this, he (usually) had to blame that other person for something, though with some

men this was not true. (They simply did violence when they felt this way, making no effort to understand why.)

In my novel, The Violent Man, my main character says to a woman that he isn't mad at her, he's just mad all through, and that she'd better stay out of his way if she doesn't want to get hurt.

Now, that is the real, basic, underlying truth. All the rest is the need some men have to rationalize their behavior. If the person, usually a woman, has also given the man a pretext, that's merely a confusing factor.

The ordinary violent male who lives down the street or next door will strike, or choke, or go into that sullen no-communication state (or do all three) when he has this mean feeling. A dictator will make up his mind to execute one or more people. You may recall reading that on the night Hitler made up his mind to massacre the Jewish people, he dined alone. There he sat in this seething state of inner rage, and when he got up from the table the murder decision had been made. The order went out to all the little Hitlers down the line, and the great killing of men, women, and children was on.

The feeling that made all this possible was the same inner need to push death away from himself that is a characteristic of all violent males, however great, however insignificant.

Eugene O'Neill got his start as a playwright with the Provincetown Players. The people involved in that group were all impressed by his periods of what seemed to be black despair. One of them wrote "There was no such darkness as Eugene O'Neill's. He would sit silent and suffering and in darkness."

O'Neill's feeling of isolation from his fellow men at times reached morbid depths. He once told a friend that he thought it was a mistake that he had been born human, and in his lowest moments he wondered if he should have been born at all.

That's violent male talk.

The second time he met Agnes Boulton, she walked up to him and said, "Remember me?"

This was O'Neill's answer, as she later reported it to his biographer: "It's a cold night, a good night for a party. The iceman cometh."

Years and years later, when his and Agnes' children were

already grown up, when he had long been divorced from her, those three words, "the iceman cometh," were used as the title of his next-to-last play.

The iceman, of course, is death.

Some references to death came out in Eugene O'Neill's conversation all through his life. Every third or fourth sentence, there it was. . . . Which brings us back to the mystical streak.

About Eugene O'Neill's play, Dynamo, one critic wrote: "There was an ominous note in all this. Eugene O'Neill seemed to be worrying too much about God and his own soul."

But the rebel was in the ascendancy, for O'Neill regarded Dynamo as the first of a series of plays. The title of the series was: "God Is Dead! Long Live-What?"

Later, in the play Days Without End, the main character throws himself at the feet of the Cross in the final sequence. Several of O'Neill's Catholic friends tried to persuade a priest named Father Ford that the play showed that O'Neill was really a Catholic at heart.

Father Ford replied, "It was my opinion that O'Neill was a long way from returning to the Church. We discussed certain matters. But you didn't tell Eugene O'Neill anything

about philosophy or theology."

Father Ford's final remark—"you didn't tell Eugene O'Neill anything about philosophy or theology"—is relevant to what I said earlier about that 20 percent of male members of any congregation who have their own fixed ideas about the true interpretation of the Scriptures, of the meaning of life, and of the truth of things in general. Now, if there was any real similarity among these special private views, we could combine them into a rational system. But the fact is that not one of these men can agree in toto with any of the

In the sphere of religion and mysticism, this has been the great problem all through history. There were almost as many systems as there were individuals—which really means almost as many as there were violent males.

Fortunately, that narrows it down to 20 percent of the male population, and if the rest of us ever realized this clearly, we'd soon put a stop to the violence in our own

South and elsewhere in the world.

In Mecca before Mohammed, there were so many messiahs and saviours that a law was finally passed that any man calling himself a messiah would be automatically subject to execution. The place was swarming with ignorant would-be gods.

Anybody could be a religious leader, but if you let your followers start to get the idea that maybe you were God—

that was it. Off went your head.

Mohammed got around this by calling himself not a messiah, but a prophet. At first he said there were many prophets—among others he included Jesus—but when his followers increased in number sufficiently for him to feel bold, the word went out. "Allah is the only god and Mohammed is his only prophet."

How many such people were there?

G. G. Coulton, fellow of St. John's College, Cambridge, makes a comparison in his little book, *The Inquisition*. Darwin, he says, was struck by the fact that there were no fir trees growing in his meadow, though the meadow was surrounded by a wood composed of fir trees. On close examination he discovered that the entire meadow was constantly filled with sprouting fir trees, but that the cattle cropped the vegetation of the meadow and so ate up the fir trees before they could get going.

Coulton says that a similar study of medieval documents reveals that a multitude of budding heresies existed, but that only a small proportion managed to struggle through perse-

cution to some noticeable size.

How many?

Since the violent male cannot restrain himself from being what he is, it is not surprising that for every deviant religion that got through to any size, tens of thousands were crushed.

As violent males, most of the heretics would not—in fact, could not—recant. Hence, the Inquisition ordered them burned.

All through this period, it was remarked by all observant individuals that the heretic was usually a man of almost saintly behavior as compared to the materialistic priests who condemned him. These heretics generally knew the Bible and were sincerely religious, but differed either on small but important points or else felt themselves to be better than the

priests and demanded that the Church behave in a Christian fashion.

As we look over history now, we can see that the Church did not put its house in order, as the saying goes, until there was competition from other churches. The result is that today the Catholic Church does require from its elite complete Christian behavior—things are now pretty much as the saintly heretics wanted them to be. But this was a product of competition, which was established only after much blood was shed. The violent males inside the Church could not give in any more than the violent males outside it could.

Down at the level on which playwrights operate—that is, on the level of family and personal relations—Eugene O'Neill saw the disaster created by the violent male, but coined the term "misbegotten" for what he saw-thus proving once again something that I have noted with amazement in other brilliant Mr. Rights: that they cannot ever see that they are the cause of 90 percent of family disasters.

Eugene O'Neill saw his family's martyrdom, saw how everybody was crushed, described what happened to them and in the end . . . well, listen to Brooks Atkinson of The New York Times as he sums up on O'Neill's final play,

Long Day's Journey into Night:

The pity, the understanding, and the foregiveness spread like a kind of sorrowful benediction and bring a relentless drama to a insignificant conclusion.

Ralph Barton, the caricaturist, also wanted to be forgiven. And when my novel, The Violent Man, was published in 1962, a man who had read it asked me to come to see him in the hospital, where he was dving.

He told me that he had recognized himself in my main character. He said, "All my life I had these moody spells, and I treated my wife shabbily. I don't know why I did so

many terrible things." He too wanted forgiveness.

On inquiry, I learned that he was the author of a book on a metaphysical system having to do with past lives. . . . HE QUESTION MAY BY THIS TIME have arisen in your mind, Gentle or (particularly) Tough Reader: Is all this prattle by a science-fiction writer about reality, a valid indication that he really understands reality writing?

The best justification I can give for my point of view on that—permit me to use the term—mystical subject, reality, needs an

additional introduction.

A decade ago I wrote three long novelettes about a shape-changing life-form that I called a Silkie. It was my intention to combine the three stories into a novel; and in fact in due course I did exactly that.

The Silkie is one of my two really far-out stories. (The Battle of Forever is the other.) As I prepared the material for publication in novel form and reread the first few paragraphs, I felt a qualm. Was I finally asking too much of my reading public? Every sentence in that opening chapter required an exceptionally large creative contribution from the reader.

My thought then was: "Here I am, a person who understands both reality and unreality writing. Surely with my awareness I can write a prologue that will lead the

reader into the story and hold him in it after he reaches the far-out opening lines of Chapter One." My reasoning was that the prologue would hold a reader long enough to hook him because he would be wanting to know the outcome of the story line of the prologue.

I'm including that prologue in this collection just to show you what a reality prologue to a science-fiction story looks like. There will be an afterword about the kind of reality I

used.

PROLOGUE TO "THE SILKIE"

1

- The street of the Haitian city had been excruciatingly hot to Marie's feet, like walking over sheets of heated metal. It was cooler in the garden, but she had to come out from under the shady trees into the sun where the old man sat. Now he laughed unpleasantly, showing his even white false teeth.

He said, "Put up money to raise a sunken treasure ship? Think I'm a fool?"

He laughed again, then blinked his eyes at her with a weary lasciviousness. He added significantly, "Now, of course, if a pretty young thing like you could be nice to an old man . . ."

He waited, sunning himself like a wrinkled toad, soaking the heat into bones that seemed no longer capable of warming themselves. Despite the sun, he shivered as if he were cold.

Marie Lederle studied him with curious eyes. She had been brought up by a sea captain with a lusty sense of humor, and now she was merely surprised that this old lecher could still get a moist gleam in his eye at the sight of a young woman.

She said steadily, "The ship went down during the war near an island off Santa Yuile. It was my father's last command, so when the company refused to sponsor an expedition, he decided to go after private capital. A friend sug-

gested you."

That was a lie; she had made inquiries. He was merely the latest of a long list of prospects. She went on quickly, "And for heaven's sake, don't get outraged. There are still people who have the adventurous spirit. Why shouldn't an old gambler like you, Mr. Reicher, spend his last days doing something exciting?"

The perfect teeth showed in a grin behind the almost lipless mouth. "There you have the answer, my dear." His tone was more pleasant. "My spare money is going into medical research. I'm still hoping a discovery will be made. . . ." He shrugged his thin shoulders, and naked fear showed on his face. "I don't long for the grave, you know."

For a moment, Marie felt sorry for him. She thought of the time when she, too, would be old and rickety. The thought passed by like a cloud in a summer sky. She had a

more pressing problem.

"Then you're not interested?"

"Not in the slightest."
"Not even a little bit?"

"Not even one-tenth of one percent," said Reicher unpleasantly.

She left him with a final, "If you change your mind, you'll

find us tied up to pier four in the Golden Marie."

She walked back to the harbor, where the small cabin cruiser baked in the sun alongside an uneven row of similar boats. They were mostly seagoing vessels, many of them pleasure craft from the United States. Aboard them were people who played bridge and danced to music from expensive phonographs and lolled in the sun. Marie found herself disliking them because they had ample money and were not like herself and her father, nearly broke and beginning to feel desperate.

She climbed aboard, burning her fingers on the hot wood. Angrily, she slapped her hand against her thigh, sting-

ing the heat pain out of them.

"That you, Marie?" Her father's voice came from somewhere in the bowels of the vessel.

"Yes, George."

"I've got an appointment with a fellow named Sawyer. There'll be quite a few retired bigshots there. One more chance, you know."

Marie said nothing but watched him silently as he came

into view. He had on his best uniform, but time had done subtle things to him, and he was no longer the strong, handsome man of her childhood. His temples were gray, and his nose and cheeks were marked indelibly with the wordless trademark of many vintners.

He strode over and kissed her. "I'm hoping particularly to talk to a wealthy old codger—Reicher—who'll be there."

Marie parted her lips to tell him that it would be no use. She changed her mind. She had noticed that his uniform still impressed people. Reicher might not find it so easy to turn down a mature, cultured man.

Not till he had gone did she wonder suddenly what kind of meeting could bring Mr. Reicher out of his hideaway.

She ate a leisurely lunch of fruit from the refrigerator and then composed a poem that sang of the cool delights of the tropical sea where the sun was as hot as a murderer's ire. After filing the poem away in a drawer filled with other bits and pieces of verse, she sat on deck under an awning and watched the sea and the harbor scene around her. The waves glittered in the afternoon sunlight, and reflections sparkled or glared from the white bows of the small craft and from the white walls of the town buildings. It was a scene that still fascinated, but she wasn't sure any more whether she loved it or hated it.

It's beautiful here, she thought, but dangerous for a penniless father and daughter.

She shuddered at the extent of that danger, then shrugged defiantly and thought, At worst I could always do something.

She wasn't exactly sure what.

She went belowdecks finally and put on her bathing suit, and presently she was paddling around in the warm, gently pulsing sea. The swimming was euthanasia, of course—another day gone the way of a hundred like it, each like a little pebble dropped into the ocean of time, sunk without a trace.

She looked back over that avenue of sun-brightened days, individually delightful, collectively disturbing since she was wasting away her life.

And she was, for the nth time, about to make some worthy resolve about her future, when she grew aware that over on the fancy sailing yacht moored a hundred feet

away, Sylvia Haskins had come on deck and was beckoning to her.

Dutifully, Marie swarm over and climbed wetly and reluctantly aboard. She detested Henry Haskins, Sylvia's husband, so she was relieved when Sylvia said, "Henry has gone to a meeting in connection with a big medical discovery, and we're going out to some island near here to have a look at something or somebody on whom it's been successfully used."

Marie said, "Oh!"

Her picture of Henry Haskins probably differed from his wife's. A cold-blooded bedroom athlete—as described by himself—Henry had several times tried to corner Marie. He had desisted only when confronted with the pointed edge of a knife presented and manipulated with a firmness that convinced him that here was one "crow" he was not going to get.

Henry called women crows, and they pretended that this was a cute way he had of being different. Compared with her husband, Sylvia was mild, friendly, ineffectual, goodhearted—traits made much of by Henry. "Silly is such a good-hearted crow," he would say in a fond tone.

To Marie, the possibility that someone had found a method of prolonging Henry's life was a shuddery idea. But what interested her was the information that he was at a meeting. It seemed instantly certain—in a town the size of Santa Yuile—that it was the same meeting her father had gone to. She said so.

Sylvia exclaimed, "Maybe then it isn't goodbye! I believe Mr. Peddy and old Grayson and the Heintzes and Jimmy Butt and at least two or three others are in on it."

And old Reicher, thought Marie. Oh, my God! "Here comes your father now!" said Sylvia.

Captain Lederle saw where she was and stopped. He looked up at the women, rubbing his hands and exuding enthusiasm. "Get my room cleaned up, Marie, as soon as you can. Mr. Reicher is coming aboard this evening, and tomorrow at dawn we leave for Echo Island."

Marie asked no questions before the eager-eared Sylvia Haskins. "Okay, George," she said cheerfully.

She dived back into the water, and presently she was heading belowdecks to her father's cabin.

Her father followed her, and as she turned to look at him, she saw that his happy mood had faded. "We're just hired," he said. "I put that act on for Sylvia."

Marie said nothing, and he evidently construed her silence as an accusation, for he defended himself. "I couldn't help it, honey. I couldn't let even a remote chance go by."

"Tell me the whole story, dear," Marie said soothingly.

Her father was disconsolate. "Oh, some old fraud claims he's got a method of rejuvenation, and these elderly roués are grabbing at the hope. I pretended an interest in the hope of getting something out of it, and I did."

Actually, it was a victory of sorts. From the wreck of his own plans, George had salvaged that magical relationship, further contact. Just what it would mean to have Reicher on

board was obscure. But here Reicher would be.

"Do we take along the diving equipment?" she asked matter-of-factly.

"Naturally," said her father.

The thought seemed to cheer him.

2

For the sea it was another day of many. The water felt its way with practiced skill among the rocks and coral of that remote island. Here, on the sand backwater, it whispered a soft sound. There, on a reef, it roared at the resistance of the hard rock. But all its noisier emotions were on the surface. In the depths off shore, the ocean was quiet.

Marie sat on the deck of the somewhat dilapidated cruiser and felt at one with the sky, the sea, and the island where the men had gone ashore. She was glad that nobody had suggested bridge for the ladies while they waited for the men to return. It was midafternoon, and the ladies were probably all napping, so she had the ocean universe to herself.

Her idle gaze caught a movement in the water, and she glanced down. And then she leaned forward, gazing downward, startled.

A human figure was swimming far down in the water below her—at least forty feet down.

The sea was singularly transparent, and the sandy bottom was visible. A number of colorful parrot fish wheeled in

those crystal-clear depths and sped out of sight into the shadows of the cliffside closer to the shore.

The man was swimming with great ease. But what was amazing was that he was so far down and that, distorted by water movement, his body looked strange, not quite human.

Even as she had that thought, he glanced up, saw her, and swiftly, with enormous power, darted up toward her.

And only then, as he broke free of the sea, did Marie

He was not human.

The creature that had come out of the water had a humanlike body. But the skin on his face and elsewhere was unnaturally thick, as if it had fat layers and other barriers against cold and water.

And Marie, who had seen a great many variations in sea life, recognized what was under his arms instantly—gills.... His feet were webbed, and he was at least seven feet long

For years now, fear had been her least emotion, so she pulled back a little, shrank inwardly—a little—and held her breath for a few seconds longer than normal.

Because her reactions were that tiny, she was looking at him when he . . . changed.

He was still in the water when it happened. And he was in the act of reaching for the gunwale of her little craft.

The long, strong body shortened; the thick skin grew thin; the head became smaller. Within the space of seconds Marie was aware that his muscles were twisting, writhing, working under a strangely mobile skin. Light reflection and the rolling of the sea obscured some of those motions, but what she saw was a seven-foot "fish" being transformed in a matter of seconds into a completely naked young man.

This being, human in every way, vaulted aboard her craft with effortless strength. He was, she saw, six feet tall and very matter-of-fact. He said in a pleasant baritone, "I'm the person whom all the fuss is about. Old Sawyer has really outdone himself in producing me. But I realize you must be shocked. So get me a pair of trunks, will you?"

Marie didn't move. His face was vaguely familiar to her. Long ago—it seemed long—there had been a young man in her life . . . until she discovered that she was but one

of a dozen girls, with most of whom he carried on a far more exotic existence than she had ever permitted.

This young man looked like that young man.

"You're not-" she said.

He seemed to know what she meant, for he shook his head, smiling. "I promise to be completely faithful," he said.

He continued, "We need—Sawyer and I need—a young woman who will bear my child. We think we can reproduce

what I can do, but we have to prove it."

"B-but what you can do is so perfect," Marie protested, only vaguely realizing that she was not resisting his proposal at all. Somehow, she already had a strange feeling of fulfillment, as if at last she could do something that would remedy the wasted years.

"You saw only a portion of what I can do," said the young man. "I have three shapes. Sawyer not only reached back into the sea history of man, but he reached forward into its future potentiality. Only one of my shapes is

human."

"What's the third?" Marie breathed. "I'll tell you later," was the reply.

"But the whole thing is fantastic," said Marie. "What are you?"

"I'm a Silkie," he answered. "The first Silkie."

Afterword

I have to confess I weaseled a little on the reality in that prologue. I'm not referring now to the distinctly s-f qualities of the last couple of pages—that was a necessary bridge. But I weaseled by using a background with which the average American is familiar only by hearsay. The West Indies are real life; they exist; the islands are not a fantasy world. It's all far away, though, and not too well associated.

Once again, there was method. I can imagine another writer who has no system blithely trying to be realistic, projecting his current quaint reality into such a prologue. In a few years no one would finish reading it (the prologue), and would thus never get to the main story.

I chose a reality that, according to my judgment, would not alter much in the next twenty-five or fifty years. In other words, it would carry over the copyright life of the story.

HE PROXY INTELLIGENCE" IS A sequel to an earlier novella, "Asylum," which at one time I regarded as one of my best stories. But I prefer "Proxy." I have in mind a third story, to be titled "I.Q. 10,000." The reason this final sequel isn't written is that I am patiently waiting until I can think of a third way to present indirectly a higher-than-human intelligence. As a craftsman, I deduce that there is no direct way to write a story about someone smarter than yourself.

In "Proxy," we have a reflection of a great being in the way he has affected "the dumbest jerk in the solar system." In "Asylum," a human reporter discovered to his horror that he apparently was sharing his body with a being who had a colossal I.O.

Portions of this story require from the reader close to the ultimate potential of what he is capable of contributing creatively to a science-fiction story.

THE PROXY INTELLIGENCE

1

TAKE A SENTIENT BEING-

Even Steve Hanardy could fit that description. He was a short stocky man, with the look about him of someone who had lived too close to the animal stage. His eyes were perpetually narrowed, as if he were peering against a bright light. His face was broad and fleshy. But he was human. He could think and act, and he was a giver and not a taker.

—Put this sentient person in a solar system surrounded by a two-billion light-year ocean of virtual nothingness beyond

which, apparently, is more nothingness—

Hanardy, a product of Earth's migration to the moon and to the planets of the solar system, was born on Europa, one of the moons of Jupiter, before the educational system caught up to the colonists. He grew up an incoherent roustabout and a spacehand on the freighters and passengers liners that sped about among the immense amount of debris—from moons to habitable meteorites—that surrounded the massive Jupiter. It was a rich and ever-growing trade area, and so presently even the stolid, unimaginative Hanardy had a freighter of his own. Almost from the beginning, his most fruitful journeys were occasional trips to the meteorite where a scientist, Professor Ungarn, lived with his daughter, Patricia. For years, it was a lucrative, routine voyage, without incident.

—Confront this sentient individual with the enigma of being—

The last voyage had been different.

To begin with, he accepted a passenger—a reporter named William Leigh, who ostensibly wanted to write up the lonely route for his news syndicate. But almost as soon as the freighter reached the Ungarn meteorite and entered the airlock, the meteorite was attacked by strange space vessels, which were capable of far greater speeds than anything Hanardy had ever seen. And William Leigh was not who he seemed.

It was hard to know just who he was. What actually happened, as far as Hanardy was concerned, was quite simple: One of the defensive energy screens had gone down before the attack of the strange ships, and Professor Ungarn sent Hanardy to machine a new part for the screen's drive unit. While he was engaged in this, Leigh came upon him by surprise, attacked him, and tied him up.

Lying there on the floor, bound hand and foot, Hanardy thought in anguish: "If I ever get loose, I'm gonna hightail it out of here!"

He tested the rope that held him and groaned at its unyielding toughness. He lay, then, for a while, accepting the confinement of the bonds, but underneath was a great grief and a great fear.

He suspected that Professor Ungarn and the professor's daughter, Patricia, were equally helpless, or they would have tried during the past hour to find out what had happened to him.

He listened again, intently, holding himself still. But only the steady throbbing of the distant dynamos was audible. No footsteps approached; there was no other movement.

He was still listening when he felt an odd tugging inside his body.

Shivering a little, Hanardy shook his head as if to clear it of mental fog, and climbed to his feet.

He didn't notice that the cords that had bound him fell away.

Out in the corridor, he paused tensely. The place looked deserted, empty. Except for the vague vibration from the dynamos, a great silence pressed in upon him. The place had the look and feel of being on a planet. The artificial gravity made him somewhat lighter than on Earth, but he was

used to such changes. It was hard to grasp that he was inside a meteorite, hundreds of thousands of miles from the nearest moon or inhabited planet. Being here was like being inside a big building, on an upper floor.

Hanardy headed for the nearest elevator shaft. He thought,

"I'd better untie Miss Pat, then her pop, and then get."

It was an automatic decision, to go to the girl first. Despite her sharp tongue, he admired her. He had seen her use weapons to injure, but that didn't change his feeling. He guessed that she'd be very angry—very possibly she'd blame him for the whole mess.

Presently he was knocking hesitantly on the door to Patricia's apartment. Hesitantly, because he was certain that she was not in a position to answer.

When, after a reasonable pause there was no reply, he

pressed gently on the latch. The door swung open.

He entered pure enchantment.

The apartment was a physical delight. There were Frenchtype windows that opened onto a sunlit space. They were open, and the sound of birds singing wafted in through them. There were other doors leading to the inner world of the girl's home, and Hanardy, who had occasionally been in the other rooms to do minor repair work, knew that there also everything was as costly as it was here in this large room that he could see.

Then he saw the girl. She was lying on the floor, half-hid-ten den behind her favorite chair, and she was bound hand and be foot with wire.

Hanardy walked toward her unhappily. It was he who had brought William Leigh, and he wasn't quite sure just how he would argue himself out of any accusation she might make about that. His guilt showed in the way he held his thick-set body, in the shuffling of his legs, in the awkward way he knelt beside her. He began gingerly to deal with the thin wire that enlaced and interlaced her limbs.

The girl was patient. She waited till he had taken all the wire off her and then, without moving from the floor, began to rub the circulation back into her wrists and ankles.

She looked up at him and made her first comment. "How did you avoid being tied up?"

"I didn't. He got me, too," said Hanardy. He spoke eagerly,

anxious to be one of the injured, along with her. He already felt better. She didn't seem to be angry.

"Then how did you get free?" Patricia Ungarn asked.

"Why, I just-" Hanardy began.

He stopped, thunderstruck. He thought back, then over what had happened. He had been lying there, tied. And then . . . and then . . .

What?

He stood blank, scarcely daring to think. Realizing that an answer was expected, he began apologetically, "I guess he didn't tie me up so good, and I was in a kind of a hurry, figuring you were here, and so I just—"

Even as he spoke, his whole being rocked with the remembrance of how tough those ropes had been a few min-

utes before he freed himself.

He stopped his mumbling explanation because the girl wasn't listening, wasn't even looking. She had climbed to her feet, and she was continuing to rub her hands. She was small of build and good-looking in a bitter way. Her lips were pressed too tightly together; her eyes were slightly narrowed with a kind of permanent anxiety. Except for that, she looked like a girl in her teens, but cleverer and more sophisticated than most girls her age.

Even as Hanardy, in his heavy way, was aware of the complexity of her, she faced him again. She said with an ungirllike decisiveness, "Tell me everything that happened to you."

Hanardy was glad to let go of the unsatisfactory recollection of his own escape. He said, "First thing I know, this guy comes in there while I'm working at the lathe. And is he strong, and is he fast! I never would've thought he had that kind of muscle and that fast way of moving. I'm pretty chunky, y'understand—"

"What then?" She was patient, but there was a pointedness about her question that channeled his attention back to the main line of events.

"Then he ties me up, and then he goes out, and then he takes those Dreeghs from the spaceship and disappears into space." Hanardy shook his head, wonderingly. "That's what gets me. How did he do that?"

He paused, in a brown study; but he came from the distance of his thought back into the room to realize guiltily that the girl had spoken to him twice.

"Sorry," he muttered. "I was thinking about how he did that, and it's kind of hard to get the idea." He finished, al-

most accusingly, "Do you know what he does?"

The girl looked at him, a startled expression on her face. Hanardy thought she was angry at his inattention and said hastily, "I didn't hear what you wanted me to do. Tell me again, huh!"

She seemed unaware that he had spoken. "What does he

do, Steve?"

"Why, he just-"

At that point, Hanardy stopped short and glanced back mentally over the glib words he had been using. It was such a fantastic dialogue that he could feel the blood draining from his cheeks.

"Huh!" he said.

"What does he do, Steve?" He saw that she was looking at him, as if she understood something that he didn't. It irritated him.

He said unhappily, "I'd better go and untie your father

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before that last bunch of Dreeghs shows up."

Having spoken, he stopped again, his mouth open in amazement. He thought, "I must be nuts. What am I saying?"

He turned and started for the door.

"Come back here!"

Her voice, sharp and commanding, cut into him. Defensively, he put up between himself and her the thick barrier of stolidity which had served him for so many years in his relations with other people. He swung awkwardly around to face her again. Before he could speak, she said with intensity, "How did he do it, Steve?"

The question ran up against a great stubbornness in him. He had no feeling of deliberately resisting her. But the mental fog seemed to settle down upon his being, and he

said, "Do what, Miss?"

"Leave?"

"Who?" He felt stupid before her questions, but he felt even more stupid for having had meaningless thoughts and said meaningless things.

"Leigh-you fool! That's who."

"I thought he took that spaceboat of yours that looks like an automobile."

There was a long pause. The girl clenched and unclenched her hands. Now she seemed very unchildlike indeed. Hanardy, who had seen her angry before, cringed and waited for the thunder and lightning of her rage to lash out at him. Instead, the tenseness faded. She seemed suddenly thoughtful and said with unexpected gentleness, "After that, Steve? After he got out there?"

She swung her arm and pointed at the aviary, where the sunlight glinted beyond the French windows. Hanardy saw birds fluttering among the trees. Their musical cries gave the scene a homey touch, as if it really were a garden. As he watched, the tree leaves stirred, and he knew that hidden fans were blowing an artificial breeze. It was like a summer afternoon, except that just beyond the glasslike wall was the blackness of space.

It was a cosmic night outside, disturbed here and there by an atom of matter—a planet hidden from sight by its own relative smallness and distance from anything else; a sun, a point of light and energy, quickly lost in darkness so vast that presently its light would fade, and become one grain in a misty bright cloud that obscured the blackness for a moment of universe time and occupied an inch of space, or so it seemed. . . .

Hanardy contemplated that startling vista. He was only vaguely aware that his present intensity of interest was quite different from similar thoughts he had had in the past. On his long journeys, such ideas had slipped into and out of his mind. He recalled having had a thought about it just a few months before. He had been looking out of a porthole, and—just for an instant—the mystery of the empty immensity had touched him. And he'd thought, "What the heck is behind all this? How does a guy like me rate being alive?"

Aloud, Hanardy muttered, "I'd better get your father free, Miss Pat." He finished under his breath: "And then beat it out of here—fast."

He turned, and this time, though she called after him angrily, he stumbled out into the corridor and went down to the depths of the meteorite, where the dynamos hummed and throbbed; and where, presently, he had Professor Ungarn untied.

The older man was quite cheerful. "Well, Steve, we're not dead yet. I don't know why they didn't jump in on us, but the

screens are still holding, I see."

He was a gaunt man with deep-set eyes and the unhappiest face Hanardy had ever seen. He stood, rubbing the circulation back into his arms. Strength of intellect shone from his face, along with the melancholy. He had defended the meteorite in such a calm, practical way from the attacking Dreeghs that it was suddenly easy to realize that this sadfaced man was actually the hitherto unsuspected observer of the solar system for a vast galactic culture, which included at its top echelon the Great Galactic-who had been William Leigh-and at the bottom, Professor Ungarn and his lovely daughter.

The thoughts about that seeped into Hanardy's fore-conscious. He realized that the scientist was primarily a protector. He and this station were here to prevent contact between Earth and the galaxy. Man and his earth-born civilization were still too low on the scale of development to be admitted to awareness that a gigantic galactic culture existed. Interstellar ships of other low-echelon cultures which had been admitted to the galactic union were warned away from the solar system whenever they came too close. Accidentally, the hunted, lawless Dreeghs had wandered into this forbidden sector of space. In their lust for blood and life energy they had avidly concentrated here in the hope of gaining such a quantity of blood, and so great a supply of life energy, that they would be freed for endless years from their terrible search.

It had been quite a trap, which had enabled the Great Galactic to capture so many of them. But now another shipload of Dreeghs was due; and this time there was no trap.

Professor Ungarn was speaking. "Did you get that part

machined before Leigh tied you up?" He broke off. "What's the matter, Steve?"

"Huh! Nothing." Hanardy came out of a depth of wonderment. "I'd better get onto that job. It'll take a half hour, maybe."

Professor Ungarn nodded and said matter-of-factly, "I'll feel better when we get that additional screen up. There's

quite a gang out there."

Hanardy parted his lips to say that that particular "gang" was no longer a problem, but that another super-ship, a late arrival, would shortly appear on the scene. He stopped the words, unspoken; and now he was consciously dismayed. "What's going on?" he wondered. "Am I nuts?"

Almost blank, he headed down to the machine shop. As he entered, he saw the ropes that had bound him lying on the floor. He walked over in a haze of interest and stooped

to pick up one of the short sections.

It came apart in his fingers, breaking into a fine, powdery stuff, some of which drifted into his nostrils. He sneezed noisily.

The rope, he discovered, was all like that. He could hardly get over it. He kept picking up the pieces just so that he could feel them crumble. When he had nothing but a scattering of dust, he stood up and started on the lathe job. He thought absently, "If that next batch of Dreeghs arrives, then maybe I can start believing all this stuff."

He paused and for the first time thought, "Now, where

did I get that name, Dreegh?"

Instantly, he was trembling so violently that he had to stop work. Because—if he could get the professor to admit that that was what they were—Dreeghs—then . . .

Then what?

"Why, it'd prove everything," he thought. "Just that one thing!"

Already, the crumbled rope, and whatever it proved, was fading into the background of his recollection, no longer quite real, needing to be reinforced by some new miracle. As it happened, he asked the question under optimum circumstances. He handed the part to the scientist and managed to ask about the Dreeghs as the older man was turning away. Ungarn began immediately, with an obvious urgency, to

work on the shattered section of the energy screen drive. It was from there, intent on what he was doing, and in an absent-minded tone, that he answered Hanardy's question.

"Yes, yes," he muttered. "Dreeghs. Vampires, in the worst

sense of the word . . . but they look just like us."

At that point he seemed to realize to whom he was talking. He stopped what he was doing and swung around and stared at Hanardy.

He said at last very slowly, "Steve, don't repeat everything you hear around this place. The universe is a bigger territory than you might think, but people will ridicule you if you try to tell them. They will say you're crazy."

Hanardy did not move. He was thinking, "He just don't

realize. I gotta know. All this stuff happening-"

But the idea of not telling was easy to grasp. At Spaceport, on the moon, Europa, at the bars that he frequented, he was accepted by certain hangers-on as a boon companion. Some of the people were sharp, even educated, but they were cynical and often witty, and were particularly scathing about serious ideas.

Hanardy visualized himself telling any one of them that there was more to space than the solar system—more life, more intelligence—and he could imagine the ridiculing discussion that would begin.

Though they usually treated him with tolerance, it sure wouldn't do any good to tell them.

Hanardy started for the door. "I gotta know," he thought again. "And right now I'd better get on my ship and beat it before that Dreegh comes along pretending that he's Pat's future husband."

And he'd better leave on the sly. The professor and the girl wouldn't like him to go away now. But defending this meteorite was their job, not his. They couldn't expect him to deal with the Dreegh who had captured, and murdered, Pat's boyfriend.

Hanardy stopped in the doorway and felt blank. "Huh!" he said aloud.

He thought, "Maybe I should tell them. They won't be able to deal with the Dreegh if they think he's somebody else."

"Steve!" It was Professor Ungarn.

Hanardy turned. "Yeah, boss?" he began. "Finish unloading your cargo."

"Okay, boss."

He walked off heavily along the corridor, tired and glad that he had been told to go and relieved that the decision to tell them could not be put into effect immediately. He thought wearily, "First thing I'd better do is take a nap."

Hanardy walked slowly up the ramp into his own ship, and so to his own cabin. Before lying down for the sleep he needed, he paused to stare at his reflection in the mirrorbright metal wall of the room. He saw a short, muscular man in greasy, gray dungarees and a dirty yellow shirt. A stubble of beard emphasized a coarseness of features that he had seen before, but somehow never so clearly, never with such a conviction that he was a low-grade human being. Hanardy groaned and stretched out in the bunk. He thought, "I sure got my eyes open all of a sudden to what kind of a lug I am."

He took a quick look back along the track of years, and groaned again. It was a picture of a man who had downgraded himself as a human being, seeking escape in a lonely

space job from the need to compete as an individual.

"Nobody will believe a word I say," he thought. "All that other junk was only in my noodle—it didn't happen out where you could prove anything. I'd better just keep my mouth shut and stop thinking I understand what's going

He closed his eyes-and looked with a clear inner vision at the universe.

He opened his eyes to realize that he had slept. He realized something else. The screens were down; a Dreegh in a spaceboat was coming into an airlock at the extreme lower side of the meteorite.

The vampire was primarily intent on information, but he would destroy everyone in the meteorite as soon as he felt it was safe.

Sweating, Hanardy tumbled out of the bunk and hurried out of his ship, and so into the meteorite. He raced along the corridor that led to the other airlock. At the entrance he

met the professor and Patricia. They were smiling and excited.

The scientist said, "Great news, Steve. Pat's fiancé has just arrived. He's here sooner than we expected, but we were getting worried that we hadn't received some communication."

Hanardy muttered something, feeling immensely foolish. To have been so wrong! To have thought: Dreegh!—when the reality was Klugg . . . the girl's long-awaited fiancé, Thadled Madro.

But the identification of the new arrival made all his fantasies just that—unreal vaporings, figments of an unsettled mind.

Hanardy watched gloomly as Madro came down the ramp from the boat. The girl's lover was a very tall, slim man in his thirties, with deep-set eyes. He had an intensity about him that was impressive, commanding—and repellent. Instantly repellent.

Hanardy realized ruefully that his reaction was overcritical. Hanardy couldn't decide what had twisted this man. But he was reminded of the degraded people who were his principal buddies at Spaceport, on Europa. Smart, many of them were—almost too smart. But they gave off this same emanation of an overloaded personality.

Hanardy was a little surprised to realize that the girl was not rushing forward to greet the gaunt-bodied visitor. It was Professor Ungarn who approached the man and bowed courteously. Madro bowed in return and then stood looking at the girl, who waited stiffly near Hanardy. The scientist glanced at his daughter and then smiled at the newcomer apologetically. He said, "Thadled Madro, this is my daughter, Patricia—who has suddenly become very shy."

Madro bowed. Patricia inclined her head. Her father turned to her and said, "My dear, I realize that this is an unfortunate way of marrying and giving in marriage—to entrust yourself to a man whom neither of us has ever seen before. But let us remember his courage in coming here at all and resolve to offer him communication and the opportunity to show us what he is."

Madro bowed to the girl. "On those terms, I greet you, Patricia." He straightened. "About communication—I am

baffled by the message I received en route. Will you please give me further information?"

Professor Ungarn told him of the Dreegh attack and of its abrupt cessation; he told him of William Leigh, the Great Galactic. He finished, "We have our report as to what happened from a member of the race of this system—who was somehow infected by the mere presence of this mighty being, and who apparently acquired the ability to see at a distance, and to be aware of some of the thoughts of some people, temporarily at least."

There was a faint smile on Ungarn's tired face. Hanardy shriveled a little inside, feeling that he was being made fun of. He looked unhappily at the girl. She must have told her

father what he had said.

Patricia Ungarn caught his gaze on her and shrugged. "You said it, Steve," she stated matter-of-factly. "Why not tell us everything you felt?".

The newcomer stared somberly and intently at Hanardy; so intently that it was almost as if he also were reading minds. He turned slowly to the girl. "Can you give me a swift summary?" he asked. "If there's action to be taken, I'd like to have some basis for it."

There was a hard note in his voice that chilled Hanardy, who had been thinking for many minutes over and over: They don't really know him! They don't know him. . . . He had a mental picture of the real Madro's ship being intercepted, Madro captured and drained of information, and then murdered by the vampire method. The rest was skillful makeup, good enough apparently to pass the inspection of the professor and his perceptive daughter. Which meant that, before killing the real Madro, the Dreegh had learned passwords, secret codes, and enough back history to be convincing.

Within minutes, this creature could decide that it was safe to take action.

Hanardy had no illusions, no hope. It had taken an unbounded being to defeat these mighty Dreeghs. And now, by a trick, a late arrival had achieved what his fellows en masse had not been able to do—he had gotten into the meteorite fortress of the galactic watcher of the solar system,

and his whole manner indicated that his fears had nothing to do with either the professor or his daughter, or Hanardy.

He wanted to know what had happened. For a little while he might be forbearing, in the belief that he could learn more as an apparent ally than as a revealed enemy.

"We have to put him off," Hanardy thought in agony. "We have to hold back, or maybe give him what he wants."

Somehow, the latter seemed preferable.

He grew aware that the girl was talking. While Hanardy listened, she gave the essential picture of what he had said. It was all there, surprisingly sharp in detail. It even penetrated some of the blur that had settled over his own memory.

When she had finished, Madro frowned and nodded. His slim body seemed unnaturally tense. He said, almost to himself, "So they were almost all captured—" He paused and, turning, looked at Hanardy. "You have the feeling there will be one more ship?"

Hanardy nodded, not trusting himself to speak.

"How many Dreeghs are there aboard this one ship?" Madro asked.

This time there was no escaping a verbal reply. "Nine," said Hanardy.

He hadn't thought about the exact number before. But he knew the figure was correct. Just for a moment, he knew it.

Madro said in an odd tone, "You get it that clearly? Then you must already know many other things as well."

His dark eyes gazed directly into Hanardy's. The unspoken meaning that was in them seemed to be, "Then you already know who I am?"

There was such a hypnotic quality in the other's look that Hanardy had to wage an inner fight against admitting that he knew.

Madro spoke again. "Were these-this first group of Dreeghs-all killed?"

"Why, I-" Hanardy stopped, amazed. "Gee, I don't know what happened to them. But he intended to kill them; up to a certain moment, he intended to; and then—"
"And then what, Steve?" That was Pat, her voice urging

him.

"I don't know. He noticed something."

"Who noticed something?" asked Pat.

"Leigh. You know-him. But I don't know what he did after that."

"But where could they be now?" the girl asked, bewildered. Hanardy remained blank, vaguely guilty, as if somehow he was failing her by not knowing.

He grew aware that Madro was turning away. "There is apparently more to discover here," the Dreegh said quietly. "It is evident that we must reassess our entire situation; and I might even guess that we Kluggs could through the chance perceptive stimulation of this man achieve so great a knowledge of the universe that, here and now, we might be able to take the next step of development for our kind."

The comment seemed to indicate that the Dreegh was still undecided. Hanardy followed along behind the others. For a few desperate seconds he thought of jerking out his gun, in the hope that he might be able to fire before the Dreegh could defend himself.

But already doubt was upon him. For this suspicion was just in his head. He had no proof other than the steady stream of pictures in his mind, and that was like a madness having no relation to anything that had been said and done before his eyes. Crazy people might act on such inner pictures, but not stolid, unimaginative Steve Hanardy.

"Gotta keep my feet on the ground!" Hanardy muttered to himself.

Ahead, Professor Ungarn said in a conversational voice, "I've got to give you credit, Thadled. You have already said something that has shocked Pat and myself. You have used the hateful word 'Klugg' just as if it doesn't bother you."

"It's just a word," said Madro.

And that was all that was said while they walked. They came to the power room. The girl sank into a chair while her father and the visitor walked over to the power control board. "The screens are working beautifully," said Professor Ungarn with satisfaction. "I just opened them for the few seconds it took for you to get through them. We've got time to decide what to do in case this last Dreegh ship attacks us."

Madro walked over near the girl and settled into a chair. He addressed Professor Ungarn. "What you said a moment ago, about the word and the identification of Klugg—you're right. It doesn't bother me."

The scientist said grimly, "Aren't you fooling yourself a little? Of all the races that know of the galactic civilization, we're the lowest on the scale. We do the hard work. We're like the day laborers on planets such as Earth. Why, when Pat found out, she nearly went mad with self-negation. Galactic morons!" He shuddered.

Madro laughed in a relaxed way, and Hanardy had to admire the easiness of him. If Madro was a Dreegh, then for all Madro knew this, also, was a trap set by the Great Galactic; and yet he seemed unworried. If, on the other hand, he was actually a Klugg, then somehow he had made inferiority right within himself. "I could use some of that," Hanardy thought gloomily. "If these guys are galactic morons, what does that make me?"

Madro was speaking. "We're what we are," he said simply. "It's not really a matter of too much difference in intelligence. It's an energy difference. There's a way here, somewhere, of utilizing energy in a very superior fashion. But you've got to have the energy, and you've got to get it from somewhere. That's what makes the case of this fellow Leigh interesting. If we could backtrack on what he did here, we might really get at the heart of a lot of things."

Patricia and her father said nothing. But their eyes glistened as they waited for the man to continue. Madro turned to Hanardy. "That question she asked you before—" he indicated the girl—"when you first untied her. How did he leave the solar system after capturing those—Dreeghs?" He hesitated the slightest bit before using the name.

Hanardy said simply, "He didn't exactly leave. It's more like . . . he was somewhere else. And he took them with him." He fumbled for words. "You see, things aren't the way they seem. They're—" He stopped, unhappy.

He realized that the two men and the girl were waiting. Hanardy waved his arms aimlessly, indicating things beyond the safeguarding of the meteorite. "All that—that's not real."

Madro turned towards his companions. "It's the concept of a universe of illusion. An old idea, but maybe we should take another look at it." Professor Ungarn murmured, "It would take complex techniques to make it work."

Hanardy said, straining for meaning, "You just keep putting it out there. As if you're doing it, even though you're not. That tunes you in."

"Put what out, Steve?" It was the girl, her voice as strained

as his.

"The world. The universe . . . the whole deal."

"Oh!"

Hanardy went on, "And then, for a moment, you don't put anything there. That's when you do something I don't understand."

"What's that?" The girl's voice, almost emotionless, led him forward.

"You stop everything," said Hanardy wonderingly. "You let the nothingness rush in. And then—you become the real you . . . for as long as you have energy."

He stared at the three people, through them, unseeing.

As from a distance, Madro's voice came to him.

"You see—it's a matter of energy," the man said calmly. "Hanardy?"

He came back into the room, mentally as well as physically. "Yeah?"

"Where did he get his energy?" Madro asked.

"Uh," said Hanardy, "he got most of it out where it was stored—a kind of dark room."

It was a new thought; a picture came with it of how the energy had been put there by somebody else, not by Leigh. Before Hanardy could speak another word, Madro was over there beside him.

"Show us!" he said, and his voice was like a fire, burning

a path of action, demanding counteraction.

Hanardy led the way, his heavy body trembling. He had the feeling that he had made an admission that spelled victory for the Dreegh. But there was no turning back. If this creature was a Dreegh, then resistance was useless. He knew that intuitively.

"If I could only be sure," Hanardy thought miserably.

And the stupid thing was that he was sure. As sure, it seemed to him, as he could ever be. But he wasn't sure enough even to make the attempt to save his own life. As things stood, he'd have to go through with this farce until

the Dreegh—satisfied that all was well—destroyed them all in his own good time.

4

It was twenty minutes later.

... After they had found the little black room to be merely a drab closet where the professor had always kept certain tools, but was otherwise empty.

"Where was it stored?" Madro demanded of Hanardy.

"I mean the energy that Leigh got."

Hanardy pointed unhappily at the metal wall inside the closet.

"Are you saying the energy was in the wall?"

The question once more disturbed Hanardy's sense of the reality of his own thoughts, and so he simply stood there, shaken, as Pat and Professor Ungarn pressed forward and with a portable instrument tested the wall.

Madro did not join them, nor did he again look into the little room. Hanardy felt an inner tremor as the Dreegh, ignoring what the father and daughter were doing, turned

and strode toward him.

"Steve," he said, "I want to talk to you."

He glanced back, raised his voice. "I'm going to take

Hanardy for a little private questioning."

"All right!" That was Pat. But neither she nor her father turned. Madro had not waited. His fingers gripped Hanardy's arm firmly at the elbow. Shrinking, Hanardy realized the other's intent.

A test!

To determine how vulnerable he was.

To the death—if he were that weak.

Even as Hanardy had these awarenesses, Madro drew him away from the storeroom and around a corner. Hanardy kept looking back, not daring to call for help but yet hoping that the professor and his daughter would be motivated to follow.

His final view of them showed them still inside the closet, and the professor was saying, "A series of tests on this wall should—"

Hanardy wondered what they would think when they found him gone—and dead.

Madro drew Hanardy along the side corridor and into a room. He closed the door, and they were alone. Hanardy still not resisting.

Madro stood there for a few moments, tall, lean, smiling. "Let's settle this once and for all," he said softly. "Myself

-against whatever ability you were endowed with."

And because Hanardy had begun to have fantasies, had nurtured a tiny hope that maybe it was true, that maybe something great had rubbed off on him—as Professor Ungarn had implied-for a few seconds, Hanardy actually waited for that something inside him to handle this situation.

That was all the time he had—seconds. The speed of Madro's attack, and the total violent intent of it, instantly

defeated that waiting reaction.

He was lifted effortlessly, grabbed by one foot, held like a rag doll, and, incredibly, was about to have his head dashed against the near wall—when, with a primitive survival spasm of effort, Hanardy kicked with his other foot, kicked hard against the wrist of the hand by which Madro held him.

For that moment, for that one attack, it was resistance enough. The Dreegh let him go. Hanardy fell-the slowmotion fall of less than Earth gravity. Far too slow for the

speed of Madro's second attack.

In his awkward, muscle-bound way, only one of Hanardy's dragging legs actually struck the floor. The next moment he was caught again by fingers that were like granite biting into his clothes and body-Madro obviously neither heeding nor caring which.

And there was no longer any doubt in Hanardy's mind. He had no special ability by which he might defeat the

Dreegh's deadly intent.

He had no inner resources. No visions. He was helpless. His hard muscles were like putty in the steely grip of a man

whose strength overwhelmingly transcended his own.

Hanardy ceased his writhing and yelled desperately, "For Pete's sake, why all this murder when there's only five women Dreeghs and four men left? Why don't you Dreeghs change, try once more to become normal?"

As swiftly as it had started, the violence ended.

Madro let him go, stepped back, and stared at him. "A

message!" he said. "So that's your role."

Hanardy did not immediately realize that the threat was ended. He had fallen to the floor. From that begging position he continued his appeal. "You don't have to kill me! I'll keep my mouth shut. Who'd believe me, anyway?"

"What's normal?" The Dreegh's voice was cold and demanding. The radiation from him—uncleanness—was

stronger.

"Me," said Hanardy.

"You!" Incredulous tone.

"Yeah, me." Hanardy spoke urgently. "What ails me is that I'm a low-lifer, somehow. But I'm a normal lug. Things balance out in me—that's the key. I take a drink, but not because I have to. It doesn't affect me particularly. When I was in my teens once I tried taking drugs. Hell, I just felt it didn't fit in my body. I just threw it off. That's normal. You can't do that with what you've got."

"What's normal?" Madro was cold, steady, remote.

"You're sick," said Hanardy. "All that blood and life energy. It's abnormal. Not really necessary. You can be cured."

Having spoken the strange words, Hanardy realized their strangeness. He blinked.

"I didn't know I was going to say that," he mumbled.

The Dreegh's expression was changing as he listened. Suddenly he nodded and said aloud, "I actually believe we've been given a communication from the Great Galactic. A twelfth-hour, last-chance offer."

"What will you do with me?" Hanardy mumbled.

"The question," came the steely reply, "is what is the best way to neutralize you? I choose this way!"

A metallic something glittered in the Dreegh's hand. From its muzzle a shimmering line of light reached toward Hanardy's head.

The spaceman flinched, tried to duck, had the cringing thought that this was death and stood there expecting at the very least a terrible shock.

He felt nothing. The light hit his face, and it was as if a pencil beam from a bright flashlight had briefly glared into his eyes. Then the light went, and there he stood blinking a little, but unhurt so far as he could determine.

He was still standing there when the Dreegh said, "What you and I are going to do now is that you're going to come with me and show me all the places on this meteorite where there are armaments or small arms of any kind."

Hanardy walked ahead, kept glancing back; and there, each time he looked, was the long body with its grim face.

The resemblance to Thadled Madro was visibly fading, as if the other had actually twisted his features into a duplication of the young male Klugg's face, not using makeup at all, and now he was relaxing.

They came to where the Ungarns waited. Father and daughter said nothing at all. To Hanardy they seemed subdued; the girl was strangely pale. He thought, "They do know!"

The overt revelation came as the four of them arrived in the main living quarters. Professor Ungarn sighed, turned and-ignoring Hanardy-said, "Well, Mr. Dreegh, my daughter and I are wondering why the delay in our execution?"

"Hanardy!" was the reply.

Having uttered the name, as if Hanardy himself were not present, the Dreegh stood for a long moment, eyes narrowed, lips slightly parted, even white teeth clamped together. The result was a kind of a snarling smile.

"He seems to be under your control. Is he?" That was Pat Ungarn, in a small voice. The moment she had spoken, and thus attracted the Dreegh's attention, she shrank, actually retreated a few steps, as he looked at her.

Sween-Madro's tense body relaxed. But his smile was as grim as ever. And still he ignored Hanardy's presence.

"I gave Steve a special type of energy charge that will nullify for the time being what was done to him."

Professor Ungarn laughed curtly. "Do you really believe that you can defeat this—this being—William Leigh defeat him with what you have done to Steve? After all, he's your real opponent, not Hanardy. This is a shadow battle. One of the fighters has left a puppet to strike his blows for him."

Sween-Madro said in an even tone, "It's not as dangerous as it seems. Puppets are notoriously poor fighters."

The professor argued, "Any individual of the race known

to lesser races as Great Galactics—which was obviously not their real name—must be presumed to have taken all such possibilities into account. What can you gain by delay?"

Sween-Madro hesitated. Then: "Steve mentioned a possible cure for our condition." His voice held an edge in it.

There was a sudden silence. It settled over the room and

seemed to permeate the four people in it.

The soundless time was broken by a curt laugh from Sween-Madro. He said, "I sensed that for a few seconds I seemed—"

"Human," said Pat Ungarn. "As if you had feelings and hopes and desires like us."

"Don't count on it." The Dreegh's voice was harsh.

Professor Ungarn said slowly, "I suspect that you analyzed Steve has a memory of mental contact with a supreme, perhaps even an ultimate, intelligence. Now, these Earth people, when awake, are in that peculiar, perennially confused state that makes them unacceptable for galactic citizenship. So that the very best way to defend yourself from Steve's memory is to keep him awake. I therefore deduce that the energy charge you fired at him was designed to maintain in continuous stimulation the waking center in the brain stem.

"But that is only a temporary defense. In four or five days, exhaustion in Hanardy would reach an extreme state, and something in the body would have to give. What will you have then that you don't have now?"

The Dreegh seemed surprisingly willing to answer, as if by uttering his explanations aloud he could listen to them himself, and so judge them.

He said, "My colleagues will have arrived by then."

"So then you're all in the trap," said Professor Ungarn.
"I think your safest bet would be to kill Pat and me right
now. As for Steve—"

Hanardy had been listening to the interchange with a growing conviction that this melancholy old man was arguing them all into being immediately executed.

"Hey!" he interrupted urgently. "What are you trying to do?"

The scientist waved at him impatiently. "Shut up, Steve. Surely you realize that this Dreegh will kill without mercy.

I'm trying to find out why he's holding off. It doesn't fit with what I consider to be good sense."

He broke off. "Don't worry about him killing you. He doesn't dare. You're safe."

Hanardy felt extremely unsafe. Nevertheless, he had a long history of accepting orders from this man, so he remained dutifully silent.

The Dreegh, who had listened to the brief interchange thoughtfully, said in an even tone that when his companions arrived, he, Hanardy, and Pat Ungarn would go to Europa. He believed Pat was needed on such a journey. So no one would be killed until it was over.

"I'm remembering," Sween-Madro continued, "what Steve said about the Great Galactic noticing something. I deduce that what he noticed had to do with Steve himself. So we'll go to Spaceport and study Steve's past behavior there. Right now, let's disarm the entire place for my peace of mind."

Clearly, it would not be for anyone else's.

From room to room, and along each corridor, silently the three prisoners accompanied their powerful conqueror.

And presently every weapon in the meteorite was neutralized or disposed of. Even energy sources that might be converted were sealed off. Thus, the meteorite screens were actually de-energized and the machinery to operate them wrecked.

The Dreegh next cut off escape possibilities by dismantling several tiny space boats. The last place they went—first Hanardy, then the professor, then Pat, and finally Sween-Madro—was Hanardy's space freighter. There also all the weapons were eliminated, and the Dreegh had Hanardy dismantle the control board. From the parts that were presently lying over the floor, the gaunt man, with unerring understanding, selected key items. With these in hand, he paused in the doorway. His baleful gaze caught Hanardy's shifting eyes. "Steve!" he said. "You'll stay right here."

"You mean, inside my ship?"

"Yes. If you leave here for any reason, I'll kill you. Do you understand?"

Hanardy glanced helplessly toward Professor Ungarn and then back at the Dreegh. He said, "There's some work the professor wanted me to do." "Professor Ungarn—" it was the vampire's harsh voice cutting across Hanardy's uncertain protest—"tell him how

unimportant such work is."

Hanardy was briefly aware of the old man's wan smile. The scientist said wearily, "Pat and I will be killed as soon as we have served our purpose. What he will eventually do with you, we don't know."

"So you'll stay right here. You two come with me," Sween-

Madro ordered the profressor and his daughter.

They went as silently as they had come. The airlock door clanged. Hanardy could hear the interlocking steel bolts wheeze into position. After that, no sound came.

The potentially most intelligent man in the solar system

was alone-and wide awake.

5

Sitting, or lying down, waiting posed no problems for Hanardy. His years alone in space had prepared him for the ordeal that now began. There was a difference.

As he presently discovered when he lay down in his nar-

row cot, he couldn't sleep.

Twenty-four Earth hours ticked by.

Not a thinking man, Steve Hanardy; nor a reader. The four books on board were repair manuals. He had thumbed through them a hundred times, but now he got them out and examined them again. Every page was, as he had expected, dully familiar. After a slow hour he used up their possibilities.

Another day, and still he was wide-eyed and unsleeping, but there was a developing restlessness in him, and ex-

haustion.

As a spaceman, Hanardy had received indoctrination in the dangers of sleeplessness. He knew of the mind's tendency to dream while awake, the hallucinatory experiences, the normal effects of the unending strain of wakefulness.

Nothing like that happened.

He did not know that the sleep center in his brain was timelessly depressed and the wake center timelessly stimulated. The former could not turn on, the latter could not turn off. So between them there could be none of the usual interplay with its twilight states.

But he could become more exhausted.

Though he was lying down almost continuously now, he became continually more exhausted.

On the fourth "morning" he had the thought for the first

time: "This is going to drive me crazy!"

Such a fear had never before in his whole life passed through his mind. By late afternoon of that day, Hanardy was scared and dizzy and hopeless, in a severe dwindling spiral of decreasing sanity. What he would have done had he remained alone was not at that time brought to a test.

For late on that fourth "day" Pat Ungarn came through the airlock, found him cowering in his bunk and said, "Steve,

come with me. It's time we took action."

Hanardy stumbled to his feet. He was actually heading after her when he remembered Sween-Madro's orders to him, and he stopped.

"What's the matter?" she demanded.

He mumbled simply, "He told me not to leave my ship. He'll kill me if I do."

The girl instantly impatient. "Steve, stop this nonsense." Her sharp words were like blows striking his mind. "You haven't any more to lose than we have. So come along!"

And she started back through the airlock. Hanardy stood, stunned and shaking. In a single sentence, spoken in her peremptory fashion, she challenged his manhood by implication, recognized that the dumb love he felt for her made him her slave, and so reestablished her absolute ascendency.

Silently, tensely, he shuffled across the metal floor of the airlock and moments later was in the forbidden meteorite.

Feeling doomed.

The girl led the way to what was, in effect, the engine room of the meteorite.

As Steve trailed reluctantly behind her, Professor Ungarn rose up from a chair and came forward, smiling his infinitely tired smile.

His greeting was, "Pat wants to tell you about intelligence. Do you know what your I.Q. is?"

The question barely reached the outer ramparts of Hanardy's attention. Following the girl along one corridor after another, a fearful vision had been in his mind, of Sween-Madro suddenly rounding the next corner and striking him dead. That vision remained, but along with it was a growing wonder. Where was the Dreegh?

The professor snapped, "Steve, do you hear me?"
Forced to look at him, Hanardy was able to remember proudly that he belonged in the 55th percentile of the human race, intelligence-wise, and that his I.Q. had been tested at 104.

"The tester told me that I was above average," Hanardy said in a tone of pleasure. Then, apologetic again, he added, "Of course, beside you guys I'm nothing."

The old man said, "On the Klugg I.Q. scale you would probably rate higher than 104. We take into account more factors. Your mechanical ability and spatial-relations skill would not be tested correctly by any human 1.Q. test that I have examined."

He continued, "Now, Steve, I'm trying to explain this all to you in a great hurry, because some time in the next week you're going to be, in flashes, the most intelligent man in the entire solar system, and there's nothing anybody can do about it except help you use it. I want to prepare you."

Hanardy, who had anxiously stationed himself so that he could keep one eye on the open door-and who who kept expecting the mighty Dreegh to walk in on the little conspiratorial group of lesser beings—shook his head hopelessly.

"You don't know what's already happened. I can be killed.

Easy. I've got no defenses."

He glumly described his encounter with the Dreegh and told how helpless he had been. "There I was on my knees, begging, until I just happened to say something that made him stop. Boy, he sure didn't think I was unkillable."

Pat came forward, stood in front of him, and grabbed his shoulders with both hands.

"Steve," she said in an urgent voice, "above a certain point of I.Q. mind actually is over matter. A being above that intelligence level cannot be killed. Not by bullets, nor by any circumstance involving matter. Now listen: in you is a memory of such an intelligence level. In manhandling you, the Dreegh was trying to see what limited stress would do. He found out. He got the message from the Great Galactic out of you.

"Steve, after that he didn't dare put a bullet into you, or

fire a death-level energy beam. Because that would force this memory to the surface!"

In her intense purposefulness she tried to move him with her hands. But that only made Hanardy aware of what a girlish body she had. So little body, so much imperious woman—it startled him, for she could barely budge him, let alone shake him.

She said breathlessly, "Don't you see, Steve? You're going to be king! Try to act accordingly."

"Look-" Hanardy began stolidly.

Rage flashed in her face. Her voice leaped past his interjection. "And if you don't stop all this resistance, in the final issue *I'll* put a bullet into your brain myself, and then you'll see."

Hanardy gazed into her blue eyes, so abruptly furious. He had a sinking conviction that she would do exactly what she threatened. In alarm, he said, "For Pete's sake, what do you want me to do?"

"Listen to what Dad has to say!" she commanded. "And stop looking the other way. You need a high-speed education and we haven't got much time."

That last seemed like a total understatement to Hanardy. His feeling was that he had no time at all.

Awareness saved him then. There was the room with its machinery, and the old man and his daughter; and there was he with his mind jumping with the new fear of her threat. Hanardy had a flitting picture of the three of them lost forever inside this remote meteorite that was just one tiny part of Jupiter's colossal family of small, speeding particles of matter—a meaningless universe that visibly had no morality or justice, because it included without a qualm creatures like the Dreeghs.

As his skittering thought reached that dark depth, it suddenly occurred to Hanardy that Pat couldn't shoot him. She didn't have a gun. He opened his mouth to tell her of her helplessness. Then closed it again.

Because an opportunity might open up for her to obtain a weapon. So the threat remained, receded in time . . . but was not to be dismissed. Nonetheless, he grew calmer. He still felt compelled, and jittery. But he stayed there and listened, then, to a tiny summary of the story of human in-

telligence and the attempts that had been made to measure it.

It seemed human intelligence tests were based on a curve where the average was 100. Each test Professor Ungarn had seen revealed an uncertainty about what constituted an intelligence factor and what did not. Was the ability to tell left from right important to intelligence? One test included it. Should an individual be able to solve brain twisters? Many testers considered this trait of great importance. And almost all psychologists insisted on a subtle understanding of the meaning of words and many of them. Skill at arithmetic was a universal requirement. Quick observation of a variety of geometric shapes and forms was included. Even a general knowledge of world conditions and history was a requirement in a few tests.

"Now, we Kluggs," continued the professor in his melan-

choly voice, "have gone a step beyond that."

The words droned on through Hanardy's mind. Kluggs were theory-operating people . . . theories based on primary and not secondary abilities. Another race, "higher" than the Kluggs—called the Lennels—operating on certainty . . . high harmonic of authority.

"Certainty, with the Lennels," said the old man, "is of course a system and not an open channel. But even so it

makes them as powerful as the Dreeghs."

On an I.Q. curve that would include humans, Kluggs, Lennels, and Dreeghs, the respective averages would be 100, 220, 380, and 450. The Dreeghs had an open channel on control of physical movement.

"Even a Great Galactic can only move as fast as—he cannot move faster than—a Dreegh," Professor Ungarn commented. He explained, "Such open channels are pathways in the individual to a much greater ability than his

standard I.Q. permits."

Musical, mathematical, artistic, or any special physical, mental, or emotional ability was an open channel that operated outside the normal human, Klugg, or even Dreegh curve. By definition, a Great Galactic was a person whose I.Q. curve included *only* open channels.

It had been reported that the open channel curve began at about 80. And, though no one among the lesser races had ever seen anything higher than 3,000—the limits of the space phenomenon—it was believed that the Great Galactic I.Q.

curve ascended by types to about 10,000.

'It is impossible," said the professor's melancholy voice, "to imagine what kind of an open channel that would be. An example of an 800 open channel is Pat. She can deceive. She can get away with a sleight of hand, a feint, a diversion-"

The old man stopped suddenly. His gaze flicked past Hanardy's right shoulder and fastened on something behind him that Hanardy couldn't see.

The spaceman froze with the sudden terrified conviction that the worst had happened, and that the Dreegh Sween-Madro was behind him.

But it couldn't be, he realized. Professor Ungarn was looking at the control board of the meteorite. There was no door there.

Hanardy allowed himself to turn around. He saw that on the big instrument panel a viewplate had lighted, showing a scene of space.

It was a familiar part of the starry heavens looking out toward interstellar space, away from the sun. Near the center of the scene a light was blinking.

Even as Hanardy watched, the viewplate picture shifted slightly, centering exactly on the blinking light.

Behind Hanardy, there was a gasp from the girl. "Dad,"

she whispered, "is it-?"

Professor Ungarn had walked toward the viewplate, past Hanardy and so into the latter's range of vision. The old man nodded with an air of utter weariness.

"Yes, I'm afraid it is, my dear. The other eight Dreeghs

have arrived."

He glanced hopelessly at Hanardy. "My daughter had some kind of idea of using you against Sween-Madro before they got here."

Hanardy said blankly, "Using me?"

The meaning of that brought him with a jar out of his own body exhaustion.

The old man was shrugging. "Whatever the merit of her

plan, of course, it's now too late."

He finished dully, "Now we'll learn our fate."

The tableau of dejection held for seconds only. A sound, a high-pitched voice, broke through the silence and the dark emotion that filled the room.

"How far away are they?" It was the girl's voice, from behind Hanardy, strained but recognizable. "Exactly how long till they get here?"

Hanardy's mind stirred from its thrall as Professor Ungarn said dully, "Less than two hours would be my guess.

Notice-"

He thereupon started a technical comment to her about the speed with which the viewplate had centered on the ship, implying—he said—the enormous velocity of its approach.

His explanation was never completed. In the middle of it, the girl uttered a screech and then, to Hanardy's amazement, she raced past him and flung herself, arms flailing, at the old man.

She kept striking at his face then, yelling the most bloodcurdling curses in a furious soprano voice. A long moment went by before Hanardy was able to make out what she was saying:

"-You stupid old man! What do you mean, only two

hours? Two hours is all we need, damn you!

At that point Hanardy emerged from his surprise. Awkwardly, he jumped over her, grabbed her pulled her away. "For Pete's sake!" he cried.

The girl tried to turn on him, her struggling body writhing in his grip. But he held her, uttering apologies the while. Finally, she realized that his strength was too much for her. She ceased her efforts, and with an attempt at control said grimly, "Steve, this crazy old fool who is my father has twice now accepted defeat—when it wasn't necessary!"

She broke off, addressed the old man. Her voice went up a whole octave as she said, "Show Steve what you showed

me only a few minutes before I went to get him."

Professor Ungarn was white and haggard. "I'm sorry, my dear," he mumbled. He nodded to Hanardy. "I'm sure you can let her go now."

Hanardy released the girl. She stood straightening her clothes, but her eyes still flashed. "Show him, damn it," she snapped, "and make it quick."

Professor Ungarn took Hanardy's arm and drew him toward the control board, speaking in apologetic tones. "I failed my daughter. But the truth is I'm over three hundred years old. That's just about it for a Klugg; so I keep forgetting how younger people might feel."

Pat—he went on—was a product of a late-life marriage. Her mother had flatly refused to go along on his assignment as a galactic watcher. In bringing the girl with him, he had hoped to shield her from the early shock of discovering that she was a member of a servant race. But isolation had not, in fact, saved her feelings. And now, their very remoteness from the safeguarding military strength of associated lower-level races had brought a horrifying threat of death from which he had decided there was no escape.

"So it didn't even occur to me to tell her-"

"Show him," the girl's voice came shrilly from the rear, "what you didn't bother to tell me."

Professor Ungarn made a few control adjustments, and there appeared on the viewplate first a picture of a room and then of a bed in one corner with an almost naked man lying on it.

The bed came into full focus, filled the viewplate. Hanardy drew in his breath with a sharp hiss of disbelief. It was the Dreegh.

The man who lay there, seemingly unconscious, bore almost no resemblance to the tall, vital being who had come aboard in the guise of Pat's fiance. The body on the bed was unnaturally thin; the rib cage showed. His face, where it had been full-cheeked, was sunken and hollow.

"They need other people's blood and life energy to survive, and they need it almost continuously," the old man whispered. "That's what I wanted to show you, Steve." Her tone grew scathing, as she continued, "My father didn't let me see that until a few minutes ago. Imagine! Here we are under sentence of death, and on the day, almost on the hour that the other Dreeghs are due to arrive, he finally reveals it—something he had watched developing for days."

The old man shut off the scene on the viewplate and sighed.

"I'm afraid it never occurred to me that a Klugg could challenge a Dreegh. Anyway, I imagine Sween-Madro

originally arrived here expecting to use us as a source of blood and life force. And then when you showed all that Great Galactic programming, he changed his mind and decided to await the coming of his colleagues. So there he is—at our mercy, Pat thinks."

Hanardy had spent his years of association with this couple deferring to them. So he waited now, patiently, for the scientist to tell him what to do about the opportunity.

The old man said, with a sigh, "Pat thinks if we make a

bold attack at this stage, we can kill him."

Hanardy was instantly skeptical, but he had never been able to influence this father and daughter in any way, and he was about to follow the old, withdrawing pattern, when he remembered again that there were no weapons around with which to make any kind of attack whatsoever.

He pointed out that fact and was still talking when he felt

something cold touch his hand.

Startled, he glanced down and back—and saw that the girl was pushing a metal bar about one and a half feet long at his palm. Involuntarily, still not thinking, he closed his fingers over it. As soon as he had it firmly in one chunky hand, Hanardy recognized by its feel that it was a special aluminum alloy, hard, light, and tough.

The girl spoke. "And just in case that dumb look on your face means what I think it does," she said, "here are your orders. Take that bar, go where the Dreegh is, and beat him

to death with it."

Hanardy turned slowly, not quite sure that it was he who was being addressed. "Me?" he said. And then, after a long pause, "Hey!"

"And you'd better get started," said the girl. "There isn't

much time."

"Hey!" repeated Hanardy blankly.

7

Slowly, the room swung back into a kind of balance. And Hanardy grew aware that the girl was speaking again.

"I'll go in through the door facing the bed," she stated. "If he can awaken at all in his condition, I want to ask him some questions. I must know about the nature of super-intelligence."

For a brain in as dulled state as Hanardy's, the words were confusing. He had been striving to adjust to the idea that he was the one who was supposed to go in to the Dreegh, and simultaneously he was bracing himself against what she wanted him to do.

With so many thoughts already in his mind, it was hard to get the picture that this slip of a girl intended to confront

the Dreegh by herself.

Pat was speaking again, in an admonishing tone. "You stand just inside the other door, Steve. Now listen carefully. Do your best not to attract his attention, which I hope will be on me. The information I want is for your benefit. But when I yell, 'Come!' don't delay. You come and you kill, understand?"

Hanardy had had a thought of his own. A sudden stark realization. The realization was that in this deadly dangerous situation there was ultimately a solution.

He could cast off in his own spacecraft!

But that meant he would have to obtain the key equipment Sween-Madro had taken from his ship. Obtain it, repair the control board, get away!

To obtain it he'd have to go to where it was—into the Dreegh's bedroom. At least apparently, he would have to do

exactly what Pat wanted.

Fear dimmed before that obvious purpose, yielded to the feeling that there was no other way.

Thinking thus, Hanardy abruptly uttered agreement.

"Yep," he said, "I understand."

The girl had started toward the door. At the tone of his voice, she paused, turned back, and gazed at him suspiciously. "Now, don't you go having any plans of your own!" She

spoke accusingly.

Hanardy was instantly guilty, instantly confused. "For Pete's sake," he said, "I don't like what you want to do—going in there and waking this guy. I don't see any good in my listening to a lecture on intelligence. I'm not smart enough to understand it! So my vote is if we're going in let's just kill him right off."

The girl had turned away. She did not glance back as she walked out of the room. Hanardy grimaced at Professor Ungarn. Moments later he was through the door, following her, weary, hopeless, mentally shut down, but resigned.

Pat heard him stumbling along behind her. Without looking around she said, "You're a weapon, Steve. I have to figure out how to fire that weapon and escape. Basically, that's all we need to do! Get away from the Dreeghs and hide. Understand?"

He was a man stumbling along metal and rock corridors in a remote part of the solar system, his normal stolidness made worse now by an immense weariness. So he heard the words she uttered, even understood their surface meaning.

It was enough awareness for him to be able to mumble,

"Yeah-yeah!"

Otherwise—she went on when he had acknowledged her—he might go off like a firecracker, discharging whatever energy homo galactic had endowed him with in a series of meaningless explosions aimed at nothing and accomplishing nothing.

So the question was: What kind of weapon was he?

"As I see it," she finished, "that information we can only hope to gain from the Dreegh. That's why we have to talk to him."

"Yeah," mumbled Hanardy hoarsely. "Yeah."

They came all too quickly to their destination. At the girl's nod Hanardy broke into an uneven lope and ran around to the far corridor. He fumbled the door open and stepped inside.

At this point Pat had already been through her door for fifteen seconds. Hanardy entered upon a strange scene in-

deed.

On the bed, the almost naked body was stirring. The eyes opened and stared at the girl, and she said breathlessly, "That! What you just now did—becoming aware of me. How do you do that?"

From where he stood, Hanardy could not see the Dreegh's head. He was aware only that the Dreegh did not answer.

"What," asked Pat Ungarn, "is the nature of the intelligence of a Great Galactic?"

The Dreegh spoke. "Pat," he said, "you have no future, so why are you making this inquiry?"

"I have a few days."

"True," said Sween-Madro.

He seemed unaware that there was a second person in

the room. So he can't read minds! Hanardy exulted. For the

first time he had hope.

"I have a feeling," Pat was continuing, "that you're at least slightly vulnerable in your present condition. So answer my question! Or—"

She left the threat and the sentence unfinished. Again the body on the bed shifted position. Then:

"All right, my dear, if it's information you want, I'll give you more than you bargained for."

"What do you mean?"

"There are no Great Galaotics," said the Dreegh. "No such beings exist, as a race. To ask about their intelligence is—not meaningless, but complex."

"That's ridiculous!" Pat's tone was scathing. "We saw

him!"

She half-glanced at Hanardy for confirmation and Hanardy found himself nodding his head in full agreement with her words. Boy, he sure knew there was a Great Galactic.

On the bed, Sween-Madro sat up.

"The Great Galactic is a sport! Just a member of some lesser race who was released by a chance stimulus so that he temporarily became a super-being. The method?" The Dreegh smiled coldly. "Every once in a while, accidentally, enough energy accumulates to make such a stimulus possible. The lucky individual, in his super-state, realized the whole situation. When the energy had been transformed by his own body and used up as far as he himself was concerned, he stored the transformed life energy where it could eventually be used by someone else. The next person would be able to utilize the energy in its converted form. Having gone through the energy, each recipient in turn sank back to some lower state.

"Thus William Leigh, Earth reporter, had for a few brief hours been the only Great Galactic in this area of space, By now his super-ability is gone forever. And there is no one to replace him.

"And that, of course," said the Dreegh, "is the problem with Hanardy. To use his memory of intelligence in its full possibility, he'll need life energy in enormous quantities. Where will he get it? He won't! If we're careful, and investigate his background cautiously, we should be able to prevent Steve getting to any source, known or unknown."

Hanardy had listened to the account with a developing empty feeling from the pit of his stomach. He saw that the color had drained from the girl's face.

"I don't believe it," she faltered. "That's just a-"

She got no further, because in that split instant the Dreegh was beside her. The sheer speed of his movement was amazing. Hanardy, watching, had no clear memory of the vampire actually getting off the bed.

But now, belatedly, he realized what the Dreegh's movements on the bed must have been—the maneuverings, rebalancings. The creature-man had been surprised—had been caught in a prone, helpless position—but had used the talk to brace himself for attack.

Hanardy was miserably aware that Pat Ungarn was equally taken by surprise. Sween-Madro's fingers snatched at her shoulder. With effortless strength he spun her around to face him. His lank body towered above her as he spoke.

"Hanardy has a memory of something, Pat. That's all. And that is all there is. That's all that's left of the Great Galactics."

Pat gasped, "If it's nothing, why are you scared?"

"It's not quite nothing," Sween-Madro replied patiently. "There is a-potential. One chance in a million. I don't want him to have any chance to use it, though of course we'll presently have to take a chance with him and put him into a state of sleep."

He released her and stepped back. "No, no, my dear, there's no possible chance of you making use of some special ability in Hanardy-because I know he's over there by the door. And he can't move fast enough to get over here and hit me with that metal bar."

The tense Hanardy sagged. And Pat Ungarn seemed frozen, glaring at the creature. She came back to life abruptly. "I know you don't dare shoot Steve. So why don't you shoot me?" Her tone was up in pitch, challenging.

"Hey!" said Hanardy. "Careful!"
"Don't worry, Steve," she answered gaily without turning around. "It's not because I have any I.Q. potentialities. But he won't touch me either. He knows you like me. You might have a bad thought about him at a key moment, later. Isn't that right, Mr. Dreegh? I've got your little dilemma figured out, haven't I, even though I've only got a Klugg brain?"
Her words seemed suicidal to Hanardy. But Sween-Madro

Her words seemed suicidal to Hanardy. But Sween-Madro just stood gazing at her, swaying a little, saying nothing—a naked scarecrow of a man from the waist up, and below wearing knee-length dungarees over bone-thin legs.

Yet there was no belief in Hanardy that the Dreegh was vulnerable. He remembered the other's high-speed movements—that seemingly instantaneous transition from one location in space to another . . . from the bed to Pat, at invisible speed. Fantastic!

Once more Pat's voice broke the silence, mockingly. "What's this? An I.Q. of 400 or 500 baffled? Doesn't know what to do? Remember, no matter what action you take, he can't stay awake much longer. It's only a matter of time before something has to give."

At that point, another sharp anxiety struck through Hanardy. He thought: "She's wasting time. Every minute those other Dreeghs are getting closer!"

The thought was so urgent in his mind that he spoke it aloud. "For Pete's sake, Miss Pat, those other Dreeghs'll be here any second—"

"Shut up, you fool!"

Instantly shrill, hysterical, terrified—that was her totally unexpected reaction.

She said something else in that same high-pitched tone, but Hanardy did not hear it clearly. For in that moment between his own words and hers, the Dreegh turned. And his arm moved. That was all that was visible. Where did it move to? The super-speed of the movement blurred that. It could only, logically, have been toward the pocket of his dungarees, but nothing like that was visible.

A weapon glittered; a beam of light touched Hanardy's face.

A blackness swept over him, he realized what else it was the girl had said. "Steve, he'll put you to sleep while that thought about the Dreeghs' coming quickly is in your mind . . .

8

How swiftly can transition between wakefulness and sleep take place?

As long as it requires for the wakefulness center to shut

off and the sleep center to turn on.

So there is no apparent conscious time lag. If you live a dull, human existence, it seems brief enough.

To Hanardy, who was normally duller than most, it seemed

no time at all.

He started forward, his lips parted to speak—and he was already asleep . . . so far as he—the self—was aware. He did have a vague feeling of starting to fall.

Consciously, nothing more occurred.

Below the conscious, there was a measurable lapse of time.

During that time, the particles inside the atoms of his body did millions of millions of separate actions. And molecules by the quadrillion maneuvered in the twilight zone of matter. Because of the thought that had been in Hanardy's mind, at some level of his brain he noticed exact spots of space, saw and identified the other-ness of the Dreeghs in the approaching Dreegh ship, estimated their other-whereness, computed the mathematics of change. It was simple in the virtual emptiness of space, difficult where matter was dense. But never impossible.

As he did so, the Dreegh ship with its eight Dreeghs changed location from one spot to another exact spot in space, bridging the gap through a lattice-work of related

spots.

In the bedroom in the meteorite, the visible event was that Hanardy fell. A twisting fall, it was, whereby he sprawled on his side, the arm with the metal bar in it partly under him.

As Hanardy collapsed to the floor, the Dreegh walked past Pat toward the open door behind it. Reaching it, he clutched at it, seemingly for support.

Pat stared at him. After what had happened she didn't quite dare to believe that his apparent weakness was as great as she saw it to be.

Yet after a little, she ventured, "May I ask my father a question?"

There was no answer. The Dreegh stood at the door, and he seemed to be clinging to it.

Excitement leaped through the girl.

Suddenly she dared to accept the reality of the exhaustion that was here. The Dreegh's one mighty effort had depleted him, it seemed.

She whirled and raced over to Hanardy, looking for the metal bar. She saw at once that he was lying on top of it and tried to roll him over. She couldn't. He seemed to be solidly imbedded in the floor in that awkward position.

But there was no time to waste! Breathing hard, she reached under him for the metal weapon, found it, tugged at it.

It wouldn't budge.

Pull at it, twist it, exert all her strength—it was no use. Hanardy had a vicelike grip on the bar, and his body weight reinforced that grip. Nothing she could do could move it, or him.

Pat believed the position, the immovability, was no accident. Dismayed, she thought the Dreegh had caused him to fall like that.

She felt momentarily awed. What an amazing prediction ability Sween-Madro had had—to have realized the nature of the danger against him and taken an exact defense against it.

It was a maneuver designed to defeat, exactly and precisely, a small Klugg woman, whose ability at duplicity could not lighten the weight of a body like Hanardy's enough to matter and whose ability to solve problems did not include the ability to unravel a muscularly knotted hand grip.

But—she was on her feet, infinitely determined—it would do him no good!

The Dreegh also had a weapon. His only hope must be that she wouldn't dare come near him.

Instants later, she was daring. Her trembling fingers fumbled over his dungarees, seeking openings.

They found nothing.

But he had a weapon, she told herself, bewildered. He fired it at Steve. I saw him!

Again, more frantically, she searched all the possibilities of the one garment he wore—in vain.

She remembered, finally, in her desperation, that her father must have been watching this room. He might have seen where it was.

"Dad!" she called anxiously.

"Yes, my dear?" The reply from the intercom came at once, reassuringly calm.

Watching the Dreegh warily, she asked, "Do you have any

advice on how to kill him?"

The old man, sitting in the control room of the meteorite, sighed. From his viewpoint, he could on one viewplate see the girl, Hanardy's unconscious body and Sween-Madro; on another he observed gloomily that the Dreegh ship had arrived to an airlock. As he watched that second viewplate, three men and five women came out of the ship and into a corridor of the meteorite. It was obvious that killing Sween-Madro was no longer of value.

The girl's voice cut across his awareness. "He must have used the super-speed again without my noticing and hidden his weapon. Did you see what he did with it?"

What Professor Ungarn was seeing was that the newly arrived Dreeghs, though in no hurry, were heading directly toward Madro and Pat.

Watching them, the professor thought, "Pat was right." Sween-Madro had been vunerable. He could have been killed. But it was too late.

Sick with self-recrimination, he abandoned the control room and hurried to join his daughter.

By the time he arrived, Sween-Madro was back in the bed, and Hanardy had been lifted onto a powered dolly which had been wheeled alongside a machine that had evidently been brought from the Dreegh ship.

The machine was a simple device with a pair of bulbous, transparent cups and a suction system. A needle was inserted into a blood vessel on Hanardy's right arm. Swiftly, a turgid bluish-red liquid rose in one of the bulbous cups; about a quart, Professor Ungarn estimated to his daughter in a whisper.

One by one, wordlessly, the Dreeghs went to the machine. Another needle was used. And into each a tiny drain of blood siphoned from the red stuff in the bulbous cup. It seemed as if about half of it was taken.

Still without anyone speaking, the needle was inserted into Sween-Madro's arm, and the rest of the blood from the cup flowed into him.

Pat stared at the dreadful beings with avid curiosity. All her life she had heard of, and been warned against, these creatures; and here they were from all those distances of years and miles. Four men and five women.

Three of the five women were brunette, one was a blonde; the fifth was a redhead.

The women were, every one, tall and willowy. The men were uniformly six feet four or five and gaunt of build. Was height a part of the Dreegh illness? Pat wondered, seeing them together like this. Did Dreegh bones grow as a result of their disease? She could only wonder.

The figure on the bed moved. Sween-Madro opened his

eyes and sat up.

He seemed shaky and unsure. Again, there was silent action. The Dreegh men did not move, but the women one by one went over and lightly kissed Sween-Madro on the lips.

At each touch of lips there was a faint bluish light, a flash of brightness, like a spark. Invariably, the blue spark leaped from the woman to the man.

And with each flash he grew more alive. His body became

visibly larger. His eyes grew bright.

Pat, who had been watching with total fascination, suddenly felt two pairs of hands grab her. She had time to let out a shriek as two Dreegh men carried her over to Sween and held her above him, her face over his.

At the final moment, she ceased her futile struggle and froze.

She was aware of Sween's sardonic eyes gazing up at her. Then, with a deliberate movement, he raised his head and brushed her lips with his.

She expected to die.

Deep inside the back of her head, a fire started. The heat of it seemed instantly unbearable; instantly there was a flash of blue flame from her lips to his.

Then she was back on the floor, dizzy, but—as she realized presently—recovering. And still alive.

Sween-Madro swung his feet over the edge of the bed and said, "The existence of such brother-and-sister energy flows, Pat—which you have now experienced—and the Dreegh ability to use them, make it likely that we could become the most powerful beings in the galaxy on a continuing basis. If we can defeat Hanardy. We only took about ten percent from you. We don't want you damaged—yet."

He stood up, walked over, and looked down at the unconscious spaceman. Presently he beckoned Pat and Profes-

sor Ungarn; father and daughter came at once.

The Dreegh said, "I'm still not well. Can you detect any change in him?" He did not wait for a reply, but said in relief, "I guess nothing happened. He looks as low-grade a human as you could ever not want to meet or deal with in any way, and that's the way he was before—don't you agree?"

Pat said quickly, "I don't understand. What did you

expect?"

"Hopefully, nothing," was the reply. "But that remark about how near our ship was was the first un-programmed use of his ability. A spatial relationship action like that comes in the Great Galactic intelligence curve at about I.Q. 1,200."

"But what did you fear?" Pat persisted.

"That it would feed back through his nervous system!"

"What would that do?"

The Dreegh merely stared at her, sardonically. It was Professor Ungarn's voice that finally broke the silence. "My dear, the Dreeghs are actually acting as if their only enemy is a programmed Hanardy."

"Then you believe their analysis of the nature of the

Great Galactics?"

"They believe it; so I believe it."

"Then there's no hope?"

The old man pointed at Hanardy. "There's Steve."

"But he's just a bum. That's why we selected him to be our dray-horse, remember?" She spoke accusingly. "Because he was the dumbest, most honest jerk in the solar system—remember?"

The old man nodded, suddenly looking gloomy. Pat became aware that the Dreeghs were watching them as if they were listening.

It was one of the dark-haired women who spoke. "My

name is Rilke," she said. She went on, in a low, husky voice, "What you've just described—a man as unimportant as this one—is one of the reasons why we want to go to Europa. We must find out what the Great Galactic did see in this strange little man. We should know, because for our blood storage tanks and energy pool we need the blood and life force of a million people from this otherwise undefended planetary system. And we dare not kill a single one of those million until the riddle of Hanardy is resolved."

9

Take a sentient being-

Everyone aboard the Dreegh super-ship that flew to the moon Europa in thirty hours (instead of many weeks) fitted that description: the Dreeghs, Pat, Professor Ungarn, and the sleeping Hanardy.

They had brought along Hanardy's freighter to be their landing craft. They came down without incident into Hanardy's permanent spaceship berth in Spaceport, the large

moon's principal city.

Consider any sentient person-

That includes a man asleep . . . like Hanardy.

There he lies, helpless. In that fourth sleep stage that Hanardy was in—the deep delta-wave stage—push at him, hit him, roll him over. It is enormously difficult to awaken him. Yet it is in this state that a person can act out a sleepwalker's strange goal.

Force this sentient individual to interact with a grossly

vast universe-

"We're taking no chances," said the Dreegh brunette woman, Rilke. "We're going to bring him into motion on the somnambulistic level."

It was Sween who directed a bright light at Hanardy's face; after mere seconds, he shut it off.

There was a measurable passage of time. Then the body on the bed stirred.

A second woman—the blonde—without glancing up from the instrument she was monitoring, made a gesture and said hurriedly, "The somnambulistic purpose is in the delta-wave band 3-10-13B."

It was a private nomenclature that meant nothing to Pat.

But the words caused an unexpected flutter of excitement

among the Dreeghs.

Sween-Madro turned to Pat. "Have you any idea why Hanardy should want to visit with, and have a feeling of affection for, thirteen people in Spaceport?"

Pat shrugged. "He associates with certain space bums around town," she said contemptuously. "Typical hangerson of the kind you find out in space. I wouldn't waste a

minute on them."

Sween said coldly, "We take no chances, Pat. The ideal solution would be to kill all thirteen. But if we do, Hanardy might have punitive dreams about us as he awakens—which awakening will happen very soon now, one way or another. So—" the long gaunt face cracked into a grimace of a smile—"we'll render them useless to him."

"Ssssh!" said the blonde woman. She motioned toward the figure on the bed.

The somnambulistic Hanardy had opened his eyes.

Pat was aware, then, of the Dreeghs watching alertly. Involuntarily, briefly, she held her breath and waited.

Hanardy did not glance at her or at the Dreeghs, showed no awareness of anyone else being in the room.

Without a word, he got out of bed and removed his pajamas. Then he went into his bathroom and shaved and combed his hair. He came out again into the bedroom and began to dress, putting on his dirty pants, a shirt, and a pair of boots.

As Hanardy walked out of the room, Rilke shoved at

Pat. "Remain near the sleepwalker," she commanded.

Pat was aware that Rilke and Sween-Madro stayed close behind her. The others had slipped somewhere out of sight.

The somnambulistic Hanardy opened the airlock and headed down the gangplank.

Sween-Madro gestured with his head for Pat to follow.

The girl had hestitated at the top of the spidery "plank." And now she stood for a moment gazing out at the city of Spaceport.

The airlock of Hanardy's freighter was located about fifty feet above the heavy lower scaffolding that held the vessel. There was a space of about five feet between the opening and the upper scaffolding which actually constituted a part of the dock.

Almost straight ahead of her Pat could see the first building of the city. It was hard for her to realize that the entire populace of the port, with all their available equipment, had no chance against the Dreeghs. There was no protection here for her, or Hanardy, or anyone.

Awe came. The decisive factor was the intelligence of the

Dreeghs.

She thought, "And what's in Steve's memory of intelligence is all that stands between these vampires and their victims."

Minutes later she found herself walking beside Hanardy. She stole a glance at his blank face, so stolid and unintel-

lectual. He seemed like a small hope indeed.

The Dreeghs and she followed Hanardy along a street, into a hotel, up an elevator, and along a corridor to a door numbered 517. Hanardy pressed a little button, and after a little the door opened. A middle-aged woman shuffled into view. She was dumpy and bleary-eyed, but her face brightened into a welcoming smirk as she saw Hanardy.

"Hi, there, Han!" she yelled.

Having spoken, she must have realized that the Dreeghs and Pat were with the spaceman. If she had any defensive thought, it was too late. Sween made her helpless with his mechanical light-flash hypnotism, about which he commented casually after they were inside and the door shut, "Nothing more complex is needed for human beings, or—" he shrugged—"Kluggs. Sorry, Pat," he apologized to the girl, "but the fact is that, like the people of this system, you also have a vague idea that hypnotism and other non-conscious phenomena were invented by hypnotists and similar unscrupulous people."

He added ruefully, "You'll never surprise a Lennel or a Meddler or a Hulak with any control method short of—"

He broke off. "Never mind!"

He turned to the woman. Presently, under his guidance, she was speaking enforced truths about her real relationship with Hanardy.

From the time they had met, Hanardy had given her money.

"What does he really get for it?" asked Rilke.

"Nothing."

Since their method evoked only truth, Rilke frowned at Sween. "It couldn't be altruism. Not on his low level."

It was visibly an unexpected development. Pat said scathingly, "If altruism is an I.Q. factor, you Dreeghs probably come in below idiot."

The man did not reply. The next instant his preternaturally long body was bending over the bloated female whom they had so briefly interrogated. There was a flash of blue as his lips touched hers. Half a dozen times he repeated that caricature of a kiss. Each time, the woman grew visibly smaller, like a sick person fading away on a hospital bed.

Finally, a bright light was flashed into the tired eyes, excising all memory of her degradation. But when they departed, the shriveled being on the bed was still alive.

The next person that the somnambulistic Hanardy led them to was a man. And this time it was Rilke who took the glancing kiss, and it was into her nervous system that the blue fire was drawn.

They drained all thirteen of Hanardy's friends in the same way, and then they decided to kill Hanardy.

Grinning, Sween explained, "If we blow him up with you, the woman for whom he feels a dumb devotion, standing beside him in his home port—the only home he knows—he'll be busy protecting those he loves. And then we, who will be out in space while this is going on, will probably survive the few instants that it will take for him to awaken."

As she heard those words, Pat felt a hardening of her own resolve, a conviction that she had nothing to lose

They had started up the metal gangplank that led to the airlock of Hanardy's ship. Hanardy walked blankly in front, behind him was the girl, then Rilke, and, bringing up the rear, Sween. As they reached the final few feet, Pat braced herself and spoke aloud.

"It seems wrong-" she said.

And leaped forward. She put her hands against Hanardy and shoved him over the side of the plank.

As she expected, the Dreeghs were quick. Hanardy was still teetering over the fifty-foot drop from the narrow walk when both the man and woman were beside him. As one person, they reached over the low handrail, reached out, reached down. That swiftly they had him.

In pushing at Hanardy, Pat found herself automatically propelled by the effort of her thrust away from Hanardy and over the other edge of the plank.

As she fell, she completed in her mind the sentence she had begun: "It seems wrong . . . not to put that dumb love

to the utmost test!"

10

Spaceport, on Europa, like other similar communities in the solar system, was not at all like an ordinary little town of four thousand human beings. If anything, it resembled an old-style naval refueling station in the South Pacific, with its military establishment and garrison. Except that the "garrison" of Spaceport consisted of technical experts who worked in complex mechanical systems for the repair and servicing of spaceships. In addition, Spaceport was a mining post where small craft brought their meteorite ore, gigantic plants separated the precious from the debris, and the resultant refined materials were trans-shipped to Earth.

The similarity to a South Pacific port was borne out in one other respect. Exactly as each little island post of Earth's Pacific Ocean gradually accumulated a saturation of human flotsam and jetsam, so on Spaceport there had gathered a strange tribe of space bums. The tribe consisted of men and women in almost equal numbers, the size of the group being variable. Currently, it consisted of thirteen persons. They were not exactly honest people, but they were not criminals. That was impossible. In space, a person convicted of one of the basic crimes was automatically sent back to Earth and not allowed out again. However, there was a great tolerance among enforcement officials as to what constituted a crime. Not drunkenness, certainly, and not dope addiction, for either men or women. Any degree of normal sex, paid for or not was never the subject of investigation.

There was a reason for this latitude. The majority of the persons involved—men and women—were technically trained. They were bums because they couldn't hold steady jobs, but during rush periods, a personnel officer of the pressured company could often be found down in the bars on Front Street looking for a particular individual or group. The

bums thus located might then earn good money for a week or two, or perhaps even three.

It was exactly such a personnel officer looking for exactly such lost souls who discovered all thirteen of the people he wanted—four women and nine men—were sick in their hotel rooms.

Naturally he called the port authorities. After an examination, the M.D. who was brought in stated that all thirteen showed extreme weakness. They seemed to be, as he so succinctly put it, "only marginally alive."

The report evoked an alarm reaction from the Port Authority. The director had visions of some kind of epidemic sweeping up from these dregs of people and decimating his

little kingdom.

He was still considering a course of action when reports from private doctors indicated that the illness, whatever it was, had affected a large number of affluent citizens of Spaceport in addition to the bums.

The total in the final count came to a hundred and ninetythree persons sick with the same loss of energy and neardeath apathy.

11

At some mind level, Hanardy became aware that Patricia Ungarn was falling to her death.

To save her, he had to get energy from somewhere.

He knew immediately where the energy would have to come from.

For a cosmic moment, as his somnambulism was disrupted and replaced by the dreaming state that precedes awakening, he was held by rigidities of his personality.

There was a split instant, then, as some aware part of him gazed in amazement and horror at a lifetime of being a sloppy Joe.

That one glance of kaleidoscopic insight was all that was necessary.

The barriers went down.

Time ceased. For him, all particle flows ended.

In that forever state, Hanardy was aware of himself as being at a location.

Around him were one hundred ninety-three other locations.

He observed at once that thirteen of the locations were extremely wavery. He immediately excluded the thirteen from his purpose.

To the remaining one hundred eighty locations he made a postulate. He postulated that the one hundred eighty would

be glad to make immediate payment.

Each of the one hundred eighty thereupon willingly gave to Hanardy seven-tenths of all the available life energy in their one hundred eighty locations.

As that energy flowed to Hanardy, time resumed for him.

The living universe that was Steve Hanardy expanded out to what appeared to be a great primeval dark. In that dark were blacker blobs, nine of them—the Dreeghs. At the very heart of the black excrescences ran a fine wormlike thread of silvery brightness: the Dreegh disease, shining, twisting, ugly.

As Hanardy noticed that utterly criminal distortion, he

became aware of a red streak in the sinister silver.

He thought, in immense astonishment, "Why, that's my blood!"

He realized then with profound interest that this was the blood the Dreeghs had taken from him when they first arrived at the Ungarn meteorite.

They had given Sween most of it. But the others had each

eagerly taken a little of the fresh stuff for themselves.

Hanardy realized that that was what the Great Galactic had noticed about him. He was a catalyst! In his presence by one means or another people got well . . . in many ways.

In a few days longer, his blood in them would enable the

Dreeghs to cure their disease.

The Dreeghs would discover the cure belatedly—too late to change their forcing methods.

For Hanardy, the scene altered.

The nine black blobs were no longer shaped by their disease, as he saw them next. He found himself respecting the nine as members of the only race that had achieved immortality.

The cure of them was important.

Again, for Hanardy, there was a change. He was aware of long lines of energy that were straight and white flowing at him from some greater darkness beyond. In the near

distance was a single point of light. As his attention focused there, all the numerous lines, except from that light point, vanished.

It occurred to Hanardy that that was the Dreegh ship and that, in relation to earth, it would eventually be in a specific direction. The thin, thin, white line was like a pointer from the ship to him. Hanardy glanced along that line. And because he was open—oh, so open—he did the touching. Then he touched other places and did a balancing thing between them and the Dreegh ship.

He oriented himself in space.

Oriented it!

As he completed that touching, he realized that the Dreegh ship was now slightly over six thousand light years away.

That was far enough, he decided.

Having made that decision, he allowed particle flow to resume for the Dreeghs. And so—

As time began again, the Dreeghs found themselves in their own spaceship. There they were, all nine of them. They gazed uneasily at each other and then made a study of their surroundings. They saw unfamiliar star configurations. Their unhappiness grew. It was not a pleasant thing to be lost in space, as they knew from previous experience.

After a while, when nothing further happened, it became apparent that—though they would probably never again be able to find the Earth's solar system—they were safe. . . . Pat's first consciousness of change was that she was no

Pat's first consciousness of change was that she was no longer falling. But no longer on Europa. As she caught her balance, she saw that she was in a familiar room.

She shook her head to clear away the fuzziness from her Ungarn meteorite, her home. She heard a faint sound and swung about—and paused, balancing on one heel, as she saw her father.

There was an expression of relief on his face. "You had me worried," he said. "I've been here for more than an hour. My dear, all is well! Our screens are back to working; everything is the way it was . . . before. We're safe."

"B-but," said the girl, "where's Steve?"

... It was earlier. Hanardy had the impression that he was remembering a forgotten experience on the Ungarn meteo-

rite—a time before the arrival of Sween-Madro and the second group of Dreeghs.

The Great Galactic of that earlier time, he who had been William Leigh, bent over Hanardy where he lay on the floor.

He said with a friendly, serious smile, "You and that girl make quite a combination. You with so much owed to you, and she with that high ability for foolhardiness. We're going to have another look at such energy debts. Maybe that way we'll find our salvation."

He broke off. "Steve, there are billions of open channels in the solar system. Awareness of the genius in them is the next step up for intelligence. Because you've had some feedback, if you take that to heart you might even get the girl."

Leigh's words ended abruptly. For at that instant he touched the spaceman's shoulder.

The memory faded—

12

It was several weeks later.

On the desk of the Port Authority lay the report on the illness which had suddenly affected one hundred ninety-three persons. Among other data, the report stated:

It develops that these people were all individuals who during the past fifteen years have taken advantage of a certain low I.Q. person named Steve Hanardy. As almost everyone in Spaceport is aware, Hanardy—who shows many evidences of mental retardation—has year after year been by his own simple-minded connivance swindled out of his entire income from the space freighter, Ecton-66 (a type classification)—which he owns and operates.

In this manner so much money has been filched from Hanardy that first one person, then another, then many, set themselves up in business at their victim's expense. And as soon as they were secure, each person in turn discarded the benefactor. For years now, while one human leech after another climbed from poverty to affluence, Hanardy himself has remained at the lowest level.

The afflicted are slowly recovering, and most are in a surprisingly cheerful frame of mind. One man even said to

me that he had a dream that he was paying a debt by becom-

ing ill, and in the dream he was greatly relieved.

There's some story around that Hanardy has married the daughter of Professor Ungarn. But to accept that would be like believing that everything that has happened has been a mere background to a love story.

I prefer to discount that rumor and prefer to say only that it is not known exactly where Hanardy is at present.

FINAL COMMENT

Gray Walter, the British physiologist, argues in his book about the brain that the development of the human cortex—where the reasoning ability resides—resulted from the following: The tiny tree creature that was one of man's earliest ancestors had to "learn" to restrain its impulse when its saw its natural food. The impulse was to go forward instantly and seek to capture and devour it. The restraint was necessary because, being a tree creature, it was usually up a tree—literally—at the moment it perceived the mobile food supply.

Picture a majority of these creatures unthinkingly stimulated by the sight of the food going toward it without pause

-and falling seventy-five feet to their deaths.

Those of our tree ancestors that survived, says Dr. Walter, developed inhibitory mechanisms in the brain. In the course of thousands, if not millions, of years, these inhibitory and related neural evolvements became the colossal cortex.

In a parallel fashion, I believe—as I have tirelessly pointed out—that the science-fiction reader ceaselessly adds meaning to a science-fiction story. In the course of a lifetime he will probably do this millions of times. This changes his brain right now; that is, it modifies his behavior progressively. The only question is, how many generations will it require for that change to be passed on genetically?

And if such a change finally takes place, what then?

Don't worry, people. Reality will continue to live—on the new level.

Why do I bother with all this? Meaning, why does one person read science fiction while another does not? This is a question I do not propose to deal with in this present work.

On the surface, being interested in unreality rather than in reality writing looks irrational. In today's world, reality writing, well done, has ten to a hundred times the potential readership of unreality writing.

I wish I could get interested in it. I believe I could make

a fortune in a few years.

It's so simple to do. But as I read the—to me—stereotyped lines about muscle aches and full-stomach breath and going to the bathroom and spreading a girl's legs; and about the sounds and the sights and the touch and taste and smell of going to a hotel, or a hospital, or witnessing a fire in a department store; and about taking off in a big plane with a cargo of conspirators aboard (they're going to hijack it and get a million dollars), and about how great it is to be a Gruk and speak Grukan, which is such a homey language and makes you feel all is right with the world whenever you hear its peculiar harsh intonations; and on and on . . . I just can't work up any enthusiasm.

People are involved in such matters, and it's all right that they are. But man is not going anywhere on that level of existence. Individuals just do and have and are and feel—and it's okay. But, to me, it's the same wheels turning over, the same overall thoughts, as twenty thousand years ago.

This is what we do during our three seconds (in a manner of speaking) of life in this vast universe. So long as I keep my gaze on the ground, I enjoy and am and have too, because living human beings should manifest like that—that's the way we're constructed. On this level, I never argue with the endless repetitions that feed back to me from three and a half billion human beings.

I'm glad they're there, with their bright eyes and bright brains. And I'm glad they're keeping the place going. What bothers me is that they not only live these repetitions

What bothers me is that they not only live these repetitions—they also want to read about them. I could understand reading about them once. But, endlessly?

When I raise my eyes and look up at the stars, and when I locate myself in space, and visualize me here on a small planet of a G-type sun at the outer rim of the Milky Way galaxy, thirty thousand light years along one "spoke" from that galaxy's center—I'm grateful to science fiction for gradually changing my brain. For better or worse doesn't matter, just so it's changed.

Reading science fiction lifted me out of the do-and-be-and-have world and gave me glimpses backward and forward into the time and space distances of the universe. I may live only three seconds (so to speak), but I have had the pleasure and excitement of contemplating the beginning and end of existence. Short of being immortal physically, I have vicariously experienced just about everything that man can conceive

will happen by reading science fiction.

I write my science fiction in eight-hundred-word scenes. Each scene has five steps. I write in what I call fictional sentences. When I was writing confession-type (reality) stories, every sentence became a fictional sentence because it had an emotion in it. In writing science fiction, I tried to write each sentence in such a way that the reader would have to make a creative contribution—that's the science fictional sentence.

My feeling is that once a reader has read any science fiction of mine, his brain will no longer be the same.

That's my mark on the sands of time: several million readers all over the world changed (for better or worse—I think for better) without their even noticing it.

That, also, is reality.

However, just as I finally—a few years ago—completed my study of human behavior by way of dianetics, so I feel that my study of science fiction is about done. I have looked at the interactions of time and space on a far-out level, and I'm ready for the next step of living and doing.

Does that mean I shall immediately cease writing science fiction? Not at all. I still have a few ongoing experiments in dianetics—they're on myself. Similarly, I have twenty unfinished science-fiction novels and about two dozen unfinished short stories lying around. But my feeling is I can complete those with my left hand, as the saying goes.

What shall my next step be?

Those people who are interested in such mundane things as what happens to authors they read will no doubt eventually discover what I'm up to.

Good luck to you, too.





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