

# TIME WAITS FOR WINTHROP AND FOUR OTHER SHORT **NOVELS FROM**

EDITED BY FREDERIK POHL
DOUBLEDAY SCIENCE FICTION

When a writer sits down to create a science fiction story, he can count on very little help from his own concrete experience, for his business is exploring worlds we don't know. In none of these worlds is there much we can take for granted - all the commonplaces of daily life in them must be made explicit.

For this reason, among others, the short novel is the best length for a work of science fiction. It gives the writer space to develop the complexities of his idea, examine its implications and make the unreal world of the story as familiar to the reader as his own.

Frederik Pohl, now editor of Galaxy Magazine and himself a master of science fiction, has put together a collection which shows how good this genre can be - and demonstrates the high quality of the material published by Galaxy.

# Galaxy READER

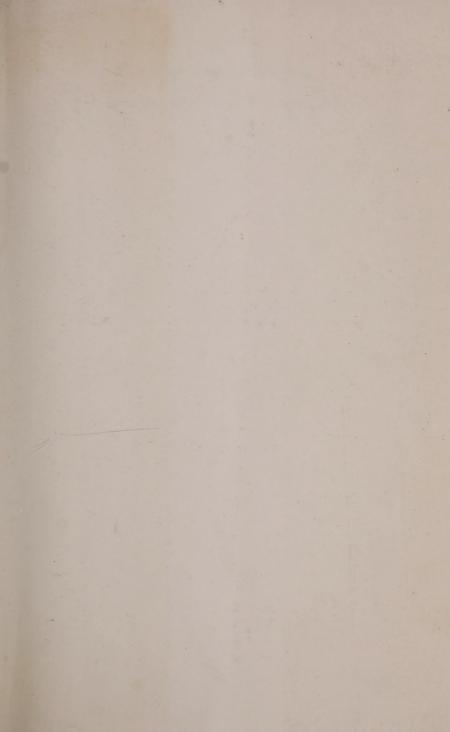
# EDITED BY H. L. GOLD

Within the pages of this anthology you will meet a host of unusual characters — among them Benji, whose time machine is designed to take him away from his nagging wife; Tommy, a boy genius who accidentally discovers amazing magnetic paint and the roundest thing in the world; and Mr. Pierre, proprietor of a strange beauty salon which can transform a person completely, but often with disastrous results.

The fourteen stories are taken from Galaxy, the world's most widely read science fiction magazine, and compiled by its former editor, H. L. Gold. A science fiction writer himself, Mr. Gold has brought together a collection of imaginative tales - wondrously weird and fascinating - offering witty, robust humor . . . pungent satire on modern civilization . . . future happenings that are not always as far-fetched as they might seem. But in the midst of automation and purple men there runs a very definite undercurrent, demonstrating that people were, are, and always will be - people.

JACKET DESIGN BY ROGER ZIMMERMAN

Printed in the U.S.A.



# Time Waits for Winthrop

and Four other Short Novels from Galaxy

# Other Books by Frederik Pohl

Novels: Slave Ship

Drunkard's Walk

Short Story Collections: Alternating Currents

The Case Against Tomorrow Tomorrow Times Seven

Anthologies (as Editor): Beyond the End of Time

Shadow of Tomorrow
Assignment in Tomorrow
The Star Science Fiction Stories

Star of Stars

The Expert Dreamers

# Time Waits for Winthrop

and Four other Short Novels from Galaxy

Edited by Frederik Pobl

DOUBLEDAY & COMPANY, INC., GARDEN CITY, NEW YORK, 1962

#### ALL OF THE CHARACTERS IN THIS BOOK ARE FICTITIOUS. AND ANY RESEMBLANCE TO ACTUAL PERSONS, LIVING OR DEAD, IS PURELY COINCIDENTAL.

"Accidental Flight" by F. L. Wallace, reprinted by courtesy of Harry Altshuler and the author.

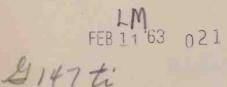
"Natural State" by Damon Knight, reprinted by courtesy of Robert Mills and the author.

"Time Waits for Winthrop" by William Tenn, reprinted by courtesy of Candida Donadio and the author.

"Galley Slave" by Isaac Asimov, reprinted by courtesy of the author.

"To Marry Medusa" by Theodore Sturgeon, reprinted by courtesy of the author.

Library of Congress Catalog Card Number 62-15318 Copyright 1952, 1953, 1957, 1958, 1962 by Galaxy Publishing Corporation All Rights Reserved Printed in the United States of America First Edition



TO BARMARAY

## CONTENTS

INTRODUCTION

TIME WAITS FOR WINTHROP by William Tenn—15

ACCIDENTAL FLIGHT by F. L. Wallace—81

TO MARRY MEDUSA by Theodore Sturgeon—149

NATURAL STATE by Damon Knight—221

GALLEY SLAVE by Isaac Asimov—297

STWEENTS

a sector matrix as a

CHARLES IN A TRACK DATABLE

MARKET MEDUCA TO TAKE SAUGEN THRAM

NAME OF STREET OF STREET, STRE

### INTRODUCTION

There are satellites in the skies overhead. In the world's living room a cathode tube paints electronic portraits of faraway places—we call it TV. Broken atoms fling their charges into the air, so that the Geiger tick is a beat faster, a tone shriller, all over the world . . .

Why, this is science fiction! And this is the world we live in. A world in which science fiction has come true; for in large measure the science fiction stories of a few decades ago have been caught up to, almost surpassed, by events in the real world outside.

This is no new thing to science fiction readers, to have their dreams come true. Jules Verne's Nautilus anticipated a dozen refinements that modern submarines have put into practice. (Not the periscope, it should be noted; the legend that Verne's description of that device made it impossible for anyone really to patent one is—a legend.) Cleve Cartmill described the atomic bomb rather well at a time when it did not yet exist in fact. Too well, in fact: It brought the FBI down on him. Network television, manned rocket aircraft, radar and the sniperscope—they were all familiar in science fiction stories, as they are all now familiar in life.

However, once a device, a concept, a way of life becomes a part of the real world it at once stops being a suitable subject for science fiction stories. Galaxy Magazine and the others which specialize in science fiction compete with one another, but none of them competes with the daily newspapers. The "here and now" does not interest them—even when what is here and now might have made . . . and did make! . . . many a science fiction story, not very many years ago.

Science fiction deals with what *might* be true but *is not*. When a writer sits down to create a science fiction story, he can count on very little help from "what everybody knows." His business is exploring the worlds we don't know—other planets sometimes, other dimensions even, still more frequently the "if" worlds that our own Earth may turn out to be. In none of these worlds is there much we can take for granted. This is why many literate and otherwise intelligent human beings can't read science fiction; they cannot see beyond "what everybody knows"; they cannot assume conditions that do not now exist. Something troubles them when they read about worlds in which no one sleeps, or where life is immortal; about telepaths or sentient robots. These are the commonplaces of science fiction. Naturally, they affect profoundly the lives and doings of the characters. They change "human nature."

All these commonplaces—all these basic assumptions about the way people live—have to be spelled out for us in each story by every science fiction writer. He can take nothing for granted. This is a prodigious feat, when you stop to think about it—as though every mystery writer had to acquaint us with the fact that people live, that they can be killed, that murder is a crime and so on, before getting down to who done it—and quite often it is accomplished with great skill. Indeed, sometimes in reading a first-chop science fiction story there is a moment of discovery that is almost vertigo, when we find that some assumption we had casually made is swept away from under us. The planet is not the Earth. The creature whose eyes we look through is not a human being.

For these reasons, among others, some of the very best science fiction stories ever written have been what are called "short

novels"—oh, say 20,000 words or so—in other words, about the length of the stories in this book. There are many good shorter stories and many good longer stories; but the "short novel" is probably optimum for the field. It gives the writer time to develop the complexities of his idea and to set the picture firmly in the mind of the reader. It gives him space to examine its implications, and room to make the unreal-world of his story as familiar as the real-world that the reader must put behind him for fullest enjoyment.

Reading any good science fiction story is a sort of exercise in objectivity. In stories like the ones in this volume you have time to understand what the author is getting at. He sets his parameters of what is and isn't possible . . . and then you can relax and enjoy the wonders to come.

It would not be appropriate to have this book appear without one note on all five of these stories. For ten years, from its inception until ill health forced him to take an indefinite leave of absence some months ago, *Galaxy* was edited by H. L. Gold, himself a fine writer and, as an editor, one who exerted a powerful and admirable influence on the whole trend of science fiction writing. Many of these stories were written, and often rewritten, to his intelligent and helpful suggestions . . . a statement which can be made about a large percentage of the best science fiction stories of the past decade.

FREDERIK POHL

# Time Waits for Winthrop

and Four other Short Novels from Galaxy



# TIME WAITS FOR WINTHROP

BY WILLIAM TENN

That was the trouble right there. That summed it up.

Winthrop was stubborn.

Mrs. Brucks stared wildly at her three fellow-visitors from the twentieth century. "But he can't!" she exclaimed. "He's not the only one—he's got to think of us! He can't leave us stranded in this crazy world!"

Dave Pollock shrugged his shoulders inside the conservative gray suit that clashed so mightily with the décor of the twenty-fifth-century room in which they sat. He was a thin, nervous young man whose hands had a tendency to perspire. Right now, they were extremely wet.

"He says we should be grateful. But whether we are or aren't grateful isn't important to him. He's staying."

"That means we have to stay," Mrs. Brucks pleaded. "Doesn't he understand that?"

Pollock spread his moist palms helplessly. "What difference does it make? He's absolutely set on staying. He *likes* the twenty-fifth century. I argued with him for two hours; I've never seen anyone so stubborn. I can't budge him, and that's all I know."

"Why don't you talk to him, Mrs. Brucks?" Mary Ann Car-

thington suggested. "He's been nice to you. Maybe you could make him act sensible."

"Hm." Mrs. Brucks patted her hairdo which, after two weeks in the future, was beginning to get straggly. "You think so? Mr.

Mead, you think it's a good idea?"

The fourth person in the oval room, a stoutish middle-aged man, whose face bore an expression of a cat that might swallow a canary in the interests of Decency, considered the matter for a moment, and nodded. "Can't do any harm. Might work. And we've got to do something."

"All right. So I'll try."

Mrs. Brucks sniffled deep inside her grandmotherly soul. She knew what the others were thinking, weren't quite saying. To them, Winthrop and she were the "old folks"—both over fifty. Therefore, they should have something in common they should be able to communicate sympathetically.

The fact that Winthrop was ten years her senior meant little to Mr. Mead's forty-six years, less to Dave Pollock's thirty-four and in all probability was completely meaningless to Mary Ann Carthington's even twenty. One of the "old folks" should be able

to talk sense to the other, they would feel.

What could they see, from the bubbling distance of youth, of the chasms that separated Winthrop from Mrs. Brucks even more finally than the others? It was unimportant to them that he was a tight and unemotional old bachelor, while she was the warm and gossipy mother of six children, the grandmother of two, with her silver wedding anniversary proudly behind her. She and Winthrop had barely exchanged a dozen sentences with each other since they'd arrived in the future: they had disliked each other deeply from the moment they had met in Washington at the time-travel finals.

But—Winthrop was stubborn. That fact remained. Mr. Mead had roared his best executive-type roars at him. Mary Ann Carthington had tried to jog his senility with her lush, lithe figure and most fluttery voice. Even Dave Pollock, an educated man, a high school science teacher with a master's degree in

something or other, Dave Pollock had talked his heart out to him and been unable to make him budge.

So it was up to her. Someone had to change Winthrop's mind. Or they'd all be stuck in the future, here in this horrible twenty-fifth century. No matter if she hated it more than anything she'd had to face in a lifetime of troubles—it was up to her.

She rose and shook out the wrinkles in the expensive black dress her proud husband had purchased in Lord & Taylor's the day before the group had left. Try to tell Sam that it was purely luck that she had been chosen, just a matter of fitting the physical specifications in the message from the future! Sam wouldn't listen: he probably boasted all over the shop, to each and every one of the other cutters with whom he worked, about his wife—one of five people selected in the whole United States of America to make a trip five hundred years into the future. Would Sam still be boasting when the six o'clock deadline passed that night and she didn't return?

This time the sniffle worked its way through the cushions of her bosom and exploded tinily at her nose.

Mary Ann Carthington crooned back sympathetically.

"Shall I ring for the jumper, Mrs. Brucks?"

"I'm crazy?" Mrs. Brucks shot back at her angrily. "A little walk down the hall, I need that headache-maker? A little walk I can walk."

She started for the door rapidly before the girl could summon the upsetting device which exploded you from one place to another and left you with your head swimming and your stomach splashing. But she paused for a moment and took a last wistful look at the room before leaving it. While it was by no means a cozy five-room apartment in the Bronx, she'd spent almost every minute of her two weeks in the future here, and for all of its peculiar furniture and oddly colored walls, she hated to leave it. At least here nothing rippled along the floor, nothing reached out from the walls; here was as much sanity as you could find in the twenty-fifth century.

Then she swallowed hard, said "Ah-h!" with regretful final-

ity and closed the door behind her. She walked rapidly along the corridor, being careful to stay in the exact middle, the greatest distance possible from the bumpy writhing walls on either side.

At a point in the corridor where one purple wall flowed restlessly around a stable yellow square, she stopped. She put her mouth, fixed in a scowl of distaste, to the square. "Mr. Winthrop?" she inquired tentatively.

"Well, well, if it isn't Mrs. Brucks!" the square boomed back

at her. "Long time no see. Come right in, Mrs. Brucks."

The patch of yellow showed a tiny hole in the center which dilated rapidly into a doorway. She stepped through gingerly, as if there might be a drop of several stories on the other side.

The room was shaped like a long, narrow isosceles triangle. There was no furniture in it, and no other exits, except for what an occasional yellow square suggested. Streaks of color chased themselves fluently along the walls and ceilings and floors, shifting the predominant hue of the interior up and down the spectrum, from pinkish grey to a thick, dark ultramarine. And odors came with the colors, odors came and filled the room for a brief spell, some of them unpleasant, some of them intriguing, but all of them touched with the unfamiliar and alien. From somewhere behind the walls and above the ceiling, there was music, its tones softly echoing, gently reinforcing the colors and the odors. The music too was strange to twentieth-century ears: strings of dissonances would be followed by a long or short silence in the midst of which an almost inaudible melody might be heard like a harmonic island in an ocean of sonic strangeness.

At the far end of the room, at the sharp apex of the triangle, an aged little man lay on a raised portion of the floor. Periodically, this raised portion would raise a bit of itself still further or lower a section, very much like a cow trying to find a comfortable position on the grass.

The single garment that Winthrop wore similarly kept adjusting itself upon him. At one moment it would be a striped red and white tunic, covering everything from his shoulders to his thighs; then it would slowly elongate into a green gown that

trickled over his outstretched toes; and, abruptly, it would contract into a pair of light brown shorts decorated with a complex pattern of brilliant blue seashells.

Mrs. Brucks observed all this with an almost religious disapproval. A man was meant, she felt dimly, to be dressed approximately the same way from one moment to the next, not to swoop wildly from one garment to another like a montage sequence in the movies.

The shorts she didn't mind, though her modest soul considered them a bit too skimpy for receiving lady callers. The green gown, well, she didn't think it went with Winthrop's sex—as she'd been brought up—but she could go along with it; after all, if he wanted to wear what was essentially a dress, it was his business. Even the red and white tunic which reminded her strongly and nostalgically of her grand-daughter Debbie's sunsuit was something she was willing to be generous about. But at least stick to one of them, show some willpower, some concentration!

Winthrop put the enormous egg he was holding on the floor. "Have a seat, Mrs. Brucks. Take the load off your feet," he

suggested jovially.

Shuddering at the hillock of floor which came into being at her host's gesture, Mrs. Brucks finally bent her knees and sat, her tentative rear making little more than a tangent to it. "How-how are you, Mr. Winthrop?"

"Fine, just fine! Couldn't be better, Mrs. Brucks. Say, have you seen my new teeth? Just got them this morning. Look."

He opened his jaws and pulled his lips back with his fingers.

Mrs. Brucks leaned forward, really interested, and inspected the mouthful of white, shining enamel. "A good job," she pronounced at last, nodding. "The dentists here made them for you so fast?"

"Dentists!" He spread his bony arms wide in a vast and merry gesture. "They don't have dentists in 2487 A.D. They grew these teeth for me, Mrs. Brucks."

"Grew? How grew?"

"How should I know how they did it? They're smart, that's

all. A lot smarter than us, every way. I just heard about the regeneration clinic. It's a place where you lose an arm, you go down there, they grow it right back on the stump. Free, like everything else. I went down there, I said 'I want new teeth' to the machine that they've got. The machine tells me to take a seat, it goes one, two, three—and bingo! there I am, throwing my plates away. You want to try it?"

She shifted uncomfortably on her hillock. "Maybe-but I

better wait until it's perfected."

Winthrop laughed again. "You're scared," he announced. "You're like the others, scared of the twenty-fifth century. Anything new, anything different, you want to run for a hole like a rabbit. Only me, only Winthrop, I'm the only one that's got guts. I'm the oldest, but that doesn't make any difference—I'm the only one with guts."

Mrs. Brucks smiled tremulously at him. "But Mr. Winthrop, you're also the only one without no one to go back to. I got a family, Mr. Mead has a family, Mr. Pollock's just married, a newly-wed, and Miss Carthington is engaged. We'd all like to

go back, Mr. Winthrop."

"Mary Ann is engaged?" A lewd chuckle. "I'd never have guessed it from the way she was squirming round that temporal supervisor fellow. That little blondie is on the make for any guy she can get."

"Still and all, Mr. Winthrop, she's engaged. To a book-keeper in her office she's engaged. A fine, hard-working boy.

And she wants to go back to him."

The old man pulled up his back and the floor-couch hunched up between his shoulder blades and scratched him gen-

tly. "Let her go back, then. Who gives a damn?"

"But, Mr. Winthrop—" Mrs. Brucks wet her lips and clasped her hands in front of her. "She can't go back, we can't go back—unless we all go back together. Remember what they told us when we arrived, those temporal supervisors? We all have to be sitting in our chairs in the time-machine building at six o'clock on the dot, when they're going to make what they call the trans-

fer. If we aren't all there on time, they can't make the transfer, they said. So, if one of us, if you, for instance, doesn't show up—"

"Don't tell me your troubles," Winthrop cut her off savagely. His face was deeply flushed and his lips came back and exposed the brand-new teeth. There was a sharp acrid smell in the room and blotches of crimson on its walls as the place adjusted to its owner's mood. All around them the music changed to a staccato, vicious rumble. "Everybody wants Winthrop to do a favor for them. What did they ever do for Winthrop?"

"Umh?" Mrs. Brucks inquired. "I don't understand you."
"You're damn tooting you don't understand me. When I was
a kid, my old man used to come home drunk every night and
beat the hell out of me. I was a small kid, so every other kid on
the block took turns beating the hell out of me, too. When I grew
up, I got a lousy job and a lousy life. Remember the depression
and those pictures of the breadlines? Well, who do you think it
was on those breadlines, on every damn breadline in the whole
damn country? Me, that's who. And then, when the good times
came back, I was too old for a decent job. Night-watchman,
berry-picker, dishwasher, that's me. Cheap flophouses, cheap furnished rooms. Everybody gets the gravy, Winthrop got the garbage."

He picked up the large egg-shaped object he had been examining when she entered and studied it moodily. In the red glow of the room, his face seemed to have flushed to a deeper color. A large vein in his scrawny neck buzzed bitterly.

"Yeah. And like you said, everybody has someone to go back to, everybody but me. You're damn tooting I don't have anyone to go back to. Damn tooting. I never had a friend, never had a wife, never even had a girl that stayed around longer than it took her to use up the loose change in my pocket. So why should I go back? I'm happy here, I get everything I want and I don't have to pay for it. You people want to go back because you feel different—uncomfortable, out of place. I don't. I'm used to being out of place: I'm right at home. I'm having a good time. I'm staying."

"Listen, Mr. Winthrop," Mrs. Brucks leaned forward anxiously, then jumped as the seat under her slunk forward. She rose and stood, deciding that on her feet she might enjoy at least minimal control of her immediate environment. "Listen, Mr. Winthrop, everybody has troubles in their life. With my daughter, Annie, I had a time that I wouldn't wish on my worst enemy. And with my Julius— But because I have troubles, you think I should take it out on other people? I should prevent them from going home when they're sick and tired of jumper machines and food machines and—I don't know—machine machines and—"

"Speaking of food machines," Winthrop perked up, "have you seen my new food phonograph? The latest model. I heard about it last night, I said I wanted one, and sure enough, first thing this morning a brand new one is delivered to my door. No fuss, no bother, no money. What a world!"

"But it's not your world, Mr. Winthrop. You didn't make anything in it, you don't work in it. Even if everything is free,

you're not entitled. You got to belong, to be entitled."

"There's nothing in their laws about that," he commented absent-mindedly as he opened the huge egg and peered inside at the collection of dials and switches and spigots. "See, Mrs. Brucks, double volume controls, double intensity controls, triple vitamin controls. What a set! With this one, you can raise the oil texture of a meal, say, while reducing its sweetness with that doohickey there—and if you press that switch, you can compress the whole meal so it's no bigger than a mouthful and you're still hungry enough to try a couple of other compositions. Want to try it? I got it set for the latest number by Unni Oehele, that new Aldebaranian composer: Memories of a Martian Soufflée."

She shook her head emphatically. "No, by me, a meal is served in plates. I don't want to try it. Thank you very much."

"You're missing something. Believe me, lady, you're missing something. The first course is a kind of light, fast movement, all herbs from Aldebaran IV mixed with a spicy vinegar from Aldebaran IX. The second course, *Consomme Grand*, is a lot slower and kind of majestic. Oehele bases it all on a broth made from

the white *chund*, a native rabbity animal they have on Aldebaran IV. See, he uses only native Aldebaranian foods to *suggest* a Martian dish. Get it? The same thing Kratzmeier did in *A Long*, *Long Dessert on Deimos and Phobos*, only it's a lot better. More modern-like, if you know what I mean. Now in the *third* course, Oehele really takes off. He—"

"Please, Mr. Winthrop!" Mrs. Brucks begged. "Enough! Too much! I don't want to hear any more." She glared at him, trying to restrain her lips from curling in contempt. She'd had far too much of this sort of thing from her son, Julius, years ago, when he'd been running around with a crazy art crowd from City College and been spouting hours of incomprehensible trash at her that he'd picked up from the daily newspaper's musical reviews and the printed notes in record albums. One thing she'd learned the hard way was how to recognize an esthetic phony.

Winthrop shrugged. "Okay, okay. But you'd think you'd at least want to try it. The others at least tried it. They took a bite of classical Kratzmeier or Gura-Hok, they didn't like it, they spat it out—fine. But you've been living on nothing but that damn twentieth-century grub since we arrived. After the first day, you haven't set foot outside your room. And the way you asked the room to decorate itself—Keerist! It's so old-fashioned, it makes me sick. You're living in the twenty-fifth century, lady; wake up!"

"Mr. Winthrop," she said sternly. "Yes or no? You're going to be nice or not?"

"You're in your fifties," he pointed out. "Fifties, Mrs. Brucks. In our time, you can expect to live what? Ten or fifteen more years. Tops. Here, you might see another thirty, maybe forty. Me, I figure I'm good for at least another twenty. With the medical machines they got, they can do wonders. And no wars to worry about, no epidemics, no depressions, nothing. Everything free, lots of exciting things to do, Mars, Venus, the stars. Why in hell are you so crazy to go back?"

Mrs. Brucks' already half-dissolved self-control gave way completely. "Because it's my home," she sobbed. "Because it's what I understand. Because I want to be with my husband, my

children, my grandchildren. And because I don't like it here,

Mr. Winthrop, I don't like it here!"

"So go back!" Winthrop yelled. The room which for the last few moments had settled into a pale golden-yellow, turned rose-color again in sympathy. "Go the hell back! There's not one of you with the guts of a cockroach. Even that young fellow, what's-his-name, Dave Pollock, I thought he had guts. He went out with me for the first week and he tried everything once. But he got scared too, and went back to his little old comfy room. It's too dec-a-dent, he says, too dec-a-dent. So take him with you—and go back, all of you!"

"But we can't go back without you, Mr. Winthrop. Remember they said the transfer has to be complete on both sides? One

stays behind, all stay. We can't go back without you."

Winthrop smiled and stroked the throbbing vein on his neck. "You're damn tooting you can't go back without me. And I'm staying. This is one time that old Winthrop calls the tune."

"Please, Mr. Winthrop, don't be stubborn. Be nice. Don't

make us force you."

"You can't force me," he told her with a triumphant leer. "I know my rights. According to the law of twenty-fifth century America, no human being can be forced to do anything. Fact. I looked it up. You try to gang up on me, carry me out of here, all I do is set up a holler that I'm being forced and *one! two! three!* a flock of government machines show up and turn me loose. That's the way it works. Put that in your old calabash and smoke it!"

"Listen," she said, as she turned to leave. "At six o'clock, we'll all be in the time machine building. Maybe you'll change your mind, Mr. Winthrop."

"I won't," he shot after her. "That's one thing you can be

sure of-I won't change my mind."

So Mrs. Brucks went back to her room and told the others that Winthrop was stubborn as ever.

Oliver T. Mead, vice-president in charge of public relations for

Sweetbottom Septic Tanks, Inc., of Gary, Indiana, drummed impatiently on the arm of the red leather easy chair that Mrs. Brucks' room had created especially for him. "Ridiculous!" he exclaimed. "Ridiculous and absolutely nonsensical. That a derelict, a vagrant, should be able to keep people from going about their business . . . do you know that there's going to be a nation-wide sales conference of Sweetbottom retail outlets in a few days? I've got to be there. I absolutely must return tonight to our time as scheduled, no ifs, no ands, no buts. There's going to be one unholy mess, I can tell you, if the responsible individuals in this period don't see to that."

"I bet there will be," Mary Ann Carthington said from behind round, respectful and well-mascaraed eyes. "A big firm like

that can really give them what for, Mr. Mead."

Dave Pollock grimaced at her wearily. "A firm five hundred years out of existence? Who're they going to complain to—the history books?"

As the portly man stiffened and swung around angrily, Mrs. Brucks held up her hands and said, "Don't get upset, don't fight. Let's talk, let's think it out, only don't fight. You think it's the

truth we can't force him to go back?"

Mr. Mead leaned back and stared out of a non-existent window. "Could be. Then again, it might not. I'm willing to believe anything—anything!—of 2458 A.D. by now, but this smacks of criminal irresponsibility. That they should invite us to visit their time and then not make every possible effort to see that we return safe and sound at the end of two weeks as scheduled—besides, what about their people visiting in our time, the five with whom we transferred? If we're stuck here, they'll be stuck in 1958. Forever. Any government worthy of the name owes protection to its citizens traveling abroad. Without it, it's less than worthless: a tax-grabbing, boondoggling, inept bureaucracy that's—that's positively criminal!"

Mary Ann Carthington's pert little face had been nodding in time to his fist beating on the red leather armchair. "That's what I say. Only the government seems to be all machines. How can you argue with machines? The only government man we've seen since we arrived was that Mr. Storku who welcomed us officially to the United States of America of 2458. And he didn't seem very interested in us. At least, he didn't show any interest."

"The Chief of Protocol for the State Department, you mean?" Dave Pollock asked. "The one who yawned when you

told him how distinguished he looked?"

The girl made a slight, slapping gesture at him, accom-

panied by a reproachful smile. "Oh, you."

"Well, then, here's what we have to do. One," Mr. Mead rose and proceeded to open the fingers of his right hand one at a time. "We have to go on the basis of the only human being in the government we've met personally, this Mr. Storku. Two, we have to select a qualified representative from among us. Three, this qualified representative has to approach Mr. Storku in his official capacity and lay the facts before him. The facts, complete and unequivocal. How his government managed somehow to communicate with our government the fact that time travel was possible, but only if certain physical laws were taken into consideration, most particularly the law of—the law of—What is that law, Pollock?"

"The law of the conservation of energy and mass. Matter, or its equivalent in energy, can neither be created nor destroyed. If you want to transfer five people from the cosmos of 2458 A.D. to the cosmos of 1958 A.D., you have to replace them simultaneously in their own time with five people of exactly the same structure and mass from the time they're going to. Otherwise, you'd have a gap in the mass of one space-time continuum and a corresponding surplus in the other. It's like a chemical equation—"

"That's all I wanted to know, Pollock. I'm not a student in one of your classes. You don't have to impress *me*, Pollock," Mr. Mead pointed out.

The thin young man grunted. "Who was trying to impress you?" he demanded belligerently. "What can you do for me—get me a job in your septic tank empire? I just tried to clear up

something you seemed to have a lot of trouble understanding. That's at the bottom of our problem: the law of the conservation of energy and mass. And the way the machine's been set for all five of us and all five of them, nobody can do anything about transferring back unless all of us and all of them are present at both ends of the connection at the very same moment."

Mr. Mead nodded slowly and sarcastically. "All right," he said. "All right! Thank you very much for your lesson, but now, if you don't mind, I'd like to go on, please. Some of us aren't

civil service workers: our time is valuable."

"Listen to the tycoon, will you?" Dave Pollock suggested with amusement. "His time is valuable. Look, Ollie, my friend, as long as Winthrop goes on being stubborn, we're all stuck here together. And as long as we're stuck here, we're all greenhorns together in 2458 A.D., savages from the savage past. For your information, right now, your time is my time, and vice versa."

"Sh-h-h!" Mrs. Brucks commanded. "Be nice. Go on talking, Mr. Mead. It's very interesting. Isn't it interesting, Miss Car-

thington?"

The blonde girl nodded. "It sure is. They don't make people executives for nothing. You put things so—so right, Mr. Mead."

Oliver T. Mead, somewhat mollified, smiled a slender thanks at her. "Three, then. We lay the facts before this Mr. Storku. We tell him how we came in good faith, after we were selected by a nation-wide contest to find the exact opposite numbers of the five people from his time. How we did it partly out of a natural and understandable curiosity to see what the future looks like, and partly out of patriotism. Yes, patriotism! For is not this America of 2458 A.D. our America? Is it not still our native land, however strange and inexplicable the changes in it? As patriots we could follow no other course, as patriots we—"

"Oh, for God's sake!" the high school teacher exploded. "Oliver T. Mead pledges allegiance to the flag! We know you'd die for your country under a barrage of stock market quotations. You're no subversive, all right? What's your idea, what's your

idea?"

There was a long silence in the room while the stout middle-aged man went through a pantomime of fighting for control. The pantomime over, he slapped his hands against the sides of his hand-tailored dark business suit and said: "Pollock, if you don't want to hear what I have to say, you can always take a breather in the hall. As I was saying, having explained the background facts to Mr. Storku, we come to the present impasse. We come to point four, the fact that Winthrop refuses to return with us. And we demand, do you hear me?—we demand that the American government of this time take the appropriate steps to insure our safe return to our own time even if it involves, well—martial law relative to Winthrop. We put this flatly, definitely, unequivocally to Storku."

"Is that your idea?" Dave Pollock asked derisively. "What

if Storku says no?"

"He can't say no, if it's put right. Authority, I think that's the keynote. It should be put to him with authority. We are citizens—in temporal extension—of America. We demand our rights. On the other hand, if he refuses to recognize our citizenship, we demand to be sent back where we came from. That's the right of any foreigner in America. He can't refuse. We explain the risks his government runs: loss of good will, irreparable damage to future contacts between the two times, his government standing convicted of a breach of good faith, that sort of thing. In these things, it's just a matter of finding the right words and making them good and strong."

Mrs. Brucks nodded agreement. "I believe. You can do it,

Mr. Mead."

The stout man seemed to deflate. "I?"

"You're the only one who can do it, Mr. Mead. You're the only one who can put things so—so *right*. Just like you said, it has to be said good and strong. That's the way *you* can say it."

"I'd, well-I'd rather not. I don't think I'm the best one for the job. Mr. Storku and I don't get along too well. Somebody

else, I think, one of you, would be-"

Dave Pollock laughed. "Now, don't be modest, Ollie. You get along with Storku as well as any of us. You're elected. Besides, isn't this public relations work? You're a big man in public relations."

Mr. Mead tried to pour all the hatred in the universe at him in one long look. Then he shot his cuffs and straightened his shoulders. "Very well. If none of you feel up to the job, I'll take it on myself. Be back soon."

"Jumper, Ollie?" Pollock asked as he was leaving the room.

"Why not take the jumper? It's faster."

"No, thank you," Mr. Mead said curtly. "I'll walk. I need the exercise."

He hurried through the corridor and toward the staircase. Though he went down them at a springy, executive trot, the stairs seemed to feel he wasn't going fast enough. An escalator motion began, growing more and more rapid, until he stumbled and almost fell.

"Stop, dammit!" he yelled. "I can do this myself!"

The stairs stopped flowing downward immediately. He wiped his face with a large white handkerchief and started down again. After a few moments, the stairs turned into an escalator once more.

Again and again, he had to order them to stop; again and again, they obeyed him, and then sneakily tried to help him along. He was reminded of a large, affectionate St. Bernard he had once had who persisted on bringing dead sparrows and field mice into the house as gifts from an overflowing heart. When the grisly objects were thrown out, the dog would bring them back in five minutes and lay them on the rug with a gesture that said: "No, I really want you to have it. Don't worry about the expense and hard work involved. Look on it as a slight expression of my esteem and gratitude. Take it, go on take it and be happy."

He gave up forbidding the stairs to move finally, and when he reached ground level, he was moving so fast that he shot out of the empty lobby of the building and onto the sidewalk at a tremendous speed. He might have broken a leg or dislocated his back.

Fortunately, the sidewalk began moving under him. As he tottered from right to left, the sidewalk did so too, gently but expertly keeping him balanced. He finally got his footing and took a couple of deep breaths.

Under him, the sidewalk trembled slightly, waiting for him

to choose a direction so that it could help.

Mr. Mead looked around desperately. There was no one in sight along the broad avenue in either direction.

"What a world!" he moaned. "What a loony-bin of a world!

You'd think there'd be a cop-somebody!"

Suddenly there was somebody. There was the *pop-pop* of a jumper mechanism in operation slightly overhead and a man appeared some twelve feet in the air. Behind him, there was an orange hedge-like affair, covered with eyes.

A portion of the sidewalk shot up into a mound right under the two creatures. It lowered them gently to surface level.

"Listen!" Mr. Mead yelled. "Am I glad I ran into you! I'm trying to get to the State Department and I'm having trouble. I'd appreciate a little help."

"Sorry," the other man said. "Klap-Lillth and I will have to be back on Ganymede in a half-hour. We're late for an appointment as is. Why don't you call a government machine?"

"Who is he?" the orange hedge inquired as they began to move swiftly to the entrance of a building, the sidewalk under them flowing like a happy river. "He doesn't narga to me like one of you."

"Time traveler," his companion explained. "From the past. One of the exchange tourists who came in two weeks ago."

"Aha!" said the hedge. "From the past. No wonder I couldn't narga him. It's just as well. You know, on Ganymede we don't believe in time travel. It's against our religion."

The Earthman chuckled and dug the hedge in the twigs. "You and your religion! You're as much an atheist as I am, Klap-

Lillth. When was the last time you attended a shkootseem ceremony?"

"Not since the last syzygy of Jupiter and the Sun," the hedge admitted. "But that's not the point. I'm still in good standing. What all you humans fail to understand about the Ganymedan religion . . ."

His voice trailed off as they disappeared inside the building. Mead almost spat after them. Then he recollected himself. They didn't have much time to fool around—and, besides, he was in a strange world with customs insanely different from his own. Who knew what the penalties were for spitting?

"Government machine," he said resignedly to the empty air.

"I want a government machine."

He felt a little foolish, but that was what they had been told to do in any emergency. And, sure enough, a gleaming affair of wires and coils and multi-colored plates appeared from nothingness beside him.

"Yes?" a toneless voice inquired. "Service needed?"

"I'm on my way to see Mr. Storku at your Department of State," Mr. Mead explained, staring suspiciously at the largest coil nearest him. "And I'm having trouble walking on the sidewalk. I'm liable to fall and kill myself if it doesn't stop moving under me."

"Sorry, sir, but no one has fallen on a sidewalk for at least two hundred years, and that was a highly neurotic sidewalk whose difficulties had unfortunately escaped our attention in the weekly psychological checkup. May I suggest you take a jumper? I'll call one for you."

"I don't want to take a jumper. I want to walk. All you have to do is tell this damn sidewalk to relax and be quiet."

"Sorry, sir," the machine replied, "but the sidewalk has its job to do. Besides, Mr. Storku is not at his office. He is taking some spiritual exercise at either Shriek Field or Panic Stadium."

"Oh, no," Mr. Mead moaned. His worst fears had been real-

ized. He didn't want to go to those places again.

"Sorry, sir, but he is. Just a moment, while I check." There

were bright blue flashes amongst the coils. "Mr. Storku is doing a shriek today. He feels he has been over-aggressive recently. He

invites you to join him."

Mr. Mead considered. He was not the slightest bit interested in going to one of those places where sane people became madmen for a couple of hours; on the other hand, time was short, Winthrop was still stubborn.

"All right," he said unhappily. "I'll join him."

"Shall I call a jumper, sir?"

The portly man stepped back. "No! I'll-I'll walk."

"Sorry, sir, but you would never get there before the shriek has begun."

Sweetbottom's vice-president in charge of public relations put the moist palms of his hands against his face and gently massaged it, to calm himself. He must remember that this was no bellhop you could complain to the management about, no stupid policeman you could write to the newspapers about, no bungling secretary you could fire or nervous wife you could tell off—this was just a machine into whose circuits a given set of vocal reactions had been built. If he had an apoplectic fit in front of it, it would not be the slightest bit concerned: it would merely summon another machine, a medical one. All you could do was give it information or receive information from it.

"I-don't-like-jumpers," he said between his teeth.

"Sorry, sir, but you expressed a desire to see Mr. Storku. If you are willing to wait until the shriek is over, there is no problem, except that you would be well advised to start for the Odor Festival on Venus where he is going next. If you wish to see him immediately, however, you must take a jumper. There are no other possibilities, sir, unless you feel that my memory circuits are inadequate or you'd like to add a new factor to the discussion."

"I'd like to add a— Oh, I give up." Mr. Mead sagged where he stood. "Call a jumper, call a jumper."

"Yes, sir. Here you are, sir." The empty cylinder that suddenly materialized immediately over Mr. Mead's head caused

him to start, but while he was opening his mouth to say, "Hey! I changed—" it slid down over him.

There was darkness. He felt as if his stomach were being gently but insistently pulled out through his mouth. His liver, spleen and lungs seemed to follow suit. Then the bones of his body all fell inward to the center of his now-empty abdomen and dwindled in size until they disappeared. He collapsed upon himself.

Suddenly he was whole and solid again, and standing in a large green meadow, with dozens of people around him. His stomach returned to its proper place and squirmed back into position.

"-changed my mind. I'll walk after all," he said, and threw

up.

Mr. Storku, a tall, genial, yellow-haired young man, was standing in front of him when the spasms had subsided and the tears ceased to leak from his eyes. "It's such a simple thing, really, Mr. Mead. Just a matter of being intently placid during

the jump."

"Easy—easy to say," Mr. Mead gasped, wiping his mouth with his handkerchief. What was the reason Storku always exuded such patronizing contempt toward him? "Why don't you people—why don't you people find another way to travel? In my time, comfort in transportation is the keystone, the very keystone of the industry. Any busline, any airline, which doesn't see to it that their passengers enjoy the maximum comfort en route to their destination is out of business before you can bat an eye. Either that, or they have a new board of directors."

"Isn't he *intriguing*?" a girl near him commented to her escort. "He talks just like one of those historical romances."

Mr. Mead glanced at her sourly. He gulped. She was nude. For that matter, so was everyone else around him, including Mr. Storku. Who knew what went on at these Shriek Field affairs, he wondered nervously? After all, he had only seen them before from a distance in the grandstand. And now he was right in the middle of these deliberate lunatics.

"Surely you're being a bit unjust," Mr. Storku suggested. "After all, if an Elizabethan or a man from the Classic Greek period were to go for a ride in one of your horseless carriages or iron horses—to use your vernacular—he would be extremely uncomfortable and exhibit much more physical strain than you have. It's purely a matter of adjustment to the unfamiliar. Some adjust, like your contemporary, Winthrop; some don't, like your self."

"Speaking of Winthrop—" Mr. Mead began hurriedly, glad both of the opening and the chance to change the subject.

"Everybody here?" An athletic young man inquired as he bounded up. "I'm your leader for this Shriek. On your feet, everybody, come on, let's get those kinks out of our muscles. We're going to have a real fine shriek."

"Take your clothes off," the government man told Mr. Mead. "You can't run a shriek dressed. Especially dressed like

that."

Mr. Mead shrank back. "I'm not going to— I just came here to talk to you. I'll watch."

A rich, roaring laugh. "You can't watch from the middle of Shriek Field! And besides, the moment you joined us, you were automatically registered for the shriek. If you withdraw now, you'll throw everything off."

"I will?"

Storku nodded. "Of course. A different quantity of stimuli has to be applied to any different quantity of people, if you want to develop the desired shriek-intensity in each one of them. Take your clothes off, man, and get into the thing. A little exercise of this sort will tone up your psyche magnificently."

Mr. Mead thought it over, then began to undress. He was embarrassed, miserable and more than a little frightened at the prospect, but he had an urgent job of public relations to do on

the yellow-haired young man.

In his time, he had gurgled pleasurably over rope-like cigars given him by politicians, gotten drunk in incredible little stinking bars with important newspapermen and suffered the slings and the arrows of outrageous television quiz shows—all in the interests of Sweetbottom Septic Tanks, Inc. The motto of the Public Relations Man was strictly When in Rome . . .

And obviously the crowd he had made this trip with from 1958 was composed of barely-employables and bunglers. They'd never get themselves and him back to their own time, back to a world where there was a supply-and-demand distributive system that made sense instead of something that seemed absolutely unholy in the few areas where it was visible and understandable. A world where an important business executive was treated like somebody instead of like a willful two-year-old. A world where inanimate objects stayed inanimate, where the walls didn't ripple around you, the furniture didn't adjust constantly under you, where the very clothes on a person's back didn't change from moment to moment as if it were being revolved in a kaleidoscope.

No, it was up to him to get everybody back to that world, and his only channel of effective operation lay through Storku. Therefore, Storku had to be placated and made to feel that Oliver T. Mead was one of the boys.

Besides, it occurred to him as he began slipping out of his clothes, some of these girls looked real cute. They reminded him of the Septic Tank Convention at Des Moines back in July. If only they didn't shave their heads!

"All together, now," the shriek leader sang out. "Let's bunch up. All together in a tight little group, all bunched up and milling around."

Mr. Mead was pushed and jostled into the crowd. It surged forward, back, right, left, being maneuvered into a smaller and smaller group under the instructions and shoving of the shriek leader. Music sprang up around them, more noise than music, actually, since it had no discernible harmonic relationships, and grew louder and louder until it was almost deafening.

Someone striving for balance in the mass of naked bodies hit Mr. Mead in the stomach with an outflung arm. He said "Oof!" and then "Oof!" again as someone behind him tripped and piled into his back. "Watch out!" a girl near him moaned as he

trod on her foot. "Sorry," he told her, "I just couldn't-" and then an elbow hit him in the eye and he went tottering away a few steps, until, the group changing its direction again, he was

pushed forward.

Round and round he went on the grass, being pushed and pushing, the horrible noise almost tearing his ear-drums apart. From what seemed a greater and greater distance he could hear the shriek leader chanting: "Come on, this way, hurry up! No, that way, around that tree. Back into the bunch, you: everybody together. Stay together. Now, backwards, that's right, backwards. Faster, faster."

They went backwards, a great mass of people pushing on Mead, jamming him into the great mass of people immediately behind him. Then, abruptly, they went forwards again, a dozen little cross-currents of humanity at work against each other in the crowd, so that as well as moving forward, he was also being hurled a few feet to the right and then turned around and being sucked back diagonally to his left. Once or twice, he was shot to the outskirts of the group, but, much to his surprise when he considered it later, all he did was claw his way back into the jampacked surging middle.

It was as if he belonged nowhere else by this time, but in this mob of hurrying madmen. A shaved female head crashing into his chest as the only hint that the group had changed its direction was what he had come to expect. He threw himself backwards and disregarded the grunts and yelps he helped create. He was part of this-this-whatever it was. He was hysterical, bruised and slippery with sweat, but he no longer thought about anything but staying on his feet in the mob.

He was part of it, and that was all he knew. Suddenly, somewhere outside the maelstrom of running,

jostling naked bodies, there was a yell. It was a long yell, in a powerful male voice, and it went on and on, almost drowning out the noise-music. A woman in front of Mr. Mead picked it up in a head-rattling scream. The man who had been yelling stopped, and, after a while, so did the woman.

Then Mr. Mead heard the yell again, heard the woman join in, and was not even remotely surprised to hear his own voice add to the din. He threw all the frustration of the past two weeks into that yell, all the pounding, shoving and bruises of the past few minutes, all the frustrations and hatreds of his lifetime. Again and again the yell started up, and each time Mr. Mead joined it. All around him others were joining it, too, until at last there was a steady, unanimous shriek from the tight mob that slipped and fell and chased itself all over the enormous meadow. Mr. Mead, in the back of his mind, experienced a child-like satisfaction in getting on to the rhythm they were working out—and in being part of working it out.

It went pulse-beat, pulse-beat, shriek-k-k, pulse-beat, pulse-beat, shriek-k-k-k, pulse-beat, pulse-beat, shriek-k-k-k.

All together. All around him, all together. It was good!

He was never able to figure out later how long they had been running and yelling, when he noticed that he was no longer in the middle of a tight group. They had thinned out somehow and were spread out over the meadow in a long, wavering, yelling line.

He felt a little confused. Without losing a beat in the shriek-rhythm, he made an effort to get closer to a man and

woman on his right.

The yells stopped abruptly. The noise-music stopped abruptly. He stared straight ahead where everybody else was staring. He saw it.

A brown, furry animal about the size of a sheep. It had turned its head and thrown one obviously startled, obviously frightened look at them, then it had bent its legs and begun running madly away across the meadow.

"Let's get it!" the shriek leader's voice sounded from what seemed all about them. "Let's get it! All of us, together! Let's

get it!"

Somebody moved forward, and Mr. Mead followed. The shriek started again, a continuous, unceasing shriek, and he joined in. Then he was running across the meadow after the

furry brown animal, screaming his head off, dimly and proudly conscious of fellow human beings doing the same on both sides of him.

Let's get it! his mind howled. Let's get it, let's get it!

Almost caught up with, the animal doubled on its tracks abruptly, and dodged back through the line of people. Mr. Mead flung himself at it and made a grab. He got a handful of fur and fell painfully to his knees as the animal galloped away.

He was on his feet without abating a single note of the shriek, and after it in a moment. Everyone else had turned

around and was running with him.

Let's get it! Let's get it! Let's get it!

Back and forth across the meadow, the animal ran and they pursued. It dodged and twisted and jerked itself free from converging groups.

Mr. Mead ran with them, ran in the very forefront. Shriek-

ing.

No matter how the furry brown animal turned, they turned too. They kept getting closer and closer to it.

Finally, they caught it.

The entire mob trapped it in a great, uneven circle and closed in. Mr. Mead was the first one to reach it. He smashed his fist into it and knocked it down with a single blow. A girl leaped onto the prostrate figure, her face contorted, and began tearing at it with her fingernails. Just before everyone piled on, Mr. Mead managed to close his hand on a furry brown leg. He gave the leg a tremendous yank and it came off in his hand. He was remotely astonished at the loose wires and gear mechanisms that trailed out of the torn-off leg.

"We got it!" he mumbled, staring at the leg. We got it, his

mind danced madly. We got it, we got it!

He was suddenly very tired, almost faint. He dragged himself away from the crowd and sat down heavily on the grass. He continued to stare at the loose wires that came out of the leg.

Mr. Storku came up to him, breathing hard. "Well," said Mr. Storku. "Did you have a nice shriek?"

Mr. Mead held up the furry brown leg. "We got it," he said

bewilderedly.

The yellow-haired young man laughed. "You need a good shower and a good sedative. Come on." He helped Mr. Mead to his feet and, holding on to his arm, crossed the meadow to a dilated yellow square under the grandstand. All around them the other participants in the shriek chattered gaily to each other as they cleansed themselves and readjusted their metabolism.

After his turn inside one of the many booths which filled the interior of the grandstand, Mr. Mead felt more like himself.

Which was not to say he felt better.

Something had come out of him in those last few moments as he tore at the mechanical quarry, something he wished infinitely had stayed at the dank bottom of his soul. He'd rather never have known it existed.

He felt vaguely, dismally, like a man who, flipping the pages of a textbook of sexual aberrations, comes upon a particularly ugly case history which parallels his life history in every respect, and understands—in a single, horrified flash—exactly what all those seemingly innocent quirks and nuances of his personality mean.

He tried to remind himself that he was still Oliver T. Mead, a good husband and father, a respected business executive, a substantial pillar of the community and the local church—but it was no good. Now, and for the rest of his life, he was also . . . this other thing.

He had to get into some clothes. Fast.

Mr. Storku nodded when the driving need was explained. "You probably had a lot saved up. About time you began discharging it. I wouldn't worry: you're as sane as anyone in your period. But your clothes have been cleaned off the field along with all the rubbish of our shriek; the officials are already preparing for the next one."

"What do I do?" Mr. Mead wailed. "I can't go home like

this."

"No?" the government man inquired with a good deal of

curiosity. "You really can't? Hm, fascinating! Well, just step under that outfitter there. I suppose you'd like twentieth-century costume?"

Mr. Mead nodded and placed himself doubtfully under the indicated mechanism as a newly-clad citizen of the twenty-fifth-century America walked away from it briskly. "Ye-es. Please

make it something sane, something I can wear."

He watched as his host adjusted some dials rapidly. There was a slight hum from the machine overhead: a complete set of formal, black-and-white evening wear sprang into being on the stout man's body. In a moment, it had changed into another outfit: the shoes grew upwards and became hip-length rubber boots, the dinner jacket lengthened itself into a sou'wester. Mr. Mead was perfectly dressed for the bridge of any whaling ship.

"Stop it!" he begged distractedly as the raincoat began showing distinctive sports shirt symptoms. "Keep it down to one

thing."

"You could do it yourself," Mr. Storku pointed out, "if your subconscious didn't heave about so much." Nonetheless, he goodnaturedly poked at the machine again, and Mr. Mead's clothes subsided into the tweed jacket and golf knickers that had been so popular in the 1920's. They held fast at that.

"Better?"

"I—I guess so." Mr. Mead frowned as he looked down at himself. It certainly was a queer outfit for the vice-president of Sweetbottom Septic Tanks, Inc., to return to his own time in, but at least it was one outfit. And as soon as he got home—

"Now, look here, Storku," he said, rubbing his hands together briskly and putting aside the recent obscene memories of himself with as much determination as he could call up. "We're having trouble with this Winthrop fella. He won't go back with us."

They walked outside and paused on the edge of the meadow. In the distance, a new shriek was being organized.

"That so?" Mr. Storku asked with no very great interest. He pointed at the ragged mob of nude figures just beginning to

jostle each other into a tight bunch. "You know, two or three more sessions out there and your psyche would be in fine shape. Although, from the looks of you, I'd say Panic Stadium would be even better. Why don't you do that? Why don't you go right over to Panic Stadium? One first-rate, screaming, headlong panic and you'd be absolutely—"

"Thank you, but no! I've had enough of this, quite enough,

already. My psyche is my own affair."

The yellow-haired young man nodded seriously. "Of course. The adult individual's psyche is under no other jurisdiction than that of the adult individual concerned.—The Covenant of 2314, adopted by unanimous consent of the entire population of the United States of America. Later, of course, broadened by the international plebiscite of 2337 to include the entire world. But I was just making a personal, friendly suggestion."

Mr. Mead forced himself to smile. He was distressed to find that when he smiled, the lapels of his jacket stood up and caressed the sides of his chin affectionately. "No offense, no offense. As I've said, it's just that I've had all I want of this nonsense. But what are you going to do about Winthrop?"

"Do? Why nothing, of course. What can we do?"

"You can force him to go back! You represent the government, don't you? The government invited us here, the government is responsible for our safety."

Mr. Storku looked puzzled. "Aren't you safe?"

"You know what I mean, Storku. Our safe return. The gov-

ernment is responsible for it."

"Not if that responsibility is extended to interference with the desires and activities of an adult individual. I just quoted the Covenant of 2314 to you, my friend. The whole philosophy of government derived from that covenant is based on the creation and maintenance of the individual's perfect sovereignty over himself. Force may never be applied to a mature citizen and even official persuasion may be resorted to only in certain rare and carefully specified instances. This is certainly not one of them. By the time a child has gone through our educational sys-

tem, he or she is a well-balanced member of society who can be trusted to do whatever is socially necessary. From that point on, government ceases to take an active role in the individual's life."

"Yeah, a real neon-lit utopia," Mr. Mead sneered. "No cops to safeguard life and property, to ask direction of even—Oh, well, it's your world and you're welcome to it. But that's not the point. Don't you see—I'm certain you can see, if you just put your mind to it—that Winthrop isn't a citizen of your world, Storku? He didn't go through your educational system, he didn't have these psychological things, these readjustment courses, every couple of years, he didn't—"

"But he came here as our invited guest," Mr. Storku pointed out. "And, as such, he's entitled to the full protection of our laws."

"And we aren't, I suppose," Mr. Mead shouted. "He can do whatever he wants to us and get away with it. Do you call that law? Do you call that justice? I don't. I call it bureaucracy, that's what I call it. Red-tape and bureaucracy, that's all it is!"

The yellow-haired young man put his hand on Mr. Mead's shoulder. "Listen, my friend," he said gently, "and try to understand. If Winthrop tried to do anything to you, it would be stopped. Not by interfering with Winthrop directly, but by removing you from his neighborhood. In order for us to take even such limited action, he'd have to do. That would be commission of an act interfering with your rights as an individual: what Winthrop is accused of, however, is omission of an act. He refuses to go back with you. Well, now. He has a right to refuse to do anything with his own body and mind. The Covenant of 2314 covers that area in so many words. Would you like me to quote the relevant passage to you?"

"No, I would not like you to quote the relevant passage to me. So you're trying to say that nobody can do anything, is that it? Winthrop can keep all of us from getting back to our own time, but you can't do anything about it and we can't do anything about it. One hell of a note."

"An interesting phrase, that," Mr. Storku commented. "If there had only been an etymologist or linguist in your group, I would be interested in discussing it with him. However, your conclusion, at least in regard to this particular situation, is substantially correct. There is only one thing you can do: you can try to *persuade* Winthrop. Up to the last moment of the scheduled transfer, that, of course, always exists as a possible solution."

Mr. Mead brushed down his overly emotional jacket lapels. "And if we don't, we're out of luck? We can't take him by the

scruff of the neck and-and-"

"I'm afraid you can't. A government machine or manufactured government official would appear on the scene and liberate him. Without any damage to your persons, you understand."

"Sure. No damage," Mr. Mead brooded. "Just leaving us stuck in this asylum for the rest of our lives, no ifs, no ands, no

buts."

Mr. Storku looked hurt. "Oh, come now, my friend: I'm certain it's not that bad! It may be very different from your own culture in many ways, it may be uncomfortably alien in its artifacts and underlying philosophy, but surely, surely, there are compensations. For the loss of the old in terms of family, associates and experiences, there must be a gain in the new and exciting. Your Winthrop has found it so—he's at Panic Stadium or Shriek Field almost every day, I've run into him at seminars and salons at least three times in the past ten days, and I hear from the Bureau of Home Appliances of the Department of Internal Economics that he's a steady, enthusiastic and thoroughly dedicated consumer. What he can bring himself to do—"

"Sure he gets all those gadgets," Mr. Mead sneered. "He doesn't have to pay for them. A lazy relief jack like him couldn't

ask for anything better. What a world-gahhh!"

"My only point," Mr. Storku continued equably, "is that being, well, 'stuck in this asylum,' as you rather vividly picture it, has its positive aspects. And since there seems to be a distinct possibility of this, it would seem logical for you people to begin investigating these positive aspects somewhat more wholeheartedly than you have instead of retreating to the security of each

other's company and such twentieth-century anachronisms as you are able to re-create."

"We have—all we want to. What we want now, all of us, is to go home and to keep on living the lives we were born into. So what it comes down to is that nobody and nothing can help us with Winthrop, eh?"

Mr. Storku called for a jumper and held up a hand to arrest the huge cylinder in the air as soon as it appeared. "Well, now. That's rather a broad statement. I wouldn't quite want to go as far as that without conducting a thorough personal investigation of the matter. It's entirely possible that someone, something, in the universe could help you if the problem were brought to its attention and if it were sufficiently interested. It's rather a large, well-populated universe, you know. All I can say definitely is that the Department of State can't help you."

Mr. Mead pushed his fingernails deep into his palms and ground his teeth together until he felt the top enamel coming off in flakes and grit. "You couldn't possibly," he asked at last, very, very slowly, "be just a little more specific in telling us where to go for help next? We have less than two hours left—and we won't be able to cover very much of the galaxy in that time."

"A good point," Mr. Storku said approvingly. "A very well-taken point. I'm glad to see that you have calmed down and are at last thinking clearly and resourcefully. Now, who—in this immediate neighborhood—might be able to work out the solution of an insoluble problem? Well, first there's the Temporal Embassy which handled the exchange and brought you people here in the first place. They have all kinds of connections, the Temporal Embassy people do; they can, if they feel like it, tap the total ingenuity of the human race for the next five thousand years. The trouble is, they take too much of the long view for my taste. Then there are the Oracle Machines which will give you the answer to any question that can be answered. The problem there, of course, is interpreting the answer correctly. Then, on Pluto, there's a convention this week of vector psychologists. If anyone could figure out a way of persuading Winthrop to change

his mind, they can. Unfortunately, the dominant field of interest in vector psychology at the moment is foetal education: I'm afraid they'd find your Winthrop far too mature a specimen. Then, out around Rigel, there's a race of remarkably prescient fungi whom I can recommend out of my own personal experience. They have a most unbelievable talent for—"

The portly man waggled a frantic hand at him. "That's enough! That's enough to go on for a while! We only have two hours—remember?"

"I certainly do. And since it's very unlikely that you can do anything about it in so short a time, may I suggest that you drop the whole matter and take this jumper with me to Venus? There won't be another Odor Festival there for sixty-six years: it's an experience, my friend, that should just not be missed. Venus always does these things right: the greatest odor-emitters in the universe will be there. And I'll be very happy to explain all the fine points to you. Coming?"

Mr. Mead dodged out of the way of the jumper which Mr. Storku was gesturing down invitingly. "No, thank you! Why is it," he complained when he had retreated to a safe distance, "that you people are always taking vacations, you're always going off somewhere to relax and enjoy yourselves? How the hell does any

work ever get done in this world?"

"Oh, it gets done," the yellow-haired young man laughed as the cylinder began to slide down over him. "Whenever there's a piece of work that only a human being can do, one of us—the nearest responsible individual with the applicable training takes care of it. But our personality goals are different from yours. In the words of the proverb: All play and no work makes Jack a dull boy."

And he was gone.

So Mr. Mead went back to Mrs. Brucks' room and told the others that the Department of State, as personified by Mr. Storku, couldn't help them with Winthrop's stubbornness.

Mary Ann Carthington tightened the curl of her blonde

hair with a business-like forefinger while she considered the matter. "You told him all that you told us, and he still wouldn't do anything, Mr. Mead? Are you sure he knows who you are?"

Mr. Mead didn't bother to answer her. He had other things on his mind. Not only was his spirit badly bruised and scratched by his recent experiences, but his golf knickers had just woken into sentiency. And whereas the jacket merely had attempted to express its great affection for his person by trying to cuddle under his chin, the knickers went in more for a kind of patrolling action. Up and down on his thighs they rippled; back and forth across his buttocks they marched. Only by concentrating hard and pressing them tight against his body with his hands was he able to keep away the feeling of having been swallowed by an anaconda.

"Sure he knows who he is," Dave Pollock told her. "Ollie waved his vice-presidency in his face, but Storku heard that Sweetbottom Septic Tanks Preferred fell to the bottom of the stock market just 481 years ago today, so he wasn't having any. Hey, Ollie?"

"I don't think that's funny, Dave Pollock," Mary Ann Carthington said and shook her head at him once in a "so, there!" manner. She knew that old beanpole of a schoolteacher was just jealous of Mr. Mead, but she wasn't sure whether it was because he didn't make as much money or because he wasn't nearly as distinguished-looking. The only thing, if a big executive like Mr. Mead couldn't get them out of this jam, then nobody could. And that would be awful, positively and absolutely awful.

She would never get back to Edgar Rapp. And while Edgar might not be everything a girl like Mary Ann wanted, she was quite willing to settle for him at this point. He worked hard and made a good living. His compliments were pale, pedestrian things, true, but at least he could be counted on not to say anything that tore a person into little, worthless bits right before their very eyes. Not like somebody she knew. And the sooner she could leave the twenty-fifth century and be forever away from that somebody, the better.

"Now, Mr. Mead," she cooled insistently. "I'm sure he told you something we could do. He didn't just tell you to give up hope completely and absolutely, did he?"

The executive caught the strap end of his knickers as it came unbuckled and started rolling exultantly up his leg. He glared at her out of eyes that had seen just too damn much, that

felt things had gone just too damn far.

"He told me something we could do," he said with careful viciousness. "He said the Temporal Embassy could help us, if we only had the right kind of pull there. All we need is some-

body with pull in the Temporal Embassy."

Mary Ann Carthington almost bit the end off the lipstick she was applying at that moment. Without looking up, she knew that Mrs. Brucks and Dave Pollock had both turned to stare at her. And she knew, deep down to the bottom of her dismayed intestines, just exactly what they were thinking.

"Well, I certainly don't-"

"Now, don't be modest, Mary Ann," Dave Pollock interrupted. "This is your big chance—and right now it looks like our only chance. We've got about an hour and a half left. Get yourself into a jumper, skedaddle out there, and girlie, turn on the charm!"

Mrs. Brucks sat down beside her and gave her shoulders the benefit of a heavy maternal arm. "Listen, Miss Carthington, sometimes we have to do things, is not so easy. But what else? Stuck here is better? That you like? So—" she spread her hands—"a touch here with the powder puff, a touch there with the lipstick, a this, a that, and, believe me, he won't know what to do first for you. Crazy about you he is already—you mean to say a little favor he wouldn't do, if you asked him?" She shrugged her massive contempt for such a sleeveless thought.

"You really think so? Well-maybe-" The girl began a preen that started at her delicately firm bottom and ended in a couple of self-satisfied wriggles somewhere around her chest.

"No maybes," Mrs. Brucks informed her after considering the matter with great care. "A sure, yes. A certainly, yes. But maybes, no. A pretty girl like you, a man like him, nothing to maybe about. It's the way, let me tell you, Miss Carthington, it's always the way. What a man like Mr. Mead can't accomplish, a woman has to do all the time. And a pretty girl like you can do it without lifting her little finger."

Mary Ann Carthington gave a nod of agreement to this rather female view of history and stood up with determination. Dave Pollock immediately called for a jumper. She stepped back as the great cylinder materialized in the room.

"Do I have to?" she asked, biting her lip. "Those awful

things, they're so upsetting."

He took her arm and began working her under the jumper with a series of gentle, urging tugs. "You can't walk: we don't have the time anymore. Believe me, Mary Ann, this is D-day and it-hour. So be a good girl and get under there and— Hey, listen. A good angle with the temporal supervisor might be about how his people will be stuck in our period if Winthrop goes on being stubborn. If anyone around here is responsible for them, he is. So, as soon as you get there—"

"I don't need you to tell me how to handle the temporal supervisor, Dave Pollock!" she said haughtily, flouncing under the jumper. "After all, he happens to be a friend of mine, not

of yours-a very good friend of mine!"

"Sure," Pollock groaned, "but you still have to convince the man. And all I'm suggesting—" He broke off as the cylinder slid the final distance down to the floor and disappeared with the girl inside.

He turned back to the others who had been watching anxiously. "Well, that's it," he announced, flapping his arms with a broad, hopeless gesture. "That's our very last hope. A Mary Ann!"

Mary Ann Carthington felt exactly like a Last Hope as she

materialized in the Temporal Embassy.

She fought down the swimming nausea which always seemed to accompany jumper transportation and, shaking her head rapidly, managed to draw a deep breath.

As a means of getting places, the jumper certainly beat Ed-

gar Rapp's gurgling old Buick—if only it didn't make you feel like a chocolate malted. That was the trouble with this time: every halfway nice thing in it had such unpleasant after-effects!

The ceiling undulated over her head in the great rotunda where she was now standing and bulged a huge purplish lump down at her. It still looked, she decided nervously, like a movie house chandelier about to fall.

"Yes?" inquired the purplish lump politely. "Whom did you wish to see?"

She licked at her lipstick, then squared her shoulders. She'd been through all this before. You had to carry these things off with a certain amount of poise: it just did not do to show nervousness before a ceiling.

"I came to see Gygyo-I mean, is Mr. Gygyo Rablin in?"

"Mr. Rablin is not at size at the moment. He will return in fifteen minutes. Would you like to wait in his office? He has another visitor there."

Mary Ann Carthington thought swiftly. She didn't entirely like the idea of another visitor, but maybe it would be for the best. The presence of a third party would be a restraining influence for both of them and would take a little of the inevitable edge off her coming back to Gygyo as a suppliant after what had happened between them.

But what was this about his not being "at size"? These twenty-fifth-century people did so many positively weird things with themselves. . . .

"Yes, I'll wait in his office," she told the ceiling. "Oh, you needn't bother," she said to the floor as it began to ripple under her feet. "I know the way."

"No bother at all, Miss," the floor replied cheerfully and continued to carry her across the rotunda to Rablin's private office. "It's a pleasure."

Mary Ann sighed and shook her head. Some of these houses were so opinionated! She relaxed and let herself be carried along, taking out her compact on the way for a last quick check of her hair and face.

But the glance at herself in the mirror evoked the memory again. She flushed and almost called for a jumper to take her back to Mrs. Brucks' room. No, she couldn't—this was their last chance to get out of this world and back to their own. But damn Gygyo Rablin, anyway—damn and damn him!

A yellow square in the wall having dilated sufficiently, the floor carried her into Rablin's private office and subsided to flatness again. She looked around, nodding slightly at the familiar

surroundings.

There was Gygyo's desk, if you could call that odd, purring thing a desk. There was that peculiar squirmy couch that—

She caught her breath. A young woman was lying on the couch, one of those horrible bald-headed women that they had here.

"Excuse me," Mary Ann said in one fast breath. "I had no idea—I didn't mean to—"

"That's perfectly all right," the young woman said, still staring up at the ceiling. "You're not intruding. I just dropped in on Gygyo myself. Have a seat."

As if taking a pointed hint, the floor shot up a section of itself under Mary Ann's bottom and, when she was securely cra-

dled in it, lowered itself slowly to sitting height.

"You must be that twentieth century—" the young woman paused, then amended rapidly: "the *visitor* whom Gygyo has been seeing lately. My name's Flureet. I'm just an old childhood friend—'way back from Responsibility Group Three."

Mary Ann nodded primly. "How nice, I'm sure. My name is Mary Ann Carthington. And really, if in any way I'm—I mean

I just dropped in to-"

"I told you it's all right. Gygyo and I don't mean a thing to each other. This Temporal Embassy work has kind of dulled his taste for the everyday female: they've either got to be stavisms or precursors. Some kind of anachronism, anyway. And I'm awaiting transformation—major transformation—so you couldn't expect very strong feelings from my side right now. Satisfied? I hope so. Hello to you, Mary Ann."

Flureet flexed her arm at the elbow several times in what Mary Ann recognized disdainfully as the standard greeting gesture. Such women! It made them look like a man showing off his muscle. And not so much as a polite glance in the direction of a guest!

"The ceiling said," she began uncertainly, "that Gyg-Mr. Rablin isn't at size at the moment. Is that like what we call not

being at home?"

The bald girl nodded. "In a sense. He's in this room, but he's hardly large enough to talk to. Gygy's size right now is—let me think, what did he say he was setting it for?—Oh, yes, 35 microns. He's inside a drop of water in the field of that microscope to your left."

Mary Ann swung around and considered the spherical black object resting on a table against the wall. Outside of the two eyepieces set flush with the surface, it had little in common with pictures of microscopes she had seen in magazines.

"In-in there? What's he doing in there?"

"He's on a micro-hunt. You should know your Gygyo by now. An absolutely incurable romantic. Who goes on micro-hunts anymore? And in a culture of intestinal amebae, of all things. Killing the beasties by hand instead of by routine psycho or even chemo therapy appeals to his dashing soul. Grow up, Gygyo, I said to him: these games are for children and for Responsibility Group Four children at that. Well, that hurt his pride and he said he was going in with a fifteen-minute lock. A fifteen-minute lock! When I heard that, I decided to come here and watch the battle, just in case."

"Why—is a fifteen-minute lock dangerous?" Mary Ann asked. Her face was tightly set however; she was still thinking of that 'you should know your Gygyo' remark. That was another thing about this world she didn't like: with all their talk of privacy and the sacred rights of the individual, men like Gygyo didn't think twice of telling the most intimate matters about people to—to other people.

"Figure it out for yourself. Gygyo's set himself for 35 mi-

crons. 35 microns is about twice the size of most of the intestinal parasites he'll have to fight—amebae like Endolimax nana, Iodamoeba butschlii and Dientamoeba fragilis. But suppose he runs into a crowd of Endamoeba coli, to say nothing of our tropical dysentery friend, Endamoeba hystolytica? What then?"

"What then?" the blonde girl echoed. She had not the slightest idea. One did not face problems like this in San Francisco.

"Trouble, that's what. Serious trouble. The *colii* might be as large as he is, and *hystolyticae* run even bigger. 36, 37 microns, sometimes more. Now, the most important factor on a microhunt, as you know, is size. Especially if you're fool enough to limit your arsenal to a sword and won't be seen carrying an automatic weapon even as insurance. Well, under those circumstances, you lock yourself down to smallness, so that you can't get out and nobody can take you out for a full fifteen minutes, and you're just asking for trouble. And trouble is just what our boy is having!"

"He is? I mean, is it bad?"

Flureet gestured at the microscope. "Have a look. I've adjusted my retina to the magnification, but you people aren't up to that yet, I believe. You need mechanical devices for everything. Go ahead, have a look. That's Dientamoeba fragilis he's fighting now. Small, but fast. And very, very vicious."

Mary Ann hurried to the spherically shaped microscope and

stared intently through the eyepieces.

There, in the very center of the field, was Gygyo. A transparent bubble helmet covered his head and he was wearing some sort of thick but flexible one-piece garment over the rest of his body. About a dozen amebae the size of dogs swarmed about him, reaching for his body with blunt, glassy pseudopods. He hacked away at them with a great, two-handed sword in tremendous sweeps that cut in two the most venturesome and persistent of the creatures. But Mary Ann could see from his frantic breathing that he was getting tired. Every once in a while he glanced rapidly over his left shoulder as if keeping watch on something in the distance.

"Where does he get air from?" she asked.

"The suit always contains enough oxygen for the duration of the lock," Flureet's voice explained behind her, somewhat surprised at the question. "He has about five minutes to go, and I think he'll make it. I think he'll be shaken up enough though, to—Did you see that?"

Mary Ann gasped. An elongated, spindle-shaped creature ending in a thrashing whip-like streak had just darted across the field, well over Gygyo's head. It was about one and a half times his size. He had gone into a crouch as it passed and the amebae surrounding him had also leaped away. They were back at the attack in a moment, however, once the danger had passed. Very wearily now, he continued to chop at them.

"What was it?"

"A trypanosome. It went by too fast for me to identify it, but it looked like either *Trypanosoma gambiense* or *rhodisiense*—the African sleeping sickness protozoans. It was a bit too big to be either of them, now that I remember. It could have been—Oh, the fool, the fool!"

Mary Ann turned to her, genuinely frightened. "Why-what did he do?"

"He neglected to get a pure culture, that's what he did. Taking on several different kinds of intestinal amebae is wild enough, but if there are trypanosomes in there with him, then there might be anything! And him down to 35 microns!"

Remembering the frightened glances that Gygyo had thrown over his shoulder, Mary Ann swung back to the microscope. The man was still fighting desperately, but the strokes of the sword came much more slowly. Suddenly, another ameba, different from those attacking Gygyo, swam leisurely into the field. It was almost transparent and about half his size.

"That's a new one," she told Flureet. "Is it dangerous?"

"No, *Iodamoeba butschlii* is just a sluggish, friendly lump. But what in the world is Gygyo afraid of to his left? He keeps turning his head as if— Oh."

The last exclamation came out almost as a simple comment,

so completely was it weighted with despair. An oval monster—its length three times and its width fully twice Gygyo's height—shot into the field from the left boundary as if making a stage entrance in reply to her question. The tiny, hair-like appendages with which it was covered seemed to give it fantastic speed.

Gygyo's sword slashed at it, but it swerved aside and out of the field. It was back in a moment, coming down like a dive bomber. Gygyo leaped away, but one of the amebae which had been attacking him was a little too slow. It disappeared, struggling madly, down the funnel-shaped mouth which indented the

forward end of the egg-shaped monster.

"Balantidium coli," Flureet explained before Mary Ann could force her trembling lips to frame the question. "100 microns long, 65 microns wide. Fast and deadly and terribly hungry. I was afraid he'd hit something like this sooner or later. Well, that's the end of our micro-hunting friend. He'll never be able to avoid it long enough to get out. And he can't kill a bug that size."

Mary Ann held quivering hands out to her. "Can't you do

something?"

The bald woman brought her eyes down from the ceiling at last. Making what seemed an intense effort, she focused them on the girl. They were lit with bright astonishment.

"What can I do? He's locked inside that culture for another four minutes at least; an absolutely unbreakable lock. Do you

expect me to-to go in there and rescue him?"

"If you can-of course!"

"But that would be interfering with his sovereign rights as an individual! My dear girl! Even if his wish to destroy himself is unconscious, it is still a wish originating in an essential part of his personality and must be respected. The whole thing is covered by the subsidiary—rights covenant of—"

"How do you *know* he wants to destroy himself?" Mary Ann wept. "I never heard of such a thing! He's supposed to be a—a friend of yours! Maybe he just accidentally got himself into more trouble than he expected, and he can't get out. I'm positive that's

what happened. Oh-poor Gygyo, while we're standing here talking, he's getting killed!"

Flureet considered. "You may have something there. He is a romantic, and associating with you has given him all sorts of swaggering adventuresome notions. He'd never have done anything as risky as this before. But tell me: do you think it's worth taking a chance of interfering with someone's sovereign individual rights, just to save the life of an old and dear friend?"

"I don't understand you," Mary Ann said helplessly. "Of course! Why don't you let me—just do whatever you have to and

send me in there after him. Please!"

The other woman rose and shook her head. "No, I think I'd be more effective. I must say, this romanticism is catching. And," she laughed to herself, "just a little intriguing. You people in the twentieth century led such lives!"

Before Mary Ann's eyes, she shrank down rapidly. Just as she disappeared, there was a whispering movement, like a flame curving from a candle, and her body seemed to streak toward the microscope.

Gygyo was down on one knee, now, trying to present as small an area to the oval monster as possible. The amebae with which he had been surrounded had now either all fled or been swallowed. He was swinging the sword back and forth rapidly over his head as the *Balantidium coli* swooped down first on one side, then on the other, but he looked very tired. His lips were clenched together, his eyes squinted with desperation.

And then the huge creature came straight down, feinted with its body, and, as he lunged at it with the sword, swerved slightly and hit him from the rear. Gygyo fell, losing his weapon.

Hairy appendages churning, the monster spun around fluently so that its funnel-shaped mouth was in front, and came back rapidly for the kill.

An enormous hand, a hand the size of Gygyo's whole body, swung into view and knocked it to one side. Gygyo scrambled to his feet, regained the sword, and looked up unbelievingly. He exhaled with relief and then smiled. Flureet had evidently

stopped her shrinkage at a size several times larger than a hundred microns. Her body was not visible in the field of the microscope to Mary Ann, but it was obviously far too visible to the Balantidium coli which turned end over end and scudded away.

And for the remaining minutes of the lock, there was not a creature which seemed even vaguely inclined to wander into

Gygyo's neighborhood.

To Mary Ann's astonishment, Flureet's first words to Gygyo when they reappeared beside her at their full height were an apology: "I'm truly sorry, but your fire-eating friend here got me all excited about your safety, Gygyo. If you want to bring me up on charges of violating the Covenant and interfering with an individual's carefully prepared plans for self-destruction—"

Gygyo waved her to silence. "Forget it. In the words of the poet: Covenant, Shmovenant. You saved my life, and, as far as I know, I wanted it saved. If I instituted proceedings against you for interfering with my unconscious, in all fairness we'd have to subpoena my conscious mind as a witness in your defense. The case could drag on for months, and I'm far too busy."

The woman nodded. "You're right. There's nothing like a schizoid lawsuit when it comes to complications and verbal quibbling. But all the same I'm grateful to you—I didn't *have* to go and save your life. I don't know quite what got into me."

"That's what got into you," Gygyo gestured at Mary Ann.
"The century of regimentation, of total war, of massive eaves-

dropping. I know: it's contagious."

Mary Ann exploded. "Well, really! I never in my life—really I—I—I just can't believe it! First, she doesn't want to save your life, because it would be interfering with your unconscious—your unconscious! Then, when she finally does something about it, she apologizes to you—she apologizes! And you, instead of thanking her, you talk as if you're excusing her for—for committing assault and battery! And then you start insulting me—and—and—"

"I'm sorry," Gygyo said. "I didn't intend to insult you, Mary

Ann, neither you nor your century. After all, we must remember that it was the first century of modern times, it was the crisissickness from which recovery began. And it was in very many ways a truly great and adventuresome period, in which Man, for the last time, dared many things which he has never since attempted."

"Well. In that case." Mary Ann swallowed and began to feel better. And at that moment, she saw Gygyo and Flureet exchange the barest hint of a smile. She stopped feeling better. Damn

these people! Who did they think they were?

Flureet moved to the yellow square exit. "I'll have to be going," she said. "I just stopped in to say good-bye before my transformation. Wish me luck, Gygyo."

"Your transformation? So soon? Well, all the best of course.

It's been good knowing you, Flureet."

When the woman had left, Mary Ann looked at Gygyo's deeply concerned face and asked hesitantly: "What does she mean—'transformation?' And she said it was a major transformation. I haven't heard of that so far."

The dark-haired young man studied the wall for a moment. "I'd better not," he said at last, mostly to himself. "That's one of the concepts you'd find upsetting, like our active food for instance. And speaking of food—I'm hungry. Hungry, do you hear? Hungry!"

A section of the wall shook violently as his voice rose. It protruded an arm of itself at him. A tray was balanced on the end of the arm. Still standing, Gygyo began to eat from the tray.

He didn't offer Mary Ann any, which, as far as she was concerned, was just as well. She had seen at a glance that it was the purple spaghetti-like stuff of which he was so terribly fond.

Maybe it tasted good. Maybe it didn't. She'd never know. She only knew that she could never bring herself to eat anything which squirmed upwards toward one's mouth and wriggled about cozily once it was inside.

That was another thing about this world. The things these

people ate!

Gygyo glanced up and saw her face. "I wish you'd try it just once, Mary Ann," he said wistfully. "It would add a whole new dimension to food for you. In addition to flavor, texture and aroma, you'd experience motility. Think of it: food not just lying there limp and lifeless in your mouth, but food expressing eloquently its desire to be eaten. Even your friend, Winthrop, culinary esthete that he is, admitted to me the other day that Centaurian libalilil has it all over his favorite food symphonies in many ways. You see, they're mildly telepathic and can adjust their flavor to the dietary wishes of the person consuming them. That way, you get—"

"Thank you, but please! It makes me absolutely and com-

pletely sick even to think of it."

"All right." He finished eating, nodded at the wall. The wall withdrew the arm and sucked the tray back into itself. "I give up. All I wanted was to have you sample the stuff before you left. Just a taste."

"Speaking of leaving, that's what I came to see you about.

We're having trouble."

"Oh, Mary Ann! I was hoping you'd come to see me for myself alone," he said with a disconsolate droop of his head.

She couldn't tell whether he was being funny or serious; she got angry as the easiest way of handling the situation. "See here, Gygyo Rablin, you are the very last man on Earth—past, present, or future—that I ever want to see again. And you know why! Any man who—who says things to a girl like you said to m-me, and at s-such a t-time . . ."

Against her will, and to her extreme annoyance, her voice broke. Tears burst from her eyelids and inched their way down her face. She set her lips determinedly and tried to shake them away.

Gygyo looked really uncomfortable now. He sat down on a corner of the desk which squirmed under him more erratically than ever.

"I am sorry, Mary Ann. Truly, terribly, sincerely sorry. I should never have made love to you in the first place. Even with-

out our substantial temporal and cultural differences, I'm certain that you know, as well as I do, we have precious little in common. But I found you—well, enormously attractive, overpoweringly attractive. I found you exciting like no woman in my own time, or any woman that I've ever encountered in a visit to the future. I just couldn't resist the attraction. The one thing I didn't anticipate was the depressing effect your peculiar cosmetics would have upon me. The actual tactile sensations were extremely upsetting."

"That's not what you said. And the way you said it! You rubbed your finger on my face and lips, and you went: 'Grea-sy! Grea-sy!'" Thoroughly in control of herself now, she mimicked

him viciously.

Gygyo shrugged. "I said I'm sorry, and I meant it. But, Mary Ann, if you only know how that stuff feels to a highly educated tactile sense! That smeary red lipstick—and oh that finely-grated nonsense on your cheeks! There's no excuse for me, that I'll grant, but I'm just trying to make you understand why I erupted so stupidly."

"I suppose you think I'd be a lot nicer if I shaved my head

like some of these women-like that horrible Flureet!"

He smiled and shook his head. "No, Mary Ann, you couldn't be like them, and they couldn't be like you. There are entirely different concepts of womanhood and beauty involved. In your period, the greatest emphasis is on a kind of physical similarity, the use of various artificial props which will make the woman most nearly approach a universally-agreed-upon ideal, and an ideal which consists of such items as redness of lips, smoothness of complexion and specific bodily shape. Whereas we place the accent on difference, but most particularly on emotional difference. The more emotions a woman can exhibit, and the more complex they are—the more striking is she considered. That's the point of the shaved heads: to show suddenly-appearing subtle wrinkles that might be missed if the area were covered with hair. And that's why we call Woman's bald head her frowning glory."

Mary Ann's shoulders slumped and she stared down at the

floor which started to raise a section of itself questioningly but sank back down again as it realized that nothing was required of it. "I don't understand, and I guess I won't ever understand. All I know is that I just can't stay in the same world with you, Gygyo Rablin—the very thought of it makes me feel kind of all wrong and sick inside."

"I understand," he nodded seriously. "And whatever comfort it may be—you have the same effect on me. I'd never have done anything as supremely idiotic as going on a locked microhunt in an impure culture before I met you. But those exciting stories of your adventuresome friend Edgar Rapp finally crept under my skin. I found I had to prove myself a man, in your terms, Mary Ann, in your terms!"

"Edgar Rapp?" she raised her eyes and looked at him incredulously. "Adventuresome? Exciting? Edgar? The only time he ever gets close to sport is when he sits on his behind all night

playing poker with the boys in the payroll department!"

Gygyo rose and ambled about the room aimlessly, shaking his head. "The way you say it, the casual, half-contemptuous way you say it! The constant psychic risks run, the inevitably recurring clashes of personality—subliminal and overt—as hand after hand is played, as hour after hour goes by, with not two, not three, but as many as five, six or even seven, different and highly aggressive human beings involved—The bluffs, the raises, the outwitting, the fantastic contest of it! And to you these things are almost nothing, they're no more than what you'd expect of a masculine man! I couldn't face it; in fact, there is not a man in my entire world who'd be able to stand up to fifteen minutes of such complex psychological punishment."

Her gaze was very soft and tender as she watched him knock unhappily about the room. "And that's why you went into that awful microscope, Gygyo? To prove that you could be as good a

man as Edgar is when he's playing poker?"

"It's not just the poker, Mary Ann. That's hair-raising enough, I grant you. It's so many things. Take this used car he has, that he drives you around in. Any man who'd drive one of

those clumsy, unpredictable power-plants through the kind of traffic and the kind of accident statistics that your world boasts—And every day, as a matter of course! I knew the micro-hunt was a pathetic, artificial affair, but it was the only thing available to me that even came close!"

"You don't have to prove anything to me, Gygyo."

"Maybe I don't," he brooded. "But I had reached the point where I had to prove it to myself. Which is quite silly when you come to think of it, but that doesn't make it any less real. And I proved something after all. That two people with entirely different standards for male and female, standards that have been postulated and recapitulated for them since infancy, don't have a chance, no matter how attractive they find each other. I can't live with my knowledge of your innate standards, and you—well, you certainly have found mine upsetting. We don't mesh, we don't resonate, we don't go. As you said before, we shouldn't be in the same world. That's doubly true ever since—well, ever since we found out how strongly we tend to come together."

Mary Ann nodded. "I know. The way you stopped making love to me, and—and said—that horrid word, the way you kind of shuddered when you wiped your lips—Gygyo, you looked at me as if I stank, as if I stank! It tore me absolutely and completely to bits. I knew right then I had to get out of your time and out of your universe forever. But with Winthrop acting the

way he is-I don't know what to do!"

"Tell me about it." He seemed to make an effort to pull himself together as he sat beside her on a section of upraised floor.

By the time she had finished, his recovery was complete. The prodigious leveling effect of mutual emotional involvement was no longer operative. Dismayed, Mary Ann watched him becoming once more a highly urbane, extremely intelligent and slightly supercilious young man of the twenty-fifth century, and felt in her very bone marrow her own awkwardness increase, her garish, none-too-bright primitiveness come thickly to the surface.

"I can't do a thing for you," he said. "I wish I could."

"Not even," she asked desperately, "with the problems we have? Not even considering how terrible it'll be if I stay here, if I don't leave on time?"

"Not even considering all that. I doubt that I could make it clear to you, however much I tried, Mary Ann, but I can't force Winthrop to go, I can't in all conscience give you any advice on how to force him—and I can't think of a thing that would make him change his mind. You see there's a whole social fabric involved which is far more significant than our personal little agonies, however important they may be to us. In my world, as Storku pointed out, one just doesn't do such things. And that, my sweet, is that."

Mary Ann sat back. She hadn't needed the slightly mocking hauteur of Gygyo's last words to tell her that he was now completely in control of himself, that once more he was looking upon her as an intriguing but—culturally speaking—extremely distant specimen.

She knew only too well what was happening: she'd been on the other end of this kind of situation once or twice herself. Just two months ago, a brilliantly smooth salesman, who handled the Nevada territory for her company, had taken her out on a date and almost swept her off her feet.

Just as she'd reached the point where the wine in her brain was filled with bubbles of starlight, she'd taken out a cigarette and dreamily, helplessly, asked him for a light. The salesman had clicked a lighter at her in an assured and lordly gesture, but the lighter had failed to work. He had cursed, clicked it futilely a few more times, then had begun picking at the mechanism madly with his fingernails. In the next few moments as he continued to claw at the lighter, it had seemed to Mary Ann that the glossy surface of his personality developed an enormous fissure along its entire length and all the underlying desperation that was essentially him leaked out. He was no longer a glamorous, successful and warmly persuasive young man, but a pathetically driven creature who was overpoweringly uncertain, afraid that if

one item in his carefully prepared presentation missed its place

in the schedule, the sale would not take place.

And it didn't. When he'd looked at her again, he saw the cool comprehension in her eyes; his lips sagged. And no matter how wittily he tried to recapture the situation, how cleverly he talked, how many oceans of sparkling urgency he washed over her, she was his master now. She had seen through his magic to the unhooded yellow light bulbs and the twisted, corroded wires which made it work. She remembered feeling somewhat sorry for him as she'd asked him to take her home—not sorry for someone with whom she'd almost fallen in love, but slight sorrow for a handicapped child (someone else's handicapped child) who had tried to do something utterly beyond his powers.

Was that what Gygyo was feeling for her now? With brimming anger and despair, Mary Ann felt she had to reach him again, reach him very personally. She had to wipe that smile off

his eyelids.

"Of course," she said, selecting the first arrow that came to hand, "it won't do you any good if Winthrop doesn't go back with us."

He looked at her questioningly. "Me?"

"Well, if Winthrop doesn't go back, we'll be stuck here. And if we're stuck here, the people from your time who are visiting ours will be stuck in the twentieth century. You're the temporal supervisor—you're responsible, aren't you? You might lose your job."

"My dear little Mary Ann! I can't lose my job. It's mine till I don't want it any more. Getting fired—what a concept! Next you'll be telling me I'm liable to have my ears cropped!"

To her chagrin, he chuckled all over his shoulders. Well, at least she had put him in a good mood; no one could say that she hadn't contributed to this hilarity. And My dear little Mary Ann. That stung!

"Don't you even feel responsible? Don't you feel anything?"

"Well, whatever I feel, it certainly isn't responsible. The five people from this century who volunteered to make the trip

back to yours were well-educated, extremely alert, highly responsible human beings. They knew they were running certain inevitable risks."

She rose agitatedly. "But how were they to know that Winthrop was going to be stubborn? And how could we, Gygyo, how could we know that?"

"Even assuming that the possibility entered nobody's mind," he pointed out, tugging at her arm gently until she sat down beside him again, "one has to, in all reason, admit that transferring to a period five centuries distant from one's own must be accompanied by certain dangers. Not being able to return is one of them. Then, one has to further admit that, this being so, one or more of the people making the transfer recognized this danger—at least unconsciously—and wished to subject themselves to its consequences. If this is at all the situation, interference would be a major crime, not only against Winthrop's conscious desires, but against such people's unconscious motivations as well—and both have almost equal weight in the ethics of our period. There! That's about as simple as I can make it, Mary Ann. Do you understand, now?"

"A-a little," she confessed. "You mean it's like Flureet not wanting to save you when you were almost being killed in that micro-hunt, because maybe, unconsciously, you wanted to get yourself killed?"

"Right! And believe me, Flureet wouldn't have lifted a finger, old friend or no old friend, your romantic twentieth-century dither notwithstanding, if she hadn't been on the verge of major transformation with the concurrent psychological remove from all normal standards and present-day human frames of reference."

"What is this major transformation business?"

Gygyo shook his head emphatically. "Don't ask me that. You wouldn't understand it, you wouldn't like it—and it's not at all important for you to know. It's a concept and a practice as peculiar to our time as, oh say, tabloid journalism and election night excitement is to yours. What you want to appreciate is this other thing—the way we protect and nurture the individual

eccentric impulse, even if it should be suicidal. Let me put it this way. The French Revolution tried to sum itself up in the slogan, Liberté, Egalité, Fraternité; The American Revolution used the phrase, Life, Liberty and the Pursuit of Happiness. We feel that the entire concept of our civilization is contained in these words: The Utter Sacredness of the Individual and the Individual Eccentric Impulse. The last part is the most important, because without it our society would have as much right to interfere with the individual as yours did; a man wouldn't even have the elementary freedom of doing away with himself without getting the proper papers filled out by the proper government official. A person who wanted to-"

Mary Ann stood up with determination. "All right! I'm not the least little bit interested in this nonsense. You won't help us in any way, you don't care if we're stuck here for the rest of our

natural lives, and that's that! I might as well go."

"In the name of the covenant, girl, what did you expect me

to tell you? I'm no Oracle Machine. I'm just a man."

"A man?" she cried scornfully. "A man? You call yourself a man? Why, a man would-a man would-a real man would just-Oh, let me get out of here!"

The dark-haired young man shrugged and rose too. He called for a jumper. When it materialized beside them, he gestured toward it courteously. Mary Ann started for it, paused, and held out a hand to him.

"Gygyo," she said, "whether we stay or leave on time, I'm never going to see you again. I've made up my mind on that. But there's one thing I want you to know."

As if knowing what she was going to say, he had dropped his eyes. His head was bent over the hand he had taken.

Seeing this, Mary Ann's voice grew gentler and more tender. "It's just-just that-oh, Gygyo, it's that you're the only man I've ever loved. Ever really truly, absolutely and completely loved. I want you to know that, Gygyo."

He didn't reply. He was still holding her fingers tightly,

and she couldn't see his eyes.

"Gygyo," she said, her voice breaking. "Gygyo! You're feeling the same, aren't--"

At last Gygyo looked up. There was an expression of puzzlement on his face. He pointed to the fingers he had been holding. The nail of each one was colored with a bright lacquer.

"Why in the world," he asked, "do you limit it to the fingernail? Most primitive peoples who went in for this sort of thing did it on other and larger parts of the body. One would expect that at least you would tattoo the whole hand— Mary Ann! Did I say anything wrong again?"

Sobbing bitterly, the girl darted past him and into the

jumper.

She went back to Mrs. Brucks' room, and, when she had been calmed sufficiently, explained why Gygyo Rablin, the temporal supervisor, either could not or would not help them with Winthrop's stubbornness.

Dave Pollock glared around the oval room. "So we give up? Is that what it comes down to? Not one person in all this brilliant, gimmicky, gadgety future will lift a finger to help us get back to our own time and our own families—and we can't help ourselves. A brave new world, all right. Real achievement. Real progress."

"I don't see what call you have to shoot your mouth off, young man," Mr. Mead muttered from where he was sitting at the far end of the room. Periodically, his necktie curled upwards and tried to nuzzle against his lips; wearily, petulantly, he slapped it down again. "At least we tried to do something about it. That's more than you can say."

"Ollie, old boy, you just tell me something I can do, and I'll do it. I may not pay a whopping income tax, but I've been trained to use my mind. I'd like nothing better than to find out what a thoroughly rational approach to this problem could do for us. One thing I know: it can't possibly come up with less than all this hysteria and emotional hoop-la, this flag-waving and executive-type strutting have managed to date."

"Listen, a difference it makes?" Mrs. Brucks held her wrist out and pointed to the tiny, gold-plated watch strapped around it. "Only forty-five minutes left before six o'clock. So what can we do in forty-five minutes? A miracle maybe we can manufacture on short notice? Magic we can turn out to order? Go fight City Hall. My Barney I know I won't see again."

The thin young man turned on her angrily. "I'm not talking of magic and miracles. I'm talking of logic. Logic and the proper evaluation of data. These people not only have a historical record available to them that extends back to and includes our own time, but they are in regular touch with the future—their future. That means there are also available to them historical records that extend back to and include their time."

Mrs. Brucks cheered up perceptibly. She liked listening to education. She nodded. "So?"

"Isn't it obvious? Those people who exchanged with us—our five opposite numbers—they must have known in advance that Winthrop was going to be stubborn. Historical records to that effect existed in the future. They wouldn't have done it—it stands to reason they wouldn't want to spend the rest of their lives in what is for them a pretty raw and uncivilized environment—unless they had known of a way out, a way that the situation could be handled. It's up to us to find that way."

"Maybe," Mary Ann Carthington suggested, bravely biting the end off a sniffle, "maybe the next future kept it a secret from them. Or maybe all five of them were suffering from what they call here a bad case of individual eccentric impulse."

"That's not how the concept of individual eccentric impulse works, Mary Ann," Dave Pollock told her with a contemptuous grimace. "I don't want to go into it now, but believe me, that's not how it works! And I don't think the temporal embassies keep this kind of secret from the people in the period to which they're accredited. No, I tell you the solution is right here if we can only see it."

Oliver T. Mead had been sitting with an intent expression on his face, as if he were trying to locate a fact hidden at the other end of a long tunnel of unhappiness. He straightened up suddenly and said: "Storku mentioned that! The Temporal Embassy. But he didn't think it was a good idea to approach them—they were too involved with long-range historical problems to be of any use to us. But something else he said—something else we could do. What was it, now?"

They all looked at him and waited anxiously while he thought. Dave Pollock had just begun a remark about "high surtax memories" when the rotund executive clapped his hands

together resoundingly.

"I remember! The Oracle Machine! He said we could ask the Oracle Machine. We might have some difficulty interpreting the answer, according to him, but at this point that's the least of our worries. We're in a desperate emergency, and beggars can't be choosers. If we get any kind of answer, any kind of an answer at all. . . . "

Mary Ann Carthington looked away from the tiny cosmetics laboratory she was using to repair the shiny damage caused by tears. "Now that you bring it up, Mr. Mead, the temporal supervisor made some such remark to me, too. About the Oracle Machine, I mean."

"He did? Good! That firms it up nicely. We may still have a chance, ladies and gentlemen, we may still have a chance. Well then, as to who shall do it. I am certain I don't have to draw a diagram when it comes to selecting the one of us most capable of dealing with a complex piece of futuristic machinery."

They all stared at Dave Pollock who swallowed hard and

inquired hoarsely, "You mean me?"

"Certainly I mean you, young man," Mr. Mead said sternly. "You're the long-haired scientific expert around here. You're the

chemistry and physics professor."

"I'm a teacher, that's all, a high school science teacher. And you know how I feel about having anything to do with the Oracle Machine. Even the thought of getting close to it makes my stomach turn over. As far as I'm concerned it's the one aspect of

this civilization that's most horrible, most decadent. Why, I'd rather-"

"My stomach didn't turn over when I had to go in and have an argument with that crazy Mr. Winthrop?" Mrs. Brucks broke in. "Till then, out of this room I hadn't taken a step, with all the everything I had positively nothing to do—you think I liked watching one minute a pair of rompers, the next minute, I don't know what, an evening gown he starts wearing? And that crazy talk he talks—smell this from a Mars, taste this from a Venus—you think maybe, Mr. Pollock, I enjoyed myself? But somebody had to do, so I did. All we're asking you is a try. A try you can make?"

"And I can assure you," Mary Ann Carthington came on in swiftly, "that Gygyo Rablin is absolutely and completely the last person on Earth I would go to for a favor. It's a personal matter, and I'd rather not discuss it now, if you don't mind, but I would die, positively die, rather than go through that again. I did it though, because there was the teensiest chance it would help us all get home again. I don't think we're asking too much of you, I don't think so one little bit."

Mr. Mead nodded. "I agree with you, young lady. Storku is a man I haven't seen eye to eye with since we've arrived, and I've gone out of my way to avoid him, but to have to get involved in that unholy Shriek Field madness in the bargain—" He brooded for a while over some indigestible mental fragment, then, as his cleated golf shoes began squirming lovingly about on his feet, shook himself determinedly and went on: "It's about time you stopped shooting off your mouth, Pollock, and got down to humdrum, specific brass tacks. Einstein's theory of relativity isn't going to get us back to good old 1958, and neither is your Ph.D. or M.A. or whatever. What we need now is action, action with a capital A and no ifs, no ands, no buts."

"All right, all right. I'll do it."

"And another thing." Mr. Mead rolled a wicked little thought pleasurably to and fro in his mind for a moment or two before letting it out. "You take the jumper. You said yourself we don't have the time to do any walking, and that's doubly true right now, doubly true, when we're right up against the dead, dead deadline. I don't want to hear any whining and any whimpering about it making you sick. If Miss Carthington and I could take the jumper, so can you."

In the midst of his misery, Dave Pollock rallied. "You think I won't?" he asked scornfully. "I've done most of my traveling here by jumper. I'm not afraid of mechanical progress—just so long as it's genuine progress. Of course I'll take the jumper."

He signaled for one with a microscopic return of his old swagger. When it appeared, he walked under it with squared shoulders. Let them all watch how a rational, scientificallyminded man goes about things, he thought. And anyway, using the jumper wasn't nearly as upsetting to him as it seemed to be to the others. He could take jumpers in stride.

Which was infinitely more than he could say for the Oracle Machine.

For that reason, he had himself materialized outside the building which housed the machine. A bit of a walk and he might be able to get his thoughts in order.

The only trouble was, the sidewalk had other ideas. Silently, obsequiously, but nonetheless firmly, it began to move under his feet as he started walking around the squat, slightly quivering structure. It rippled him ahead at a pace somewhat faster than the one he set, changing direction as soon as he changed his.

Dave Pollock looked around at the empty streets and smiled with resignation. The sentient, eager-to-serve sidewalks didn't bother him, either. He had expected something like that in the future, that and the enormously alert servitor houses, the clothes which changed their color and cut at the wearers' caprice—all more or less, in one form or another, to be anticipated, by a knowledgeable man, of human progress. Even the developments in food—from the wriggling, telepathic, please-eat-me-and-enjoyme stuff all the way up to the more complex culinary compositions on which an interstellarly famous chef might have worked for a year or more—was logical, if you considered how bizarre to

an early American colonist, would be the fantastic, cosmopolitan variety of potables and packaged meals available in any twentieth-century supermarket.

These things, the impediments of daily life, all change and modify in time. But certain things, certain things, should not.

When the telegram had arrived in Houston, Texas, informing him that—of all the people in the United States of America—he was most similar in physical composition and characteristics to one of the prospective visitors from 2458 A.D., he had gone almost mad with joy. The celebrity he suddenly enjoyed in the faculty lunchroom was unimportant, as were the Page One stories in local newspapers under the heading: LONE STAR SON GALLOPING FUTUREWARDS.

First and foremost, it was reprieve. It was reprieve and another chance. Family responsibilities, a dying father, a sick vounger sister, had prevented him from getting the advanced academic degrees necessary for a university teaching position with all of its accompanying prestige, higher income and opportunities for research. Then, when they had come to an end and he had gone back to school, a sudden infatuation and too-hasty marriage had thrown him back onto the same treadmill. He had just begun to realize-despite the undergraduate promise he had shown and none-too-minute achievement-how thoroughly he was trapped by the pleasant residential neighborhood and cleanly modern high school between which he shuttled daily, when the telegram arrived, announcing his selection as one of the group to be sent five hundred years ahead. How it was going to help him, what, precisely, he would do with the chance, he did not know-but it had lifted him out of the ruck of anonymity; somehow, someway, it would enable him to become a striking individual at last.

Dave Pollock had not realized the extent of his good fortune until he met the other four in Washington, D.C. He had heard, of course, how the finest minds in the country had bitterly jostled and elbowed each other in a frenzied attempt to get into the group and find out what was going to develop in *their* spe-

ciality half a millennium hence. But not until he had talked with his prospective fellow-tourists—an itinerant worker, a Bronx housewife, a pompous mid-western business executive, a pretty but otherwise very ordinary San Francisco stenographer—did it come to him that he was the only one with any degree of scientific training.

He would be the only one capable of evaulating the amount of major technological advance! He would be the only one to correlate all the bewildering mass of minor changes into something resembling coherence! And thus, above all, he would be the only one to appreciate the essential quality of the future, the basic threads that would run through it from its underlying social fabric to its star-leaping fringes!

He, who had wanted to devote his life to knowledge-seeking, would exist for two weeks, unique and intellectually alone, in a five-century-long extrapolation of every laboratory and library in

his age!

At first, it had been like that. Everywhere there was glory and excitement and discovery. Then, little, disagreeable things began to creep in, like the first stages of a cold. The food, the clothing, the houses—well, you either ignored it or made other arrangements. These people were extremely hospitable and quite ingenious: they didn't at all mind providing you with more familiar meals when your intestines had revolted a couple of times. The women, with their glossy baldness and strange attitudes toward relations between the sexes—well, you had a brand-new wife at home and didn't have to get involved with the women.

But Shriek Field, Panic Stadium, that was another matter. Dave Pollock was proud of being a thoroughly rational person. He had been proud of the future, when he first arrived, taking it almost as a personal vindication that the people in it should be so thoroughly, universally rational, too. His first acquaintance with Shriek Field had almost nauseated him. That the superb intellects he had come to know should willingly transform themselves into a frothing, hysterical pack of screaming animals, and at regular, almost medically-prescribed intervals. . . .

They had explained to him painfully, elaborately, that they could not be such superb intellects, so thoroughly rational, unless they periodically released themselves in this fashion. It made sense, but—still—watching them do it was absolutely horrifying. He knew he would never be able to stand the sight of it.

Still, this one could make acceptable in some corner of the brain. But the chess business?

Since his college days, Dave Pollock had fancied himself as a chess player. He was just good enough to be able to tell himself that if ever he had the time to really concentrate on the game, to learn the openings, say, as they should be learned, he'd be good enough to play in tournaments. He'd even subscribed to a chess magazine and followed all the championship matches with great attention. He'd wondered what chess would be like in the future—surely the royal game having survived for so many centuries would survive another five? What would it be like: a version of three-dimensional chess, or possibly another, even more complex evolution?

The worst of it was the game was almost identical with the one played in the twentieth century.

Almost every human being in 2458 played it; almost every human being in 2458 enjoyed it. But there were no human champions. There were no human opponents.

There were only the chess machines. And they could beat

anybody.

"What's the sense," he had wailed, "of playing with a machine which has millions of 'best moves and counter-moves' built into its memory circuits? That has a selector mechanism able to examine and choose from every chess game ever recorded? A machine which has been designed never to be beaten? What's the sense—where's the excitement?"

"We don't play to win," they had explained wonderingly. "We play to play. It's the same with all our games: aggressions are gotten rid of in a Shriek or a Panic, games are just for mental or physical exercise. And so, when we play, we want to play against the best. Besides, every once in a while, an outstandingly

good player, once or twice in his lifetime, is able to hold the machine to a draw. Now, that is an achievement. That merits excitement."

You had to love chess as much as he did, Dave Pollock supposed, to realize what an obscenity the existence of these machines made of it. Even the other three in his group, who had become much more restive than he at twenty-fifth-century mechanisms and mores, only stared at him blankly when he raged over it. No, if you didn't love something, you weren't bothered overmuch when it was degraded. But surely they could see the abdication of human intellect, of human reason, that the chess machines implied?

Of course, that was nothing compared to the way human reason had abdicated before the Oracle Machine. That was the

last, disgusting straw to a rational person.

The Oracle Machine. He glanced at his watch. Only twenty-five minutes left. Better hurry. He took one last selfencouraging breath and climbed the cooperative steps of the building.

"My name is Stilia," a bald-headed, rather pleasant-faced young woman said as she came toward him in the spacious anteroom. "I'm the attendant of the machine for today. Can I help you?"

"I suppose so." He looked uncomfortably at a distant, throbbing wall. Behind the yellow square on that wall, he knew, was the inner brain of the Oracle Machine. How he'd love to kick a hole in that brain!

Instead, he sat down on an upraised hummock of floor and wiped his perspiring hands carefully. He told her about their approaching deadline, about Winthrop's stubbornness, about the decision to consult the Oracle Machine.

"Oh, Winthrop, yes! He's that delightful old man. I met him at a dream dispensary a week ago. What wonderful awareness he has! Such a total immersion in our culture! We're very proud of Winthrop. We'd like to help him every way we possibly can." "If you don't mind, lady," Dave Pollock said morosely, "we're the ones who need help. We've got to get back."

Stilia laughed. "Of course. We'd like to help everybody. Only Winthrop is—special. He's trying hardest. Now, if you'll just wait here, I'll go in and put your problem before the Oracle Machine. I know how to do it so that it will activate the relevant memory circuits with the least loss of time."

She flexed her right arm at him and walked toward the yellow square. Pollock watched it expand in front of her, then, as she went through the opening it made, contract behind her. In a few minutes she returned.

"I'll tell you when to go in, Mr. Pollock. The machine is working on your problem. The answer you get will be the very best that can be made, given the facts available."

"Thanks." He thought for a while. "Tell me something. Doesn't it seem to take something out of life—out of your thinking life—to know that you can take absolutely any problem, personal problem, scientific problem or working problem, to the Oracle Machine and it will solve it much better than you could?"

Stilia looked puzzled. "Not at all. To begin with, problem-solving is a very small part of today's thinking life. It would be as logical to say that it took something vital out of life to make a hole with an electric drill instead of a hand drill. In your time, no doubt, there are people who feel just that way, they have the obvious privilege of not using electric drills. Those who use electric drills, however, have their physical energy freed for tasks they regard as more important. The Oracle Machine is the major tool of our culture; it has been designed toward just one end—computing all the factors of a given problem and relating them to the totality of pertinent data that is in the possession of the human race. But even if people consult the Oracle Machine, they may not be able to understand and apply the answer. And, if they do understand it, they may not choose to act on it."

"They may not choose to act on it? Does that make sense? You said yourself the answers are the very best that can be made, given the facts available."

"Human activities don't necessarily have to make sense. That is the prevailing and rather comfortable modern view, Mr. Pollock. There is always the individual eccentric impulse."

"Yeah, there's always that," he growled. "Resign your private, distinct personality by running with a howling mob at Shriek Field, lose all of yourself in an insane crowd—but don't forget your individual eccentric impulse. Never, never forget

your individual eccentric impulse!"

She nodded soberly. "That really sums it up, I must say, in spite of your rather unmistakable sarcasm. Why do you find it so hard to accept? Man is both a herd animal and a highly individualistic animal—what we call a self-realizable animal. The herd instincts must be satisfied at whatever cost, and have been in the past through such mechanisms as warfare, religion, nationalism, partyism and various forms of group chauvinism. The need to resign one's personality and immerse in something larger than self has been recognized since earliest times: Shriek Fields and Panic Stadiums everywhere on the planet provide for this need and expend it harmlessly."

"I wouldn't say it was so harmless from the look of that

mechanical rabbit, or whatever it was."

"I understand that human beings who took the place of the mechanical rabbit in the past looked much worse when a herd of men was through with them," she suggested, locking eyes with him. "Yes, Mr. Pollock, I think you know what I mean. The self-realizable instincts, on the other hand, must be satisfied, too. Usually, they can be satisfied in terms of one's daily life and work, as the herd instincts can be fulfilled by normal group relationships and identification with humanity. But occasionally, the self-realizable instincts must be expressed at abnormal strengths, and then we have to have a kind of private Shriek Field—the concept of individual eccentric impulse. The two are opposite poles of exactly the same thing. All we require is that another human being will not be actively interfered with."

"And so long as that doesn't happen, anything goes!"

"Exactly. Anything goes. Absolutely anything a person may

want to do out of his own individual eccentric impulse is permitted. Encouraged, actually. It's not only that we consider that some of humanity's greatest achievements have come out of individual eccentric impulses, but that we feel the greatest glory of our civilization is the homage we pay to such intrinsically personal expression."

Dave Pollock stared at her with reluctant respect. She was bright. This was the kind of girl he might have married if he'd gone on to his doctorate, instead of Susie. Although Susie— He wondered if he'd ever see Susie again. He was astonished at how bitterly homesick he felt.

"It sounds good," he admitted. "But living with it is another thing entirely. I guess I'm too much a product of my own culture to ever swallow it down all the way. I can't get over how much difference there is between our civilizations. We talk the same language but we sure as hell don't think the same thoughts."

Stilia smiled warmly and sat back. "One of the reasons your period was invited to exchange visitors with us is because it was the first in which most speech patterns became constant and language shifts came to an end. Your newly-invented speech recording devices were responsible for that. But technological progress continued, and sociological progress actually accelerated. Neither was solidified to any great extent until the invention in the latter part of the twenty-third century—"

A hum began in the distant wall. Stilia broke off and stood up. "The Oracle Machine is ready to give you the answer to your problem. Just go inside, sit down and repeat your question

in its simplest form. I wish you well."

I wish me well, too, Dave Pollock thought, as he went through the dilated yellow square and into the tiny cube of a room. For all of Stilia's explication, he was supremely uncomfortable in this world of simply satisfied herd instincts and individual eccentric impulses. He was no misfit; he was no Winthrop: he very much wanted out and to return to what was smoothly familiar.

Above all, he didn't want to stay any longer in a world

where almost any question he might think of would be answered best by the bluish, narrow, throbbing walls which surrounded him.

But— He did have a problem he couldn't solve. And this machine could.

He sat down. "What do we do about Winthrop's stubbornness?" he asked, idiotically feeling like a savage interrogating a handful of sacred bones.

A deep voice, neither masculine nor feminine in quality, rumbled from the four walls, from the ceiling, from the floor.

"You will go to the time-travel bureau in the Temporal Embassy at the proper time."

He waited. Nothing more was forthcoming. The walls were still.

The Oracle Machine evidently had not understood.

"It won't do us any good to be there," he pointed out. "Winthrop is stubborn, he won't go back with us. And, unless all five of us go back together, none of us can go. That's the way the transferring device is set. So, what I want to know is, how do we persuade Winthrop without—"

Again the enormous voice.

"You will go to the time-travel bureau in the Temporal Embassy at the proper time."

And that seemed to be that.

Dave Pollock trudged out and told Stilia what had happened. "It seems to me," he commented just a little nastily, "that the machine found the problem was just a bit too much for it and was trying hard to change the subject."

"Just the same, I would do what it advised. Unless, of course, you find another, subtler interpretation of the answer."

"Or unless my individual eccentric impulse gets in the way?"

This time the sarcasm was lost on her. She opened her eyes wide. "That would be best of all! Imagine if you should at last learn to exercise it!"

So Dave Pollock went back to Mrs. Brucks' room and,

thoroughly exasperated, told the others of the ridiculous answer the Oracle Machine had given him on the problem of Winthrop's stubbornness.

At a few minutes to six, however, all four of them—Mrs. Brucks, Oliver T. Mead, Mary Ann Carthington, Dave Pollock—were in the time-travel bureau of the Temporal Embassy, having arrived in varying stages of upset by way of jumper. They didn't have any particular hopes: there just wasn't anything else to do.

They sat dispiritedly in their transfer seats and stared at their watches.

At precisely one minute to six, a large group of twenty-fifth-century citizens came in to the transfer room. Gygyo Rablin, the temporal supervisor, was among them, as was Stilia, the attendant of the Oracle Machine, Flureet, wearing the drawn look of one awaiting major transformation, Mr. Storku, returned temporarily from the Odor Festival on Venus—and many, many others. They carried Winthrop to his proper seat and stood back with reverent expressions on their faces. They looked like people who had seen the fulfillment of a religious ceremony—and they had.

The transfer began.

Winthrop was an old man, sixty-four, to be exact. He had, in the past two weeks, undergone much excitement. He had been on micro-hunts, undersea hunts, teleported jaunts to incredibly distant planets, excursions, numerous and fantastic. He had had remarkable things done to his body, spectacular things done to his mind. He had pounded in pursuit at Shriek Field, scuttled fearfully at Panic Stadium. And, above all, he had eaten plentifully and repeatedly of foods grown in distant stellar systems, of dishes prepared by completely alien entities, of meals whose composition had been totally unsuspected by his metabolism in the period of its maturing. He had not grown up with these things, with this food, as had the people of the twenty-fifth century: it had all been shatteringly new to his system.

No wonder they had observed with such pleased astonishment his individual eccentric impulse assert itself. No wonder they had guarded its unfolding so lovingly.

Winthrop was no longer stubborn. Winthrop was dead.

## ACCIDENTAL FLIGHT

BY F. L. WALLACE

Cameron frowned intently at the top of the desk. It was difficult to concentrate under the circumstances. "Your request was turned over to the Medicouncil," he said. "After studying it, they reported back to the Solar Committee."

Docchi edged forward, his face literally lighting up.

Dr. Cameron kept his eyes averted; the man was damnably disconcerting. "You know what the answer is. A flat no, for the present."

Docchi leaned back. "We should have expected that," he said wearily.

"It's not entirely hopeless. Decisions like this can always be changed."

"Sure," said Docchi. "We've got centuries." His face was flushed—blazing would be a better description.

Absently, Cameron lowered the lights in the room as much as he could. It was still uncomfortably bright. Docchi was a nuisance.

"But why?" asked Docchi. "You know that we're capable. Why did they refuse?"

Cameron had tried to avoid that question. Now it had to be

answered with blunt brutality. "Did you think you would be chosen? Or Nona, or Jordan, or Anti?"

Docchi winced. "Maybe not. But we've told you that we're willing to abide by what the experts say. Surely from a thousand

of us they can select one qualified crew."

"Perhaps so," said Cameron. He switched on the lights and resumed staring at the top of the desk. "Most of you are biocompensators. Ninety per cent, I believe. I concede that we ought to be able to get together a competent crew." He sighed. "But you're wasting your time discussing this with me. I'm not responsible for the decision. I can't do anything about it."

Docchi stood up. His face was colorless and bright.

Dr. Cameron looked at him directly for the first time. "I suggest you calm down. Be patient and wait; you may get your chance."

"You wait," said Docchi. "We don't intend to."

The door opened for him and closed behind him.

Cameron concentrated on the desk. Actually he was trying to look through it. He wrote down the card sequence he expected to find. He opened a drawer and gazed at the contents, then grimaced in disappointment. No matter how many times he tried, he never got better than strictly average results. Maybe there was something to telepathy, but he hadn't found it yet.

He dismissed it from his mind. It was a private game, a method of avoiding involvement while Docchi was present. But Docchi was gone now, and he had better come up with some

answers. The right ones.

He switched on the telecom. "Get me Medicouncilor Thorton," he told the robot operator. "Direct, if you can; indirect if you have to. I'll wait."

With an approximate mean diameter of thirty miles, the asteroid was listed on the charts as Handicap Haven. The regular inhabitants were willing to admit the handicap part of the name, but they didn't call it haven. There were other terms, none of them suggesting sanctuary.

It was a hospital, of course, but even more like a convales-

cent home, the permanent kind. A healthy and vigorous humanity had built it for those few who were less fortunate. A splendid gesture, but, like many such gestures, the reality fell somewhat short of the original intentions.

The robot operator interrupted his thoughts. "Medicouncilor

Thorton will speak to you."

The face of an older man filled the screen. "On my way to the satellites of Jupiter. I'll be in direct range for the next half hour." At such distance, transmission and reception were practically instantaneous. "You wanted to speak to me about the Solar Committee reply?"

"I do. I informed Docchi a few minutes ago."

"How did he react?"

"He didn't like it. As a matter of fact, he was mad all the way through."

"That speaks well for his mental resiliency."

"They all seem to have enough spirit, though, and nothing to use it on," said Dr. Cameron. "I confess I didn't look at him often, in spite of the fact that he was quite presentable. Handsome, even, in a startling way."

Thorton nodded. "Presentable. That means he had arms."

"He did. Is that important?"

"I think it is. He expected a favorable reply and wanted to look his best. As nearly normal as possible."

"Trouble?"

"I don't see how," said the medicouncilor uncertainly. "In any event, not immediately. It will take them some time to get over the shock of refusal. They can't do anything, really. Individually they're helpless. Collectively—there aren't parts for a dozen sound bodies on the asteroid."

"I've looked over the records," said Dr. Cameron. "Not one accidental has ever *liked* being on Handicap Haven, and that covers quite a few years. But there has never been so much open discontent as there is now."

"Someone is organizing them. Find out who and keep a close watch."

"I know who. Docchi, Nona, Anti, and Jordan. But it doesn't do any good merely to watch them. I want your permission to break up that combination. Humanely, of course."

"How do you propose to do it?"

"Docchi, for instance. With prosthetic arms he appears physically normal, except for that uncanny luminescence. That is repulsive to the average person. Medically there's nothing we can do about it, but psychologically we might be able to make it into an asset. You're aware that Gland Opera is the most popular program in the Solar System. Telepaths, teleports, pyrotics and so forth are the heroes. All fake, of course: makeup and trick camera shots. But Docchi can be made into a real live star. The death-ray man, say. When his face shines, men fall dead or paralyzed. He'd have a chance to return to normal society under conditions that would be mentally acceptable to him."

"Acceptable to him, perhaps, but not to society," reflected the medicouncilor. "An ingenious idea, one which does credit to your humanitarian outlook. Only it won't work. You have Docchi's medical record, but you probably don't know his complete history. He was an electrochemical engineer, specializing in cold lighting. He seemed on his way to a brilliant career when a particularly messy accident occurred. The details aren't important. He was badly mangled and tossed into a tank of cold lighting fluid by automatic machinery. It was some time before he was discovered.

"There was a spark of life left and we managed to save him. We had to amputate his arms and ribs practically to his spinal column. The problem of regeneration wasn't as easy as it usually is. We were able to build up a new rib case; that's as much as we could do. Under such conditions, prosthetic arms are merely ornaments. They can be fastened to him and they look all right, but he can't use them. He has no back or shoulder muscles to anchor them to.

"And add to that the adaptation his body made while he was in the tank. The basic cold lighting fluid, as you know, is semiorganic. It permeated every tissue in his body. By the time

we got him, it was actually a necessary part of his metabolism. A corollary, I suppose, of the fundamental biocompensation theory."

The medicouncilor paused and shook his head. "I'm afraid your idea is out, Dr. Cameron. I don't doubt that he would be successful on the program you mention. But there is more to life on the outside than success. Can you picture the dead silence when he walks into a room of normal people?"

"I see," said Cameron, though he didn't, at least not eye to eye. The medicouncilor was convinced and there was nothing Cameron could do to alter that conviction. "The other one I

had in mind was Nona," he added.

"I thought so." Thorton glanced at the solar chronometer. "I haven't much time, but I'd better explain. You're new to the post and I don't think you've learned yet to evaluate the patients and their problems properly. In a sense, Nona is more impossible than Docchi. He was once a normal person. She never was. Her appearance is satisfactory; perhaps she's quite pretty, though you must remember that you're seeing her under circumstances that may make her seem more attractive than she really is.

"She can't talk or hear. She never will. She doesn't have a larynx, and it wouldn't help if we gave her one. She simply doesn't have the nervous system necessary for speech or hearing. Her brain is definitely not structurally normal. As far as we're concerned, that abnormality is not in the nature of a mutation. It's more like an anomaly. Once cleft palates were frequent—prenatal nutritional deficiencies or traumas. Occasionally we still run into cases like that, but our surgical techniques are always adequate. Not with Nona, however.

"She can't be taught to read or write; we've tried it. We dug out the old Helen Keller techniques and brought them up to date with no results. Apparently her mind doesn't work in a human fashion. We question whether very much of it works at

all."

"That might be a starting point," said Cameron. "If her brain-"

"Gland Opera stuff," interrupted Thorton. "Or Rhine Opera, if you'll permit me to coin a term. We've thought of it, but it isn't true. We've tested her for every telepathic quality that the Rhine people list. Again no results. She has no special mental capacities. Just to make sure of that, we've given her periodic checkups. One last year, in fact."

Cameron frowned in frustration. "Then it's your opinion

that she's not able to survive in a normal society?"

"That's it," answered the medicouncilor bluntly. "You'll have to face the truth—you can't get rid of any of them."

"With or without their cooperation, I'll manage," said

Cameron.

"I'm sure you will." The medicouncilor's manner didn't ooze confidence. "Of course, if you need help we can send reinforcements."

The implication was clear enough. "I'll keep them out of

trouble," Cameron promised.

The picture and the voice were fading. "It's up to you. If it turns out to be too difficult, get in touch with the Medicouncil . . ."

The robot operator broke in: "The ship is beyond direct telecom range. If you wish to continue the conversation, it will have to be relayed through the nearest main station. At present, that is Mars."

Aside from the time element, which was considerable, it wasn't likely that he would get any better answers than he could supply for himself. Cameron shook his head. "We are through, thanks."

He got heavily to his feet. That wasn't a psychological reaction at all. He really was heavier. He made a mental note. He would have to investigate.

In a way they were pathetic—the patchwork humans, the half or quarter men and women, the fractional organisms masquerading as people—an illusion which died hard for them. Medicine and surgery were partly to blame. Techniques were too good, or not good enough, depending on the viewpoint.

Too good in that the most horribly injured person, if he were still alive, could be kept alive. Not good enough because a percentage of the injured couldn't be returned to society completely sound and whole. There weren't many like that; but there were some, and all of them were on the asteroid.

They didn't like it. At least they didn't like being confined to Handicap Haven. It wasn't that they wanted to go back to the society of the normals, for they realized how conspicuous they'd be among the multitudes of beautiful, healthy people on the planets.

What the accidentals did want was ridiculous. They desired, they hoped, they petitioned to be the first to make the long, hard journey to Alpha and Proxima Centauri in rockets. Trails of glory for those that went; a vicarious share in it for those who couldn't.

Nonsense. The broken people, those without a face they could call their own, those who wore their hearts not on their sleeves, but in a blood-pumping chamber, those either without limbs or organs—or too many. The categories seemed endless.

The accidentals were qualified, true. In fact, of all the billions of solar citizens, they alone could make the journey and return. But there were other factors that ruled them out. The first point was never safe to discuss with them, especially if the second had to be explained. It would take a sadistic nature that Cameron didn't possess.

Docchi sat beside the pool. It was pleasant enough, a pastoral scene transplanted from Earth. A small tree stretched shade overhead. Waves lapped and made gurgling sounds against the sides. No plant life of any kind grew and no fish swam in the liquid. It looked like water, but it wasn't. It was acid. In it floated something that monstrously resembled a woman.

"They turned us down, Anti," Docchi said bitterly.
"Didn't you expect it?" the creature in the pool asked.

"I guess I didn't."

"You don't know the Medicouncil very well."

"Evidently I don't." He stared sullenly at the faintly blue fluid. "Why did they turn us down?"

"Don't you know?"

"All right, I know," he said. "They're pretty irrational."

"Of course, irrational. Let them be that way, as long as we don't follow their example."

"I wish I knew what to do," he said. "Cameron suggested

we wait."

"Biocompensation," murmured Anti, stirring restlessly. "They've always said that. Up to now it's always worked."

"What else can we do?" asked Docchi. Angrily he kicked at

an anemic tuft of grass. "Draw up another request?"

"Memorandum number ten? Let's not be naive about it. Things get lost so easily in the Medicouncil's filing system."

"Or distorted," grunted Docchi.

"Maybe we should give the Medicouncil a rest. They're tired of hearing us anyway."

"I see what you mean," said Docchi, rising.

"Better talk to Jordan about it."

"I intend to. I'll need arms."

"Good. I'll see you when you leave for far Centauri."

"Sooner than that, Anti. Much sooner."

Stars were beginning to wink. Twilight brought out shadows and tracery of the structure that supported the transparent dome overhead. Soon controlled slow rotation would bring darkness to this side of the asteroid.

Cameron leaned back and looked speculatively at the gravital engineer, Vogel. The man could give him considerable assistance, if he would. There was no reason why he shouldn't; but any man who had voluntarily remained on Handicap Haven as long as Vogel had was a doubtful quantity.

"Usually we maintain about half Earth-normal gravity,"

Cameron said. "Isn't that correct?"

Engineer Vogel nodded.

"It isn't important why those limits were set," Cameron

continued. "Perhaps it's easier on the weakened bodies of the accidentals. There may be economic factors."

"No reason for those limits except the gravital units themselves," Vogel said. "Theoretically it should be easy to get any gravity you want. Practically, though, we get between a quarter and almost full Earth gravity. Now take the fluctuations. The gravital computer is set at fifty per cent. Sometimes we get fifty per cent and sometimes seventy-five. Whatever it is, it just is and we have to be satisfied."

The big engineer shrugged. "I hear the units were designed especially for this asteroid," he went on. "Some fancy medical reason. Easier on the accidentals to have less gravity change, you say. Me, I dunno. I'd guess the designers couldn't help it and the reason was dug up later."

Cameron concealed his irritation. He wanted information, not a heart-to-heart confession. "All practical sciences try to justify whatever they can't escape but would like to. Medicine, I'm sure, is no exception." He paused thoughtfully. "Now, there are three separate gravital units on the asteroid. One runs for forty-five minutes while the other two are idle. Then it cuts off and another takes over. This is supposed to be synchronized. I don't have to tell you that it isn't. You felt your weight increase suddenly at the same time I did. What is wrong?"

"Nothing wrong," said the engineer. "That's what you get

with gravital."

"You mean they're supposed to run that way? Overlapping so that for five minutes we have Earth or Earth-and-a-half gravity and then none?"

"It's not *supposed* to be that way," said Vogel. "But nobody ever built a setup like this that worked any better." He added defensively: "Of course, if you want, you can check with the company that makes these units."

"I'm not trying to challenge your knowledge, and I'm not anxious to make myself look silly. I have a sound reason for asking the experience."

ing these questions. There is a possibility of sabotage."

The engineer's grin was wider than the remark seemed to require.

"All right," said Cameron tiredly. "Suppose you tell me why

sabotage is so unlikely."

"Well," explained the gravital engineer, "it would have to be someone living here, and he wouldn't like it if he suddenly got double or triple gravity or maybe none at all. But there's another reason. Now take a gravital unit. Any gravital unit. Most people think of it as just that—a unit. It isn't really that at all. It has three parts.

"One part is a power source; that can be anything as long as it's big enough. Our power source is a nuclear pile, buried deep in the asteroid. You'd have to take Handicap Haven apart to get to it. Part two is the gravital coil, which actually produces the gravity and is simple and just about indestructible. Part three is the gravital control. It calculates the relationship between the amount of power flowing through the gravital coil and the strength of the created gravity field in any one microsecond. It uses the computed relationship to alter the power flowing through in the next microsecond to get the same gravity. No change of power, no gravity. I guess you could call the control unit a computer, as good a one as is made for any purpose."

The engineer rubbed his chin. "Fatigue," he continued. "The gravital control is an intricate computer that's subject to fatigue. That's why it has to rest an hour and a half to do forty-five minutes of work. Naturally they don't want anyone tinkering with it. It's non-repairable. Crack the case open and it won't work. But first you have to open it. Mind you, that can be done. But I wouldn't want to try it without a high-powered lab setup."

If it didn't seem completely foolproof, neither did it seem a likely source of trouble. "Then we can forget about the gravital units," said Cameron, arising. "But what about hand weapons? Are there any available?"

"You mean toasters?"

"Anything that's lethal."

"Nothing. No knives even. Maybe a stray bar or so of

metal." Vogel scratched his head. "There is something dangerous, though. Dangerous if you know how to take hold of it."

Instantly Cameron was alert. "What's that?"

"Why, the asteroid itself. You can't physically touch any part of the gravital unit. But if you could somehow sneak an impulse into the computer and change the direction of the field . . ." Vogel was very grave. "You could pick up Handicap Haven and throw it anywhere you wanted. At the Earth, say. Thirty miles in diameter is a big hunk of rock."

It was this kind of information Cameron was looking for, though the engineer seemed to regard the occasion as merely a social call. "Is there any possibility of that occurring?" he asked

quietly.

The engineer grinned. "Never happened, but they're ready for things like that with any gravital system. They got monitor stations all over—the moons of Jupiter, Mars, Earth, Venus.

"Any time the gravital computer gets dizzy, the monitor overrides it. If that fails, they send a jammer impulse and freeze it up tight. It won't work until they let loose."

Cameron sighed. He was getting very little help or information from Vogel. "All right," he said. "You've told me what I

wanted to know."

He watched the engineer depart for the gravity-generating chamber far below the surface of the asteroid.

The post on Handicap Haven wasn't pleasant; it wasn't an experience a normal human would desire. It did have advantages—advancement came in sizes directly proportional to the disagreeableness of the place.

Ten months to go on a year's assignment. If Cameron could survive that period with nothing to mar his administration, he was in line for better positions. A suicide or any other kind of unpleasantness that would focus the attention of the outside world on the forgotten asteroid was definitely unwelcome.

He flipped on the telecom. "Rocket dome. Get me the

pilot."

When the robot finally answered, it wasn't encouraging. "I'm sorry. There is no answer."

"Then trace him," he snapped. "If he's not in the rocket dome, he's in the main dome. I want you to get him at once."

A few seconds of silence followed. "There is no record of the pilot leaving the rocket dome."

His heart skipped; with an effort he spoke carefully. "Scan the whole area. Understand? You've got to find him."

"Scanning is not possible. The system is out of operation in that area."

"All right," he said, starting to shake. "Send out repair robots." They were efficient in the sense they always did the work they were set to do, but not in terms of speed.

"The robots were dispatched as soon as scanning failed to work. Are there any other instructions?"

He thought about that. He needed help, plenty of it. Vogel? He'd be ready and willing, but that would leave the gravity-generating setup unprotected. Better do without him.

Who else? The sour old nurse who'd signed up because she wanted quick credits toward retirement? Or the sweet young thing who had bravely volunteered because someone ought to help those poor unfortunate men? Not the women, of course. She had a bad habit of fainting when she saw blood. Probably that was why she couldn't get a position in a regular planetary hospital.

That was all, except the robots, who weren't much help in a case like this. That and the rocket pilot. For some reason he wasn't available.

The damned place was undermanned. Always had been. Nobody wanted to come except the mildly psychotic, the inefficient and lazy, or, conceivably, an ambitious young doctor like himself. Mentally, Cameron berated the last category. If anything serious happened here, such a doctor might end his career bandaging scratches at a children's playground.

"Instructions," he said. "Yes. Leave word in gravity-generat-

ing for Vogel. Tell him to throw everything he's got around the units. Watch them."

"Is that all?"

"Not quite. Send six general purpose robots. I'll pick them up at the entrance to the rocket dome."

"Repair robots are already in that area. Will they do as well?"

"They will not. I want geepees for another reason." They wouldn't be much help, true, but the best he could manage.

Docchi waited near the rocket dome. Not hiding, merely inconspicuous among the carefully nurtured shrubbery that was supposed to give the illusion of Earth. If the plants failed in that respect, at least they contributed to the oxygen supply of the asteroid.

"Good girl," said Docchi. "That Nona is wonderful."

Jordan could feel him relax. "A regular mechanical marvel," he agreed. "But we can gas about that later. Let's get going."

Docchi glanced around and then walked boldly into the passageway that connected the main dome with the much smaller, adjacent rocket dome. Normally, it was never dark in the inhabited parts of the asteroid; a modulated twilight was considered more conducive to the slumber of the handicapped. But it wasn't twilight as they neared the rocket dome—it was a full-scale rehearsal for the darkness of interplanetary space.

Docchi stopped before the emergency airlock which loomed solidly in front of them. "I hope Nona was able to cut this out of the circuit," he said anxiously.

"She understood, didn't she?" asked Jordan. He reached out and the great slab moved easily aside in its grooves. "The trouble with you is that you lack confidence."

Docchi, listening with a frown, didn't answer.

"Okay, I hear it, too," whispered Jordan. "We'd better get well inside before he reaches us."

Docchi walked rapidly into the darkness of the rocket dome. He allowed his face to become faintly luminescent, the one part of his altered metabolism that he had learned to control, when he wasn't under emotional strain.

He was nervous now, but his control had to be right. Enough light so that he'd be noticed, not so much that details of his appearance would be plain.

The footsteps came nearer, accompanied by a steady volume of profanity. Docchi flashed his face once and then lowered the

intensity almost immediately.

The footsteps stopped. "Docchi?"

"No. Just a lonely little light bulb out for an evening stroll."
The rocket pilot's laughter wasn't altogether friendly. "I know it's you. I meant, what are you doing here?"

"I saw the lights in the rocket dome go out. The entrance

was open, so I came in. Maybe I can help."

"They're off, all right. Everything. Even the standby system." The rocket pilot moved closer. The deadly little toaster was in his hand. "You can't help. You'd better get out. It's against regulations for you to be in here."

Docchi ignored the weapon. "What happened? Did a me-

teor strike?"

The pilot grunted. "Not likely." He peered intently at the barely visible silhouette. "Well, I see you're getting smart. You should do that all the time. You look better that way, even if they're not usable arms. You look . . ." His voice faded away.

"Sure, almost human," Docchi finished for him. "Not like a pair of legs and a spinal column with a lightning bug stuck on

top."

"I didn't say that. So you're sensitive about it, eh? Maybe that's not your fault. Anyway, you'd better get going."

"But I don't want to go," said Docchi deliberately. "I'm not

afraid of the dark. Are you?"

"Cut the psycho talk, Docchi. All your circuits are working and you know it. Now get out of here before I take your fake hand and drag you out."

"Now you've hurt my feelings," declared Docchi reproach-

fully, nimbly stepping away.

"You asked for it," growled the pilot, lunging after him. What he took hold of wasn't an imitation hand, made of plastic. It was flesh and blood. That was why the pilot screamed, once, before he was lifted off his feet and slammed to the floor.

Docchi bent double. The dark figure on his back came over his head like a sword from a scabbard.

"Jor-"

"Yeah," said Jordan.

He wrapped one arm around the pilot's throat and clamped it tight. With the other he felt for the toaster the pilot still held. Effortlessly he tore it away and used the butt with just enough force to knock the pilot unconscious without smashing the skull. Docchi stood by until it was over. All he could offer was an ineffectual kick, not balanced by arms.

It wasn't needed.

"Let there be light," ordered Jordan, laughing, and there was, a feeble, flickering illumination from Docchi.

Jordan was balancing himself on his hands. A strong head, massive, powerful arms and shoulders. His body ended at his chest. A round metal capsule contained his digestive system.

"Dead?" Docchi looked down at the pilot.

Jordan rocked forward and listened for the heartbeat. "Nah," he said. "I remembered in time that we can't afford to kill anyone."

"Good," said Docchi, and stifled an exclamation as something coiled around his leg. His reactions were fast; he broke loose almost instantly.

"Repair robot," said Jordan, looking around. "The place is lousy with them."

Docchi blinked on and off involuntarily and the robot came toward him.

"Friendly creature," observed Jordan. "He's offering to fix your lighting system for you."

Docchi ignored the squat contrivance and stared at the pilot. "Now what?" he asked.

"Agreed," said Jordan. "He needs attention. Not the kind I

gave him." He balanced the toaster in his hand and burned a small hole in the little wheeled monster. Tentacles emerged from the side of the machine and felt puzzledly at the damaged area. The tentacles were withdrawn and presently reappeared with a small torch and began welding.

Jordan pulled the unconscious pilot toward him. He leaned against the machine, raised the inert form over his head and laid it gently on the top flat surface. Another tentacle reached out to investigate the body of the pilot. Jordan welded the joints solid with the toaster. Three times he repeated the process until the

pilot was fastened to the robot.

"The thing will stay here, repairing itself, until it's completely sound again," remarked Jordan. "However, that can be fixed." He adjusted the toaster beam to an imperceptible thickness. Deftly he sliced through the control case and removed a circular section. He reached inside and ripped out circuits. "No further self-repair," he said cheerfully. "Now I'm going to need your help. From a time standpoint, I think it's a good idea to run the robot around the main dome a few times before it delivers the pilot to the hospital. No point in giving ourselves away before we're ready."

Docchi bent over the robot, and with his help the proper sequence was implanted. The machine scurried erratically away.

Docchi watched it go. "Time for us to be on our way." He bent double for Jordan. The arms folded around his neck, but Jordan made no effort to climb up onto his back. For a panic moment Docchi knew how the pilot felt when strength, where there shouldn't have been strength, reached out from the darkness and gripped his throat.

He shook the thought from his mind. "Get on my back,"

he insisted.

"You're tired," said Jordan. "Half gravity or not, you can't carry me any farther." His fingers worked swiftly and the carrying harness fell to the floor. "Stay down," growled Jordan. "Listen."

Docchi listened. "Geepees!"

"Yeah," said Jordan. "Now get to the rocket."

"What can I do when I get there? You'll have to help me."
"You'll figure something out when the time comes. Hurry
up!"

"Not without you," said Docchi stubbornly, without moving.

A huge paw clamped around the back of his skull. "Listen to me," whispered Jordan fiercely. "Together we were a better man than the pilot—your legs and my arms. It's up to us to prove that separately we are a match for Cameron and his geepees."

"We're not trying to prove anything," said Docchi.

A brilliant light sliced through the darkness and swept around the rocket dome.

"Maybe we are," said Jordan. Impatiently, he hitched himself along the ground. "I think I am."

"What are you going to do?"

"I'm going up. With no legs, that's where I belong."

He grasped the structural steel member in his great hands, and in the light gravity, ascended rapidly.

"Careful," warned Docchi.

"This is no time to be careful." His voice floated down from high in the lacy structure. It wasn't completely dark; the lights were getting nearer. Docchi decided it was possible for Jordan to see what he was doing.

They hadn't expected to be discovered so soon. But the issue had not yet been settled against them. Docchi settled into a long stride, avoiding the low-slung repair robots that seemed to be everywhere. If Jordan refused to give up, Docchi had to try.

He stayed well ahead of the oncoming general purpose robots.

He reached the rocket and barely had time to look around. It was enough, however. The ship's passenger and freight locks were closed. Nona had either not understood all their instructions, or she hadn't been able to carry them out. The first, probably. She had put the light and scanning circuits out of commission with no tools except her hands. That and her un-

canny knowledge of the inner workings of machines. It was too much to expect that she should also have the ship ready and waiting for them.

It was up to him to get in. If he had the toaster they'd taken from the pilot, he might have been able to soften the proper area of the passenger lock. But he didn't. Not having arms, he couldn't have used it. For that reason Jordan had kept the weapon.

The alternative was to search the surrounding mechanical jungle for an external control of the rocket. There had to be one, at least for the airlocks. Then it was a matter of luck whether he could work it.

The approaching lights warned him that he no longer had that alternative. If Cameron hadn't tried to search the rocket dome as he came along, the geepees would be solidly ringed around the ship now. That was Cameron's mistake, however, and he might make more.

In all probability Jordan was still at large. Perhaps nearby. Would Cameron know that? He might not.

Docchi descended into the shallow landing pit. Until both of them were caught, there was always a chance. He had to hide, but the landing pit seemed remarkably ill-suited for that purpose.

He leaned against the stern tube cluster and tried to shake his brain into activity. The metal pressed hard into the thin flesh that covered his back. In the smooth glazed surface of the landing pit, the only answer was the tubes.

He straightened up and looked into them. A small boy might climb inside and crawl out of sight. Or a grown man who had no shoulders or arms to get wedged in the narrow cylinder.

Out in space, the inner ends of the tubes were closed with a combustion cap wherein the fuel was ignited. But in the dome, where the ship was not used for months at a time . . .

Yes, there was that possibility.

He tried a lower tube. He lay on the floor and thrust his head inside. He wriggled and shoved with his feet until he had forced himself entirely in. It was dark and terrifying, but no

time for claustrophobia.

He stopped momentarily and listened. A geepee descended noisily into the landing pit. The absence of any other sound indicated to Docchi that it was radio-controlled.

He drove himself on, though it was slow progress. The walls were smooth and it was difficult to get much purchase. The going became even tougher—the tube was getting smaller. Not much, but enough to matter.

Again he stopped. Outside, there was the characteristic sputter, like frying, that the toaster beam made when it struck metal. A great clatter followed.

"Get him!" shouted Cameron. "He's up there!"

Jordan had arrived and had picked off a geepee. And it wasn't going to be easy for Cameron to capture him. The diversion would help.

"Don't use heat," ordered Cameron. "Get your lights on him. Blind him. Drive him in a corner and then go up and get him."

Docchi had been wrong; the geepees were controlled by voice, not radio. That would make it easier for him once he got inside the ship. If he did.

It looked as though he would. The tube wasn't getting narrower. More important, the air was not noticeably stale. The combustion cap had been retracted, which was a lucky break. His feet slipped. It didn't matter; somehow he inched along. Blood was pounding in his veins from the constriction, but his head emerged in the rocket.

He stared at the retracted combustion cap a few feet away. If he had arms, he could grasp it and pull himself free. But if he had arms, he would never have gotten this far. He wriggled until his body was nearly out and only his legs were in the tube. He kicked hard, fell to the floor.

He lay there while his head cleared, then rolled to his feet and staggered forward to the control compartment. The rocket was his, but he didn't want it for himself alone.

He stared thoughtfully at the instrument panel. It had been

a long time since he had operated a ship. When he understood the controls, he bent down and thrust his chin against the gravital dial. Laboriously he turned it to the proper setting. Then he sat down and kicked on a switch. The ship rocked and rose a few inches.

Chances were that Cameron wouldn't notice that in the confusion outside. If he did, he had thirty seconds in which to stop Docchi. That wouldn't be enough for Cameron.

"Rocket landing," said Docchi when the allotted time passed. "Emergency instructions. Emergency instructions. Stand by." Strictly speaking, that wasn't necessary, for the frequency he was using assured him of complete control.

"All energized geepees lend assistance. This order supersedes previous orders. Additional equipment necessary." After listing the equipment, he sat back and chuckled.

With his knee he turned on the external lights, got up and walked to the passenger lock, brushing against the switch. The airlock opened. He stood boldly at the threshold and looked out. The rocket dome was floodlighted by the ship.

"All right, Jordan, you can come down now," he called.

Jordan appeared overhead, hanging from a beam. He swung along it until he reached a column, down which he descended. He propelled himself over the floor and up the ramp in his awkward fashion. Balancing on his hands, he gazed up at Docchi.

"Well, monster, how did you do it?"

"Monster yourself," said Docchi. "Do what?"

"I saw you crawl in the rocket tubes," said Jordan. "But what did you do after you got inside?"

"Cameron's a medic," said Docchi, "not mechanically inclined. He forgot that an emergency rocket landing cancels any verbal orders. So I took the ship up a few inches. Geepees aren't very bright; that satisfied them that I was coming in for a landing. What Cameron should have done was splash some heat against a gravital unit, and then, having created an artificial emergency condition in the main dome, he could have directed

the geepees from the gravity control center. After that, he would have had top priority, not me."

"But they rushed off, carrying Cameron with them." Jordan

looked puzzled.

"Easy. I told the geepees that there was danger of crashing and that they must remove any human beings nearby, whether they were willing or not. You weren't nearby and that let you out. They took Cameron because he was."

"It's ours!" breathed Jordan. "But what about Anti and

Nona?"

"Anti's taken care of. As far as the geepees are concerned, she comes under the heading of emergency landing material. They'll bring her. Nona is supposed to be waiting with Anti." Docchi frowned. "There's nothing we can do if she isn't. Meanwhile you'd better get ready to take the ship off."

Jordan swung himself inside.

Docchi remained at the passenger lock, waiting. He heard the geepees first and saw them seconds later. They came into sight half pushing, half carrying a huge rectangular tank. With unexpected robotic ingenuity, they had mounted it on four of their smaller brethren, the squat repair robots, which served to support the tremendous weight.

The tank was filled with blue liquid. Twisted pipes dangled from the ends; it had been torn and lifted from its foundation. Broken plants still clung to the narrow ledge on top and moist soil adhered to the sides. Five geepees pushed it rapidly toward the ship, mechanically oblivious to the disheveled man who frus-

tratedly shouted and struck at them.

"Jordan, open the freight lock."

In response the ship rose a few more inches and hung quivering. A section of the ship hinged outward and downward

to form a ramp. The ship was ready to take on cargo.

Docchi stood at his post. That damn fool Cameron should have stayed in the main dome where the geepees had released him. His presence added an unwelcome complication. Still, it should be easy enough to get rid of him when the time came. It was Nona who really worried him. She wasn't anywhere to be seen. He took an uncertain step down the ramp, came back, shaking his head. It was impossible to look for her now, though he wanted to.

The tank neared the ship. A few feet of it projected onto the ramp. The geepees stopped; their efforts lost momentum.

They looked bewildered.

The tank rolled backward. The geepees shook, buzzed and looked around, primarily at Docchi. He didn't wait any longer. He leaped into the ship.

"Close the passenger lock!" he shouted.

Jordan looked up questioningly from the controls.

"Vogel, the engineer," explained Docchi. "He must have seen the geepees on scanning when they entered the main dome. He's trying to do what Cameron should have done, but didn't have enough sense to do."

The passenger lock swung ponderously shut behind him.

"Now what?" Jordan asked, worried.

"First, let's see what you can get on the telecom," said Docchi.

The angle was impossible, so close to the ship, but they did manage to get a corner of the tank on the screen. Apparently it was resting where Docchi had last seen it, though it was difficult to be sure because the curve of the ship loomed so large.

"Maybe we'd better get out of here," suggested Jordan

nervously.

"Without the tank? Not a chance. Vogel hasn't got complete control of them yet." That seemed to be true. The geepees were nearly motionless, paralyzed.

"What shall I do?" asked Jordan.

"Give me full power on the radio," said Docchi. "Burn it out if you have to. I think the engineer is at the wrong angle to broadcast much power to them. Besides, the intervening structure is absorbing most of his signal."

He waited until Jordan had complied. "The tank must be

placed in the ship," he added.

Geepees were not designed to sift contradictory commands that were nearly at the same level of urgency. Their reasoning power was feeble, but the mechanism was complicated enough. In that respect they resembled humans. Borderline decisions were difficult.

"More power," whispered Docchi.

Sweating, Jordan obeyed.

Marionettes. This string led toward a certain action. Another, intrinsically more important, but suddenly far less powerful, pulled for something else. Circuits burned within electronic brains. Micro-relays fluttered under the stress.

Choice . . .

Stiffly the geepees moved and grasped the tank. The quality of decision, in this case, was strained. Inch by inch the tank rolled up the ramp.

"When it's completely on, raise the ramp," Docchi whis-

pered to Jordan in an even lower voice.

One geepee wavered and fell. Motionless, it lay there. The remaining four were barely equal to the task.

"Now," said Docchi.

The freight ramp began to rise. The tank picked up speed as it rolled into the ship.

"Geepees, save yourselves!" shouted Docchi.

They leaped from the ramp.

Jordan breathed deeply. "I don't think they can hurt us now."

Docchi nodded. "Get me ship-to-asteroid communication, if there's any radio left."

"There is." Jordan made the adjustment.

"Vogel, we're going out. Give us the proper sequence and save the dome some damage."

There was no reply.

"He's trying to bluff," said Jordan. "He knows the airlocks to the main dome will automatically close if we do break through."

"Sure," said Docchi. "Everyone in the main dome is safe, if

everyone is in there. Vogel, we'll give you time to think about that."

Jordan gave him the time until it hurt, waiting. Meanwhile he flipped on the telecom and searched the rocket dome. Nothing was moving; no geepee was in sight. Docchi watched the screen with interest. What he thought didn't show on his face.

Still there was no reply from Vogel.

"All right," Docchi said in a low, hard voice. "Jordan, take it out. Hit the shell with the bow of the rocket."

The ship hardly quivered as it ripped through the transparent covering of the rocket dome. The worst sound was unheard: the hiss of air escaping through the great hole in the envelope.

Jordan sat at the controls, gripping the levers. "I couldn't tell," he said slowly. "It happened too fast for me to be sure. Maybe Vogel did have the inner shell out of the way. In that event, it's all right because it would close immediately. The outer shell is supposed to be self-sealing, but I doubt if it could handle that much damage."

He twisted the lever and the ship leaped forward.

"Cameron I don't mind. He had enough time to get out if he wanted to. But I keep thinking that Nona might be in there."

Docchi avoided his eyes. There was no light at all in his face. He walked away.

Jordan rocked back and forth. The hemisphere that held what remained of his body was well suited for that. He set the auto-controls and reduced the gravity to one-quarter Earth normal. He bent his great arms and shoved himself into the air, deftly catching hold of a guide rail. He would have to go with Docchi. But not at the moment. He felt bad.

That is, he did until he saw a light blinking at a cabin door. He had to investigate that first.

Jordan caught up before Docchi reached the cargo hold. In the lesser gravity of the ship, Jordan was truly at home.

Docchi turned and waited for him. Jordan still carried the

weapon he had taken from the pilot. It was clipped to the sacklike garment he wore, dangling from his midsection, which, for him, was just below his shoulders. Down the corridor he flew, swinging from the guide rails lightly, though gravity on the ship was as erratic as on the asteroid.

Docchi braced himself. Locomotion was not so easy for him. Jordan halted beside him and dangled from one hand. "We have another passenger."

Docchi stiffened. "Who?"

"I could describe her," said Jordan. "But why, when a name will do at least as well?"

"Nona!" said Docchi. He slumped in sudden relief against

the wall. "How did she get in the ship?"

"A good question," said Jordan. "Remind me to ask her that sometime when she's able to answer. But since I don't know, I'll have to use my imagination. My guess is that, after she jammed the lights and scanners in the rocket dome, she walked to the ship and tapped the passenger lock three times in the right places, or something just as improbable. The lock opened for her whether it was supposed to or not."

"As good a guess as any," agreed Docchi.

"We may as well make our assumptions complete. Once inside, she felt tired. She found a comfortable cabin and fell asleep in it. She remained asleep throughout our skirmish with the geepees."

"She deserves a rest," said Docchi.

"She does. But if she had waited a few minutes to take it, she'd have saved you the trouble of crawling through the tubes."

"She did her part and more," Docchi argued. "We depend too much on her. Next we'll expect her to escort us personally to the stars." He straightened up. "Let's go. Anti is waiting for us."

The cargo hold was sizable. It had to be to contain the tank, battered and twisted though it was. Equipment had been jarred from storage racks and lay in tangled heaps on the floor.

"Anti!" called Docchi.

"Here."

"Are you hurt?"

"Never felt a thing," came the cheerful reply.

Jordan scaled the side of the tank. He reached the top and peered over. "She seems all right," he called down. "Part of the

acid's gone. Otherwise no damage."

Damage enough, however. Acid was a matter of life for Anti. It had been splashed from the tank and, where it had spilled, metal was corroding rapidly. The wall against which the tank had crashed was bent and partly eaten through. That was no reason for alarm; the scavenging system of the ship would handle acid. The real question was what to do for Anti.

"I've stewed in this soup for years," said Anti. "Get me out of here."

"How?"

"If you weren't as stupid as doctors pretend to be, you'd know how. No gravity, of course. I've got muscles, more than you think. I can walk as long as my bones don't break from the weight."

No gravity would be rough on Docchi; having no arms, he would be virtually helpless. The prospect of floating free without being able to grasp something was terrifying.

"As soon as we can manage it," he said, forcing down his

fear. "First we've got to drain and store the acid."

Jordan had anticipated that. He'd swung off the tank and was busy expelling the water from an auxiliary compartment into space. As soon as the compartment was empty, he led a hose from it to the tank.

The pumps sucked and the acid level fell slowly.

Docchi felt the ship lurch familiarly. "Hurry," he called out to Jordan.

The gravital unit was acting up. Presumably it was getting ready to cut out. If it did—well, a free-floating globe of acid would be as destructive to the ship and those in it as a high velocity meteor cluster.

Jordan jammed the lever as far as it would go and held it

there. "All out," said Jordan presently, and let the hose roll back into the wall. Done in plenty of time. The gravital unit remained in operation for a full minute.

As soon as she was weightless, Anti rose out of the tank. In all the time Docchi had known her, he had seen no more than a face framed in blue acid. Periodic surgery, where it was necessary, had trimmed the flesh from her face. For the rest, she lived submerged in a corrosive liquid that destroyed the wild tissue as fast as it grew. Or nearly as fast.

Docchi averted his eyes.

"Well, junkman, look at a real monster," snapped Anti.

Humans were not meant to grow that large. But it was not obscene to Docchi, merely unbelievable. Jupiter is not repulsive because it is the bulging giant of planets; it is overwhelming, and so was Anti.

"How will you live out of the acid?" he stammered.

"How really unobservant some men are," said Anti loftily. "I anticipated our little journey and prepared for it. If you look closely, you will notice I have on a special surgery robe. It's the only thing in the Solar System that will fit me. It's fabricated from a spongelike substance and holds enough acid to last me about thirty-six hours."

She grasped a rail and propelled herself toward the corridor. Normally that was a spacious passageway. For her it was a close fit.

Satellites, one glowing and the other swinging in an eccentric orbit, followed after her.

Nona was standing before the instrument panel when they came back. There was an impressive array of dials, lights and levers in front of her, but she wasn't interested in these. A single small dial, separate from the rest, held her complete attention. She seemed disturbed by what she saw or didn't see. Disturbed or excited, it was difficult to say which.

Anti stopped. "Look at her. If I didn't know she's a freak

like the rest of us, the only one, in fact, who was born that way, it would be easy to hate her—she's so disgustingly normal."

Normal? True and yet not true. Surgical techniques that could take a body apart and put it back together again with a skill once reserved for the repair of machines had made beauty commonplace. No more sagging muscles, wrinkles; even the aged were attractive and youthful-seeming until the day they died. No more ill-formed limbs, misshapen bodies. Everyone was handsome or beautiful. No exceptions.

None to speak of, at least.

The accidentals didn't belong, of course. In another day most of them would have been candidates for a waxworks or the formaldehyde of a specimen bottle.

Nona fitted neither category; she wasn't a repair job. Looking at her closely—and why not?—she was an original work as far from the normal in one direction as Anti, for example, was in the other.

"Why is she staring at the little dial?" asked Anti as the others slipped past her and came into the compartment. "Is there something wrong with it?" She shrugged. "I would be interested in the big dials. The ones with colored lights."

"That's Nona." Docchi smiled. "I'm sure she's never been in the control room of a rocket before, and yet she went straight to the most curious thing in it. She's looking at the gravital indicator. Directly behind it is the gravital unit."

"How do you know? Does it say so?"

"It doesn't. You have to be trained to recognize it, or else be Nona."

Anti dismissed that intellectual feat. "What are you waiting for? You know she can't hear us. Go stand in front of her."

"How do I get there?" Docchi had risen a few inches from the floor, now that Jordan had released him from his grip.

"A good engineer would have enough sense to put on magneslippers. Nona did." Anti grasped his jacket. How she was able to move was uncertain. The tissues that surrounded the woman were too vast to permit the perception of individual motions. Nevertheless, she proceeded to the center of the compartment, and with her came Docchi.

Nona turned before they reached her.

"My poor boy," sighed Anti. "You do a very bad job of concealing your emotions, if that's what you're trying to do. Anyway, stop glowing like a rainbow and say something."

"Hello," said Docchi.

Nona smiled at him, though it was Anti that she came to. "No, not too close, child. Don't touch the surgery robe unless you want your pretty face to peel off like a plastiwrapper."

Nona stopped; she said nothing.

Anti shook her head hopelessly. "I wish you would learn to read lips or at least recognize written words. It's so difficult to communicate with you."

"She knows facial expressions and actions, I think," said Docchi. "She's good at emotions. Words are a foreign concept to her."

"What other concepts does anyone think with?" asked Anti dubiously.

"Maybe mathematical relationships," answered Docchi. "Though she doesn't. They've tested her for that." He frowned. "I don't know what concepts she does think with. I wish I did."

"Save some of that worry and apply it to our present situation," said Anti. "The object of your concern doesn't seem to be interested in it."

That was true. Nona had wandered back and was staring at the gravital indicator again. What she saw to hold her attention was a puzzle.

In some ways she seemed irresponsible and childlike. That was an elusive thought, though: whose child? Not really, of course. Her parents were obscure technicians and mechanics, descendants of a long line of mechanics and technicians. The question he had asked himself was this: where and how does she belong? He couldn't answer.

With an effort Docchi came back to reality. "We appealed to the Medicouncil," he said. "We asked for a ship to go to the

nearest star. It would have to be a rocket, naturally. Even allowing for a better design than any we now have, the journey would take a long time, forty or fifty years going and the same length of time back. That's entirely too long for a normal, but it wouldn't matter to a biocompensator."

"Why a rocket?" interrupted Jordan. "Why not some form

of gravity drive?"

"An attractive idea," admitted Docchi. "Theoretically, there's no limit to gravity drive except light speed, and even that's not certain. If it would work, the time element could be cut to a fraction. But the last twenty years have proved that gravity drives won't work at all outside the Solar System. They function very poorly even when the ship is as far out as Jupiter's orbit."

"I thought the gravity drive on a ship was nearly the same as the gravital unit on the asteroid," said Jordan. "Why won't they function?"

"I don't know why," answered Docchi impatiently. "If I did, I wouldn't be marooned on Handicap Haven. Arms or no arms, biocompensator or not, I'd be the most important scientist on Earth."

"With a multitude of pretty women competing for your affections," added Anti.

"I think he'd settle for one. A certain one," suggested Jordan. "Poor, unimaginative boy," said Anti. "In my youth . . ."

"We've heard about your youth," said Jordan.

"Youth and love are long since past for both of you. Talk about them privately if you want, but not now." Docchi glowered at them. "Anyway," he resumed, "gravity drive is out. One time they had hopes for it, but no longer. It should be able to drive this ship. Actually, its sole function is to provide an artificial gravity *inside* the ship, for passenger comfort. So rocket ship it is. That's what we asked for. The Medicouncil refused. Therefore we're going to appeal to a higher authority."

"Fine," said Anti. "How?"

"We've discussed it," answered Docchi. "Ultimately the

Medicouncil is responsible to the Solar Government. And in turn—"

"All right, I'm in favor of it," said Anti. "I just wanted to know."

"Mars is closer," continued Docchi. "But Earth is the seat of government. As soon as we get there . . ." He stopped suddenly and listened.

Anti listened with him and waited until she could stand it no longer. "What's the matter?" she asked. "I don't hear anything."

Jordan leaned forward in his seat and looked at the instrument panel. "That's the trouble, Anti. You're not supposed to hear anything. But you should be able to feel the vibration from the rocket exhaust, as long as it's on."

"I don't feel anything, either."

"Yeah," said Jordan. He looked at Docchi. "There's plenty of fuel."

Momentum of the ship didn't cease when the rockets stopped, of course. They were still moving, but not very fast and not in the direction they wanted to go. Gingerly Docchi tried out the magneslippers; he was clumsy, but no longer helpless in the gravityless ship. He stared futilely at the instruments as if he could wring more secrets than the panel had electronic access to.

"It's mechanical trouble of some sort," he said uneasily.

"There's one way of finding out."

Before he could move, Anti was in the corridor that led away from the control compartment.

"Stay here, Anti," he said. "I'll see what's wrong."

She reached nearly from the floor to the ceiling. She missed by scant inches the sides of the passageway. Locomotion was easy enough for her; turning around wasn't. Anti didn't turn.

"Look, honey," her voice floated back. "You brought me along for the ride. That's fine, but I'm not satisfied with it. I want to earn my fare. You stay and run the ship because you know how and I don't. I'll find out what's wrong."

"But you won't know what to do, Anti." There was no answer. "All right," he said in defeat. "Both of us ought to go. Jordan, you stay at the controls."

Anti led the way because Docchi couldn't get around her. Determinedly he shuffled along. There was a trick to magneslippers that he had nearly forgotten. Slowly it was coming back to him—shuffle instead of striding.

It was a dingy, poorly lighted passageway in an older ship. Handicap Haven definitely didn't rate the best equipment that was produced. On one side was the hull of the ship; on the other, a few small cabins. None were occupied. Anti stopped. The passageway ended in a cross corridor that led to the other side of the ship.

"We'd better check the stern rocket tubes," he said, still unable to see around her. "Open it up and we'll take a look."

"I can't," said Anti. "There are handles, but the thing won't open. There's a red light, too. Does that mean anything?"

His heart sank. "It does. Don't try to open it. With your strength, you might be unlucky enough to do it."

"That's a man for you," said Anti sharply. "First he wants

me to open it, and then he tells me not to."

"There's a vacuum in there. The combustion cap has been retracted. That's the only thing that will actuate the warning signal. You'd die in a few seconds if you somehow managed to open the lock to the rocket compartment."

"What are we waiting for? Let's get busy and fix it."

"Sure, fix it. You see, Anti, that didn't happen by itself. Someone, or something, was responsible."

"Who?"

"Did you see anyone when we were loading your tank in the ship?"

"Nothing. I heard Cameron shouting, a lot of noise. All I could see was what was directly overhead. What does that have to do with it?"

"I think it has to do with a geepee. I thought they all dropped outside. Maybe there was one that didn't."

"Why a geepee?" she asked blankly.

"In the first place, no man is strong enough to move the combustion cap. But if he should somehow manage to exert superhuman effort, as soon as the cap cleared the tubes, rocket action would cease. The air in the compartment would exhaust into space and anyone in there would die."

"So we have a dead geepee in there."

"A geepee doesn't die. Not even become inactive; it doesn't need air." Docchi tried to think the thing through. "Not only that, a geepee might be able to escape from the compartment. The lock would close as soon as the pressure dropped. But a geepee . . ."

Anti settled down grimly. "Then there's a geepee on the

loose, intent on sabotage?"

"I'm afraid so," he admitted worriedly.

"What are we standing here for? We'll go back to controls and pick up the robot on radio. What it damaged, it can repair." She was partly turned around now and saw Docchi's face. "Don't tell me," she said. "I suppose I should have thought of it. The signal doesn't work inside the ship."

Docchi nodded. "It doesn't. Robots are never used aboard, so the control is set in the bow antenna and the ship, of course, is

insulated."

"Well," said Anti happily, "we've got a robot hunt ahead of us."

"We do. And our bare hands to hunt it with."

"Oh, come now! It's not as bad as all that. Look, the geepee was back here when the rockets stopped. Could it get by the control compartment without our seeing it?"

"It couldn't. There are two corridors leading through the

compartment, one on each side of the ship."

"That's what I thought. We came down one corridor and no geepee was in it. It has to be in the other. If it goes into a cabin, a light will shine on the outside. It can't really hide from us."

"Sure, we'll find out where it is. But what are we going to do

with it when we find it?"

"I was thinking," said Anti. "Can you get around me when I'm standing like this?"

"I can't."

"Neither can a geepee. All I need is a toaster, or something that looks like one, and I can drive the robot into the control compartment for Jordan to pick off." Determinedly, she began to move toward the opposite corridor. "Hurry back to Jordan and tell him what we're doing. There ought to be another toaster on the ship. Probably there's one somewhere in the control compartment. Bring it back to me."

Docchi bit his lip and stared at the back of the huge woman. "All right," he answered. "But stay where you are. Don't

try anything until I get back."

Anti laughed. "I value my big, fat life," she said. There were other things she valued, but she didn't mention them.

Docchi went as fast as the magneslippers would allow, which wasn't very fast. The strategy was simple, but it didn't follow that it was sound—a toaster for Jordan and one for Anti, if another could be found.

Anti would block the corridor. A geepee might go through her, but it could never squeeze past her. The robot would have to run for it. If it came toward Anti, she might be able to burn it down. But she would be firing directly into the control room. If she missed even partially—

The instruments were delicate.

It wasn't better if Jordan got the chance to bring down the robot. Anti would be in the line of fire. No, that wasn't good, either. They'd have to think of something else.

"Jordan," called Docchi as he entered the control compartment. Jordan wasn't there. Nona was, still gazing serenely at the gravity indicator.

Lights were streaming from the corridor on the opposite side of the compartment. Docchi hurried over. Jordan was just inside the entrance, the toaster clutched grimly in his hand. He was hitching his truncated body slowly toward the stern.

Coming to meet him was Anti-unarmed, enormously fat

Anti. She wasn't walking; somehow it seemed more like swimming, a bulbous, flabby sea animal moving through the air. She waved her fins against the wall and propelled herself forward.

"Melt him down!" she cried.

It was difficult to make out the vaguely human form of the geepee. The powerful, shining body blended into the structure of the ship itself—unintentional camouflage, though the robot wasn't aware of that. It was crouched at the threshold of a cabin, hesitating between the approaching dangers.

Jordan raised the weapon and as instantly lowered it.

"Get out of the way," he told Anti.

There was no place for her to go. She was too big to enter a cabin, too massive to let the geepee squeeze by her even if she wanted it to.

"Never mind that. Get him," she answered.

A geepee was not a genius even by robot standards. It didn't need to be. Heat is deadly; a human body is a fragile thing. This it knew. It ran toward Anti. Unlike man, it didn't need magneslippers. It had magnetic metal feet which could move fast, and did.

Docchi couldn't close his eyes, though he wanted to. He had to watch. The geepee torpedoed into Anti. And it was the robot that was thrown back. Relative mass favored the monstrous woman.

The electronic brain obeyed its original instructions, whatever those were. It got to its feet and rushed toward Anti. Metal arms shot out with dazzling speed and crashed against the flesh of the fat woman. Docchi could hear the thud. No ordinary person could take that kind of punishment and live.

Anti wasn't ordinary; she was strange, even for an accidental, living far inside a deep armor of flesh. It was possible that she never felt the crushing force of those blows. Amazingly, she grasped the robot and drew it to her. And the geepee lost the advantage of leverage. The bright arms didn't flash so fast nor with such lethal power.

"Gravity!" cried Anti. "All you've got!"

She leaned against the struggling machine.

Gravity. That was something he could do. Docchi turned, took two steps before the surge of gravity hit him. It came in waves, the sequence of which he was never able to disentangle. The first wave staggered him; at the second his knees buckled and he sank to the floor. After that his eardrums hurt. He thought he could feel the ship quiver. He knew dazedly that an artificial gravity field of this magnitude was impossible, but that knowledge didn't help him move.

It vanished as suddenly as it had come. Painfully his lungs expanded. Each muscle ached. He rolled to his feet and lurched

past Jordan.

He didn't find the mass of broken flesh he expected. Anti

was already standing.

"Oof!" she grunted and gazed with satisfaction at the twisted grotesque shape at her feet. The electronic brain had been smashed, the body flattened.

"Are you hurt?" asked Docchi gently, awed.

She waggled the extremities of her body. "Nope, I can't feel anything broken," she said solemnly. She moved back to get a better view of the robot. "I'd call that throwing my weight around. At the right time, of course. The secret's timing. And I must say you picked up your cue with the gravity well." Her laughter rolled through the ship.

"It wasn't I," said Docchi.

"Jordan? No, he's just getting up. Then who?"

"Nona," said Docchi. "It had to be her. She saw what had to be done and did it. But how she got that amount of gravity—"

"Ask her," said Anti with fond irony.

Docchi grimaced and limped back into the control room, followed by Anti and Jordan. Nona was at the gravity panel, her face pleasant and childlike.

"Gravity can be turned on or off," said Docchi puzzledly, searching her face for some sign. "And regulated, within certain narrow limits. But somehow you doubled or tripled the normal amount. How?"

Nona smiled questioningly.

"Gravity engineers would like to know that too," said Jordan.

"Everybody would like to know," Anti interrupted irritably. "Except me. I'm too pragmatic, I suppose, but I want to know when we start the rockets and be on our way."

"It isn't that easy," sighed Jordan. "A retracted combustion cap in flight generally means at least one burned-out tube." He made his way to the instrument panel and looked at it glumly. "Three."

"A factor." Docchi nodded. "But I was thinking about the robot."

Anti was impatient. "An interesting subject, no doubt. What about it?"

"Where did it get instructions? Not radio; the hull of the ship cuts off all radiation. The last we knew, it was in our control."

"All right, how?"

"Voice," said Docchi. "Cameron's voice, to be exact."

"But he was in the rocket dome," Jordan objected.

"Think back to when we were loading the tank. We had to look through the telecom and the angle of vision was bad. We couldn't see much of the cargo lock. Anti couldn't see anything that wasn't directly overhead. Both Cameron and the geepee managed to get inside and we didn't know it."

Jordan hefted his weapon. "Looks like we've got another

hunt on our hands. This time a nice normal doctor."

"Keep it handy," said Docchi, glancing at the toaster. "But be careful how you use it. One homicide and we can forget what we came for. I think he'll be ready to surrender. The ship's temporarily disabled; he'll consider that damage enough."

Jordan found the doctor in the forward section of the ship. Cameron knew better than to argue with a toaster. In a matter of minutes he was in the control room.

"Now that you've got me, what are you going to do with me?" he asked.

Docchi swiveled away from the instrument panel. "I don't expect active cooperation, of course, but I like to think you'll give your word not to hinder us hereafter."

Cameron glared. "I promise nothing of the kind."

"We can chain him to Anti," suggested Jordan. "That will keep him out of trouble."

"Like leading a poodle on a leash? Nope," said Anti indignantly. "A girl has to have some privacy."

"Don't wince, Cameron," objected Docchi. "She really was a

girl once, an attractive one."

"We can put him in a spacesuit and lock his hands behind his back," said Jordan. "Something like an ancient straitjacket." Cameron laughed.

"No, that's inhuman," said Docchi.

Jordan juggled the toaster. "I can weld with this. Let's put him in a cabin and weld the door closed. We can cut a slot to shove food in. A very narrow slot."

"Excellent. I think you have the solution. That is, unless Dr.

Cameron will reconsider his decision."

Cameron shrugged. "They'll pick you up in a day or less anyway. I suppose I'm not compromising myself by agreeing to your terms."

"Good."

"A doctor's word is as good as his oath," observed Anti.

"Hippocratic or hypocritic."

"Now, Anti, don't be cynical. Doctors have an economic sense as well as the next person," said Docchi gravely. He turned to Cameron. "You see, after Anti grew too massive for her skeletal structure, doctors reasoned she'd be most comfortable in the absence of gravity. That was in the early days, before successful ship gravital units were developed. They put her on an interplanetary ship and kept transferring her before each landing.

"But that grew troublesome and—expensive. They devised a new treatment; the asteroid and the tank of acid. Not being aquatic by nature, Anti resented the change. She still does." "I knew nothing about that," Cameron pointed out defensively.

"It was before your time." Docchi frowned at the doctor. "Tell me, why did you laugh when Jordan mentioned a space-suit?"

Cameron grinned. "That was my project while you were busy with the robot."

"To do what? Jordan-"

But Jordan was already on his way. He was gone for some time.

"Well?" asked Docchi on his return. It really wasn't necessary; Jordan's gloomy face told the story.

"Cut to ribbons."

"All of them?"

"Every one. Beyond repair."

"What's the excitement about?" rumbled Anti. "We don't need spacesuits unless something happens to the ship and we have to go outside."

"Exactly, Anti. How do you suppose we go about replacing the defective tubes? From the outside, of course. By destroying the spacesuits, Cameron made sure we can't."

Anti opened her mouth with surprise and closed it in anger.

She glowered at the doctor.

"We're still in the asteroid zone," said Cameron. "In itself, that's not dangerous. Without power to avoid stray rocks, it is. I advise you to contact the Medicouncil. They'll send a ship to pick us up and tow us in."

"No, thanks. I don't like Handicap Haven as well as you do," Anti said brusquely. She turned to Docchi. "Maybe I'm stupid for asking, but exactly what is it that's deadly about being out in space without a spacesuit?"

"Cold. Lack of air pressure. Lack of oxygen."

"Is that all? Nothing else?"

His laugh was too loud. "Isn't that enough?"

"I wanted to be sure," she said.

She beckoned to Nona, who was standing near. Together they went forward, where the spacesuits were kept.

Cameron scowled puzzledly and started to follow. Jordan

waved the toaster around.

"All right," said the doctor, stopping. He rubbed his chin. "What is she thinking about?"

"I wouldn't know," said Docchi. "She's not scientifically trained, if that's what you mean. But she has a good mind, as good as her body once was."

"And how good was that?"

"We don't talk about it," said Jordan shortly.

It was a long time before the women came back—if the weird creature that floated into the control compartment with Nona was Anti.

Cameron stared at her and saw shudderingly that it was. "You need a session with the psychocomputer," he said. "When we get back, that's the first thing we do. Can't you understand . . ."

"Be quiet," growled Jordan. "Now, Anti, explain what

you've rigged up."

"Any kind of pressure is good enough as far as the outside of the body is concerned," answered Anti, flipping back the helmet. "Mechanical pressure will do as well as air pressure. I had Nona cut the spacesuits into strips and wind them around mehard. Then I found a helmet that would fit over my head when the damaged part was cut away. It won't hold much air pressure, even taped very tight to my skin. But as long as it's pure oxygen—"

"It might be satisfactory," admitted Docchi. "But the tem-

perature?"

"Do you think I'm going to worry about cold?" asked Anti.

"Me? Way down below all this flesh?"

"Listen to me," said Cameron through his teeth. "You've already seriously threatened my career with all this childish non-sense. I won't permit you to ruin it altogether by a deliberate suicide."

"You and your stinking career," retorted Jordan tiredly. "We're not asking your permission to do anything." He turned away from the doctor. "You understand the risk, Anti? It's possible that it won't work at all."

"I've thought about it," Anti replied soberly. "On the other hand, I've thought about the asteroid."

"All right," said Jordan. Docchi nodded. Nona bobbed her head; it was doubtful that she knew what she was agreeing to.

"Let's have some telecom viewers outside," said Docchi. "One directly in back, one on each side. We've got to know what's happening."

Jordan went to the control panel and flipped levers. "They're out and working," he said, gazing at the screen. "Now, Anti, go to the freight lock. Close your helmet and wait. I'll let the air out slowly. The pressure change will be gradual. If anything seems wrong, let me know over the helmet radio and I'll yank you in immediately. Once you're outside I'll give you further instructions. Tools and equipment are in a compartment that opens into space."

Anti waddled away.

Jordan looked down at his legless body. "I suppose we have to be realistic about it—"

"We do," answered Docchi. "Anti is the only one of us who has a chance of doing the job and surviving."

Jordan adjusted a dial. "It was Cameron who was responsible for it. If Anti doesn't come back, you can be damn sure he'll join her."

"No threats, please," said Docchi. "When are you going to let her out?"

"She's out," said Jordan. Deliberately, he had diverted their attention while he had taken the burden of emotional strain.

Docchi glanced hastily at the telecom. Anti was hanging free in space, wrapped and strapped in strips torn from the useless spacesuits—that, and more flesh than any human had ever borne. The helmet sat jauntily on her head; the oxygen cylinder was strapped to her back. She was still intact.

"How is she?" he asked anxiously, unaware that the microphone was open.

"Fine," came Anti's reply, faint and ready. "The air's thin,

but it's pure oxygen."

"Cold?" asked Docchi.

"It hasn't penetrated yet. No worse than the acid, at any rate. What do I do?"

Jordan gave her directions. The others watched. It was work to find the tools and examine the tubes for defectives, to loosen the tubes in the sockets and pull them out and push them spinning into space. It was still harder to replace them, though there was no gravity and Anti was held to the hull by magneslippers.

But it seemed more than work. To Cameron, who was watching, an odd thought occurred: In her remote past, of which he knew nothing, Anti had done something like this before. Ridiculous, of course. Yet there was a rhythm to her motions, this shapeless giant creature whose bones would break with her weight if she tried to stand at even only half Earth gravity. Rhythm, a sense of purpose, a strange pattern, an incredible gargantuan grace.

The whale plowing the waves is graceful; it cannot be otherwise in its natural habitat. The human race had produced, accidentally, one unlikely person to whom interplanetary space was

not an alien thing. Anti was at last in her element.

"Now," said Jordan, keeping the tension out of his voice, "go back to the outside tool compartment. You'll find a lever. Pull. That will set the combustion cap in place."

"Done," said Anti, some minutes later.

"That's all. You can come in now."

"That's all? But I'm not cold. It hasn't reached any nerves yet."

"Come in," repeated Jordan, showing the anger of alarm. She walked slowly over the hull to the cargo lock and, while she did, Jordan reeled in the telecom viewers. The lock was no sooner closed to the outside and the air hissing into the compartment than Jordan was there, opening the inner lock.

"Are you all right?" he asked.

She flipped back the helmet. There was frost on her eyebrows and her nose was a bright red. "Of course. My hands aren't a bit cold." She stripped off the heated gloves and waggled her fingers.

"It can't be!" protested Cameron. "You should be frozen

stiff!

"Why?" asked Anti, laughing. "It's a matter of insulation and I have plenty of that."

Cameron turned to Docchi. "When I was a kid, I saw a film of a dancer. She did a ballet, Life of the Cold Planets, I believe it was called. For some cockeyed reason, I thought of it when

Anti was out there. I hadn't thought of it in years."

He rubbed his hand fretfully over his forehead. "It fascinated me when I first saw it. I couldn't get it out of my mind. When I grew older, I found out a tragic thing happened to the dancer. She was on a tour of Venus and the ship she was in disappeared. They sent out searching parties, of course. They found her after she had spent a week on a fungus plain. You know what that meant. The great ballerina was a living spore culture medium."

"Shut up," growled Jordan.

Cameron didn't seem to hear. "Naturally, she died. I can't remember her name, but I've always remembered the ballet she did. And that's funny, because it reminded me of Anti out there—"

A fist exploded in his face. If there had been more behind the blow than shoulders and a fragment of a body, his jaw would have been broken. As it was he floated through the air and crashed against the wall.

Angrily, he got to his feet. "I gave my word I wouldn't cause any trouble. The agreement evidently doesn't work both ways." He glanced significantly at the weapon Jordan carried. "Maybe you'd better be sure to have that around at all times."

"I told you to shut up," said Jordan. After that he ignored the doctor. He didn't have a body with which to do it, but some-

how Jordan managed a bow. "A flawless performance. One of your very best, Antoinette."

"Do you think so?" sighed Anti. The frost had melted from her eyebrows and was trickling down her cheek. She left with Jordan.

Cameron remained behind. He felt his jaw. It was too bad about his ambitions. He knew now that he was never going to be the spectacular success he had once imagined. Not after these accidentals had escaped from Handicap Haven. Still, he would always be able to practice medicine somewhere in the Solar System. He'd done his best on the asteroid and this ship, and he'd been a complete ass both times.

The ballerina hadn't really died, as he had been told. It would have been better for her if she had. He succeeded in re-

calling her name. It had been Antoinette.

Now it was Anti. He could have found that out by checking her case history—if Handicap Haven had one on file. Probably not, he comforted himself. Why keep case histories of hopeless cases?

"We'll stick to the regular lanes," said Docchi. "I think we'll get closer. They have no reason to suspect that we're heading toward Earth. Mars is more logical, or one of the moons of Jupiter, or another asteroid."

Jordan shifted uneasily. "I'm not in favor of it. They'll pick

us up before we have a chance to say anything."

"But there's nothing to distinguish us from an ordinary Earth-to-Mars rocket. We have a ship's registry on board. Pick out a ship that's in our class. Hereafter, we're going to be that ship. If Traffic blips us, and they probably won't unless we try to land, have a recording ready. Something like this: 'ME 21 zip crackle 9 reporting. Our communication is acting up. We can't hear you, Traffic.' Don't overdo the static effects but repeat that with suitable variations and I don't think they will bother us."

Shaking his head dubiously, Jordan swung away toward the

repair shops.

"You look worried," said Anti.

Docchi turned around. "Yeah."

"Won't it work?"

"Sure. We'll get close to Earth. They're not looking for us around here. They don't really know why we escaped in the rocket. That's why they can't figure out where we're going."

His face was taut and his eyes were tired. "It's not that. The entire Solar Police Force has been alerted for us."

"Which means?"

"Look. We planned to bypass the Medicouncil and take our case directly to the Solar Government. If they want us as much as the radio indicates, it's not likely they'll be very sympathetic. If the Solar Government doesn't support us all the way, we'll never get another chance."

"Well?" said Anti. She seemed trimmer, more vigorous. "What are we waiting for? Let's take the last step first."

He raised his head. "The Solar Government won't like it." "They won't, but there's nothing they can do about it."

"I think there is—simply shoot us down. When we stole the ship, we automatically stepped into the criminal class."

"We knew that in advance."

"Is it worth it?"

"I think so," said Anti.

"In that event," he said, "I'll need time to get ready."

She scrutinized him carefully. "Maybe we can fix you up."

"With fake arms and greasepaint? No. They'll have to accept us as we are."

"A good idea. I hadn't thought of the sympathy angle."

"Not sympathy. Reality. I don't want them to approve of us as handsome accidentals and have them change their minds when they discover what we're really like."

Anti looked doubtful, but she kept her objections to herself as she waddled away.

Sitting in silence, he watched her go. She, at least, would derive some benefit. Dr. Cameron apparently hadn't noticed that exposure to extreme cold had done more to inhibit her unceasing

growth than the acid bath. She'd never be normal again; that was obvious. But some day, if the cold treatment were properly

investigated, she might be able to stand gravity.

He examined the telecom. They were getting closer. No longer a bright point of light, Earth was a perceptible disc. He could see the outline of oceans, shapes of land; he could imagine people.

Jordan came in. "The record is rigged up, though we haven't had to use it. But we have a friend behind us. An official friend."

"Has he blipped us?"

"Not yet. He keeps hanging on."

"Is he overtaking us?"

"He would like to."

"Don't let him."

"With this bag of bolts?"

"Shake it apart if you have to," Docchi impatiently said. "How soon can you break into a broadcasting orbit?"

"I thought that was our last resort."

"Right. As far as Anti and I are concerned, this is it. Any argument against?"

"None that I can think of," answered Jordan. "With a heavy

cruiser behind us, no argument at all."

They were all in the control compartment. "I don't want a focus exclusively on me," Docchi was saying. "To a world of perfect normals I may look strange, but we have to avoid the family portrait effect."

"Samples," suggested Anti.

"In a sense, yes. A lot depends on whether they accept those samples."

For the first time Dr. Cameron began to realize what they were up to. "Wait!" he exclaimed. "You've got to listen to me!"

"We're not going to wait and we've already done enough listening to you," said Docchi. "Jordan, see that Cameron stays out of the telecom transmitting angle and doesn't interrupt. We've come too far for that." "Sure," Jordan promised harshly. "If he makes a sound, I'll melt the teeth out of his mouth." He held the toaster against his side, out of line with the telecom, but aimed at Cameron's face.

Cameron began to shake with urgency, but he kept still. "Ready?" Docchi asked.

"Flip the switch and we will be, with everything we've got. If they don't read us, it'll be because they don't want to."

The rocket slipped out of the approach lanes. It spun down, the stern tubes pulsing brightly, coming toward Earth in a tight trajectory.

"Citizens of the Solar System!" began Docchi. "Everyone on Earth! This is an unscheduled broadcast, an unauthorized appeal. We are using the emergency bands because, for us, it is an emergency. Who are we? Accidentals, of course, as you can see by looking at us. I know the sight isn't pretty, but we consider other things more important than appearance. Accomplishment, for example. Contributing to progress in ways normals cannot do.

"Shut away on Handicap Haven, we're denied this right. All we can do there is exist in frustration and boredom, kept alive whether we want to be or not. Yet we have a gigantic contribution to make . . . if we are allowed to leave the Solar System for Alpha Centauri! You can't travel to the stars now, although eventually you will.

"You must be puzzled, knowing how slow our present rockets are. No normal person could make the round trip; he would die of old age. But we accidentals can go! We would positively not die of old age! The Medicouncil knows that is true . . . and still will not allow us to go!"

At the side of the control compartment, Cameron opened his mouth to protest. Jordan, glancing at him, imperceptibly waggled the concealed weapon. Cameron swallowed his words and subsided without a sound.

"Biocompensation," continued Docchi evenly. "You may know about it, but in case information on it has been suppressed, let me explain: The principle of biocompensation has long been a matter of conjecture. This is the first age in which medical technology is advanced enough to explore it. Every cell, every organism, tends to survive, as an individual, as a species. Injure it and it strives for survival according to the seriousness of the injury. We accidentals have been maimed and mutilated almost past belief.

"Our organisms had the assistance of medical science. Real medical science. Blood was supplied as long as we needed it, machines did all our breathing, kidneys were replaced, hearts furnished, glandular products supplied in the exact quantities necessary, nervous and muscular systems were regenerated. In the extremity of our organic struggle, because we had the proper treatment, our bodies were wiped virtually free of death."

Sweat ran down his face. He longed for hands to wipe it

away.

"Most accidentals are nearly immortal. Not quite—we'll die four or five hundred years from now. Meanwhile, there is no reason why we can't leave the Solar System. Rockets are slow; you would die before you got back from Alpha Centauri. We won't. Time doesn't matter to us.

"Perhaps better, faster rockets will be devised after we leave. You may get there long before we do. We won't mind. We will simply have made our contribution to progress as best we could, and that will satisfy us."

With an effort Docchi smiled. The instant he did, he felt it was a mistake, one that he couldn't rectify. Even to himself

it felt more like a snarl.

"You know where we're kept. That's a politer word than imprisoned. We don't call it Handicap Haven; our name for it is the *junkpile*. And to ourselves we're junkmen. Does this give you a clue to how we feel?

"I don't know what you'll have to do to force the Medicouncil to grant their permission. We appeal to you as our last resort. We have tried all other ways and failed. Our future as human beings is at stake. Whether we get what we want and need is something for you to settle with your conscience." He nudged the switch and sat down.

His face was gray.

"I don't like to bother you," said Jordan, "but what shall we do about them?"

Docchi glanced at the telecom. "They" were uncomfortably close and considerably more numerous than the last time he had looked.

"Take evasive action," he said wearily. "Swing close to Earth and use the planet's gravity to give us a good push. We've got to keep out of their hands until people have time to react."

"I think you ought to know-" began Cameron. There was

an odd tone to his voice.

"Save it for later," said Docchi. "I'm going to sleep." His body sagged. "Jordan, wake me up if anything important happens. And remember that you don't have to listen to this fellow unless you want to."

Jordan nodded and touched the controls. Nona, leaning against the gravital panel, paid no attention to the scene. She seemed to be listening to something nobody else could hear. That was nothing new, but it broke Docchi's heart whenever he saw it. His breath drew in almost with a sob as he left the control room.

The race went on. Backdrop: planets, stars, darkness. The little flecks of light that edged nearer didn't seem cheerful to Jordan. His lips were fixed in a straight, hard line. He could hear Docchi come in behind him.

"Nice speech," said Cameron.

"Yeah." Docchi glanced at the telecom. The view didn't inspire further comment.

"That's the trouble, it was just a speech. It didn't do you any good. My advice is to give up before you get hurt."

"It would be."

Cameron stood at the threshold. "I may as well tell you," he said reluctantly. "I tried to before the broadcast, as soon as I found out what you were going to do. But you wouldn't listen."

He came into the control compartment. Nona was huddled in a seat, motionless, expressionless. Anti was absent.

"You know why the Medicouncil refused to let you go?"

"Sure," said Docchi.

"The general metabolism of accidentals is further from normal than that of creatures we dredge from the bottom of the sea. Add to that an enormously elongated life span and you ought to see the Medicouncil's objection."

"Get to the point!"

"Look at it this way," Cameron continued almost desperately. "The Centauri group contains quite a few planets. From what we know of cosmology, intelligent life probably exists there to a greater or lesser extent. You will be our representatives to them. What they look like isn't important; it's their concern. But our ambassadors have to meet certain minimum standards. They at least—damn it, don't you see that they at least have to look like human beings?"

"I know you feel that way," said Jordan, rigid with con-

tempt.

"I'm not talking for myself," Cameron said. "I'm a doctor. The medicouncilors are doctors. We graft on or regenerate legs and arms and eyes. We work with blood and bones and intestines. We know what a thin borderline separates normal people from—from you.

"Don't you understand? They're perfect, perhaps too much so. They can't tolerate even small blemishes. They rush to us with things like hangnails, pimples, simple dandruff. Health—or rather the appearance of it—has become a fetish. They may think they're sympathetic to you, but what they actually feel is something else."

"What are you driving at?" whispered Docchi.

"Just this: if it were up to the Medicouncil, you would be on your way to the Centauri group. But it isn't. The decision always had to be referred back to the Solar System as a whole. And the Medicouncil can't go counter to the mass of public opinion." Docchi turned away in loathing.

"Don't believe me," said Cameron. "You're not too far from Earth. Pick up the reaction to your broadcast."

Worriedly, Jordan looked at Docchi.

"We may as well find out," said Docchi. "It's settled now, one way or the other."

They searched band after band. The reaction was always the same. Obscure private citizen or prominent one, man or woman, they all told how sorry they were for the accidentals, but—

"Turn it off," said Docchi at last.

"Now what?" Jordan asked numbly.

"You have no choice," said the doctor.

"No choice," repeated Docchi dully. "No choice but to give up. We misjudged who our allies were."

"We knew you had," said Cameron. "It seemed better to let you go on thinking that way while you were on the asteroid. It gave you something to hope for. It made you feel you weren't alone. The trouble was that you got farther than we thought you would ever be able to."

"So we did," Docchi said. His lethargy seemed to lift a little. "And there's no reason to stop now. Jordan, pick up the ships behind us. Tell them we've got Cameron on board. A hostage. Play him up as a hero. Basically, he's not with those who are against us."

Anti came into the control compartment. Cheerfulness faded from her face. "What's the matter?" she asked.

"Jordan will explain to you. I've got to think."

Docchi closed his eyes. The ship lurched slightly, though the vibration from the rockets did not change. There was no reason for alarm; the flight of a ship was never completely steady. Docchi paid no attention.

At last he opened his eyes. "If we were properly fueled and provisioned," he said without much hope, "I would be in favor of the four of us heading for Alpha or Proxima. Maybe even Sirius. It wouldn't matter where, since we wouldn't intend to

come back. But we can't make it with our small fuel reserve. If we can shake the ships behind us, we might be able to hide until we can steal the necessary fuel and food."

"What'll we do with Doc?" asked Jordan.

"We'd have to raid an unguarded outpost, of course. Probably a small mining asteroid. We can leave him there."

"Yeah," said Jordan. "A good idea, if we can run away from our personal escort of bloodhounds. Offhand, that doesn't seem very likely. They didn't come any closer when I told them we had Doc with us, but they didn't drop back—"

He stopped and raised his eyes to the telecom. He blinked,

not believing what he saw.

"They're gone!" His voice broke with excitement.

Almost instantly Docchi was beside him. "No," he corrected. "They're still following, but they're very far behind." Even as he looked, the pursuing ships visibly lost ground.

"What's our relative speed?" asked Jordan. He looked at the dials himself, frowned, tapped them as if the needles had

gone crazy.

"What did you do to the rockets?" demanded Docchi.

"Nothing! There wasn't a thing I could do. We were already running at top speed."

"We're above it. Way above it. How?"

There was nothing to explain their astonishing velocity. Cameron, Anti, and Jordan were in the control compartment. Nona still sat huddled up, hands pressed tight against her head. There was no explanation at all, yet power was pouring into the gravital unit, as a long unused, actually useless dial was indicating.

"The gravital drive is working," Docchi blankly pointed out.

"Nonsense," said Anti. "I don't feel any weight."

"You don't," answered Docchi. "You won't. The gravital unit was originally installed to drive the ship. When that proved unsatisfactory, it was converted. The difference is slight but important. An undirected general field produces weight effects inside the ship. That's for passenger comfort. A directed field,

outside the ship, will drive it. You can have one or the other, not both."

"But I didn't turn on the gravital drive," said Jordan in flat bewilderment. "I couldn't if I wanted to. It's disconnected."

"I would agree with you, except for one thing. It's working." Docchi stared at Nona, whose eyes were closed. "Get her attention," he said.

It was Jordan who gently touched her shoulder. She opened her eyes. On the instrument board, the needle of a once useless dial rose and fell.

"What's the matter with the poor dear?" asked Anti. "She's shaking."

"Let her alone," said Docchi.

No one moved. No one said anything at all. Minutes passed while the ancient ship creaked and groaned and ran away from the fastest rockets in the Solar System.

"I think I know," said Docchi at last, still frowning. "Consider the gravity-generating plant. Part of it is an electronic computer, capable of making the necessary calculations and juggling the proportion of power required to produce, continuously, directed or undirected gravity. In other words, a brain, a complex mechanical intelligence. From the viewpoint of that intelligence, why should it perform ad infinitum a complicated but meaningless routine? It didn't know why, and because it didn't, very simply, it refused to do so.

"Now consider Nona. She's deaf, can't speak, can't communicate. In a way she's comparable to the gravital computer. Like it, she has a very high potential intelligence. Like it, she's had difficulty grasping the facts of her environment. Unlike it, though, she has learned something. How much, I don't know, but it's far more than the Medicouncil psychologists credit her

with."

"Yeah," said Jordan dubiously. "But what's happening now?"

"If there were two humans involved, you would call it telepathy," answered Docchi hesitantly, fumbling for concepts he could only sense without grasping. "One intelligence is electronic, the other organic. You'll have to coin a new term, because the only one I know is extrasensory perception, and that's obviously ridiculous. It is, isn't it?"

Jordan smiled and flexed his arms. Under the shapeless garment his muscles rippled. "It isn't," he said. "The power was there, but we're the only ones who know how to use it. Or rather Nona is."

"Power?" repeated Anti, rising majestically. "You can keep it. I want just enough to get to Centauri."

"I think you'll get it," Docchi promised. "A lot of things seem clearer now. For example, in the past, why didn't gravital units work well at considerable distances from the Sun? As a matter of fact, the efficiency of each unit was inversely proportional to the square of the distance between it and the Sun.

"The gravital computer is a deaf, blind, mass-sensitive brain. The major fact in its existence is the Sun, the greatest mass in the Solar System. To such a brain, leaving the Solar System would be like stepping off the edge of a flat world, because it couldn't be aware of stars.

"Now that it knows about the Galaxy, the drive will work anywhere. With Nona to direct it, even Sirius isn't far away."

"Doc," said Jordan carelessly, "you'd better be figuring a way to get off the ship. Remember, we're going faster than man ever went before." He chuckled. "Unless, of course, you *like* our company and don't want to leave."

"We've got to do some figuring ourselves," interposed Doc-

chi. "Such as where we are heading now."

"A good idea," said Jordan. He busied himself with charts and calculations. Gradually his flying fingers slowed. His head bent low over his work. At last he stopped and folded his arms.

"Where?" asked Docchi.

"There." Jordan dully punched the telecom selector and a view became fixed on the screen. In the center glimmered a tiny world, a fragment of a long-exploded planet. Their destination was easily recognizable.

It was Handicap Haven.

"But why do we want to go there?" asked Anti. She looked in amazement at Docchi.

"We're not going voluntarily," he answered, his voice flat and spent. "We're going where the Medicouncil wants us to go. We forgot about the monitor system. When Nona activated the gravital unit, that fact was indicated at some central station. All the Medicouncil had to do was use the monitor to take the gravital drive away from Nona."

"We thought we were running away from the ships, which we were, but only to beat them back to the junkpile?" asked Anti.

Docchi nodded.

"Well, it's over. We did our best. There's no use crying about it." Yet she was. She passed by Nona, patting her gently. "It's all right, darling. You tried."

Jordan followed her from the compartment.

Cameron remained; he came over to Docchi. "Everything isn't lost," he said, somewhat awkwardly. "You're back where you started from, but Nona at least will benefit."

"Benefit?" said Docchi. "Someone will. It won't be Nona."
"You're wrong. Now that she is an important factor—"

"So is a special experimental machine. Very valuable. I don't think she'll like that classification."

Silence met silence. It was Dr. Cameron who turned away. "That ghastly glow of yours when you're angry always did

upset me. I'll come back when it's dimmer."

Docchi glared after him. Cameron was the only normal aware that it was Nona who controlled the gravital unit. All the outside world could realize was that it was in operation, as it had been designed to work, but never had. If Cameron could be disposed of—

He shook his head. It wouldn't solve anything. He might fool them for a while. They might think he was responsible. In the end, they'd find out. Nona wasn't capable of that much deception, for she never knew what a test was. He went over to her. Once he had hoped . . . It didn't

matter what he had hoped.

She looked up and smiled. She had a right to. No word had ever broken the silence of her mind, but now she was communicating with something, whatever it was that an electronic brain could say. Of course she didn't understand that the conversation was taking place between two captives, herself and the gravital computer.

Abruptly he turned away. He stopped at the telecom panel and methodically kicked it apart. Delicate tubes smashed into powder. The emergency radio he thoroughly demolished.

The ship was firmly in the grip of the gravital monitor. There was nothing he could do about that. All that remained was to protect Nona from their prying minds as long as he could.

She didn't hear the noise, or didn't care. She sat there, head in her hands, calm and smiling.

The outer shell of the rocket dome opened before and closed behind them. Jordan set the controls in neutral and lifted his hands, muttering to himself. They were gliding through the lip of the inner shell. Home.

"Cheer up," said Cameron breezily. "You're not really prisoners, you know."

Nona seemed content, though Jordan didn't. Docchi said nothing, the light gone from his face. Anti wasn't with them; she was floating in the tank of acid. The gravity field of the asteroid made that necessary.

The ship scraped gently and they were down. Jordan touched a lever; passenger and freight locks were open.

"Let's go," said Dr. Cameron. "I imagine there's a reception committee for you."

There was. The little rocket dome held more ships than normally came in a year. The precise confusion of military discipline was everywhere in evidence. Armed guards lined either side of the landing ramp down which they walked.

At the bottom, a large telecom unit had been set up. If size indicated anything, someone considered this an important occasion. From the screen, larger than life, Medicouncilor Thorton looked out approvingly.

The procession from the ship halted in front of the telecom

unit.

"A good job, Dr. Cameron," said the medicouncilor. "We were quite surprised at the escape of the four accidentals, and your disappearance, which coincided with it. From what we were able to piece together, you deliberately followed them. A splendid example of quick thinking, Doctor. You deserve recognition for it."

"Thank you," said Cameron.

"I'm sorry I can't be there to congratulate you in person but I will be soon." The medicouncilor paused discreetly. "At first the publicity was bad. Very bad. We thought it unwise to conceal an affair of such magnitude. Of course the unauthorized broadcast made it impossible. Fortunately, the gravital discovery came along at just the right time. I don't mind telling you that the net effect is now in our favor."

"I hoped it would be," said Cameron. "Nona-"

"You've spoken about her before." The medicouncilor frowned. "We can discuss her later. For the moment, see that she and the rest of the accidentals are returned to their usual places. Bring Docchi to your office at once. I want to question him privately."

Cameron stared at him in bewilderment. "But I thought—"
"No objections, Doctor," snapped Thorton. "Important people are waiting for you. That is all." The telecom darkened.

"I think you heard what he said, Dr. Cameron." The officer at his side was very polite. He could afford to be, with the rank of three big planets on his tunic.

"Very well," Cameron answered. "But as commander of the asteroid, I request that you furnish a guard for the girl."

"Commander?" repeated the officer. "That's funny-my orders indicate that I am, until further notice. I haven't got that

notice." He looked around at his men and crooked a finger. "Lieutenant, see that the little fellow—Jordan, I think his name isgets a lift back to the main dome. And you can walk the pretty lady to her room. Or whatever it is she lives in." He smiled negligently at Cameron. "Anything to oblige another commander."

The medicouncilor, Thorton, was waiting impatiently on the telecom when they got to Cameron's office.

"We will arrive in about two hours," he said immediately. "When I say we, I mean a number of top governmental officials and scientists. Meanwhile, let's get on with this gravital business." He caught sight of the commander. "General Judd, this is a technical matter. I don't think you'll be interested in it."

"Very well, sir. I'll stand guard outside."

The medicouncilor was silent until the door closed behind General Judd. "Sit down, Docchi," he said with unexpected kindness. He paused to note the effect. "I can sympathize with you. You had everything you wanted nearly within your reach. And, after that, to return to Handicap Haven—well, I can understand how you feel. But since you did return, I think we can arrange to do something for you."

Docchi stared at the man on the screen. A spot of light pulsed on his cheek and then flared rapidly over his face.

"Sure," he said casually. "But there are criminal charges against me."

"A formality," said the medicouncilor. "With a thing like the discovery—or rediscovery—of the gravital drive to think about, no one is going to worry much about your unauthorized departure from the asteroid."

Medicouncilor Thorton sounded pleased. "I don't want to mislead you. We can't do any more for you medically than has already been done. However, you will find yourself the center of a more adequate social life. Friends, work, whatever you want. Naturally, in return for this, we will expect your full cooperation." "Naturally." Docchi blinked at him and got to his feet. "Sounds interesting. I'd like to think about it for a minute."

Cameron planted himself squarely in front of the screen. "Maybe I don't understand. I think you've got the wrong person."

"Dr. Cameron!" Thorton glowered. "Please explain."

"It was an easy mistake to make," said Cameron. "Cut off from communication, the gravital drive began to work. How? Why? Mostly, who did it? You knew it wasn't I. I'm a doctor, not a physicist. Nor Jordan, he's at best a mechanic. Therefore it had to be Docchi, because he's an engineer. He could make it work. But it wasn't Docchi. He had nothing to do with—"

"Look out!" cried Thorton too late.

Cameron fell to his knees. The same foot that brought him down crashed into his chin. His head snapped back and he sprawled on the floor. Blood trickled from his face.

"Docchi!" shouted Thorton from the screen.

Docchi didn't answer. He was crashing through the door. The commander was lounging against the wall. Head down, Docchi ran into him. The toaster fell from his belt to the floor. With scarcely a pause, Docchi stamped on it and continued running.

The commander got to his feet and retrieved the weapon. He aimed it tentatively at the retreating figure; a thought occurred to him and he lowered it. He examined the damaged mechanism. After that, it went gingerly into a tunic pocket.

Muffled shouts were coming from Cameron's office. The general broke in.

The medicouncilor glared at him from the screen. "I can see that you let him get away."

The disheveled officer straightened his uniform. "I'm sorry, sir. I'll alert the guards immediately."

"Never mind now. Revive that man."

The general wasn't accustomed to giving resuscitation; it was out of his line. Nevertheless, in a few minutes Cameron was conscious, though somewhat dazed.

"Now then, Doctor, if it wasn't Docchi who was responsi-

ble for the sudden functioning of the gravital drive, who was it?"

With satisfaction, Cameron told him. He had not been wrong about the girl. Listening to the detailed explanation of Nona's mental abilities, the general was perplexed, as generals sometimes are.

"I see." The medicouncilor nodded. "We overlooked that possibility altogether. Not the mechanical genius of an engineer. Instead, the strange telepathic sense of a girl. That puts the problem in a different light."

"It does." Cameron pressed his aching jaw. "She can't tell us how she does it. We'll have to experiment. Fortunately, it won't involve any danger. With the monitor system we can always control the gravital drive."

The medicouncilor leaned perilously backward and shook his head. "You're wrong. It's supposed to, but it doesn't. We tried. For a microsecond, the monitor did take over, but the gravital computer is smarter than we thought, if it was the computer that figured out the method. It found a way of cutting the power from the monitor circuit. It didn't respond at all."

Cameron forgot his jaw. "If you didn't bring the rocket back

on remote, why did she come?"

"Docchi knows," growled the medicouncilor. "He found out in this room. That's why he escaped." He tapped on his desk with blunt fingers. "She could have taken the ship anywhere she pleased and we couldn't have stopped her. Since she voluntarily came back, it's obvious that she wants the asteroid!"

Medicouncilor Thorton tried to shove his face out of the screen and into the room. "Don't you ever think, General? There isn't any real difference between gravital units except size and power. What she did to the ship she can do as easily to the asteroid." He thrust out a finger and pointed angrily. "Don't stand there, General Judd. Find that girl!"

It was late for that kind of command. The great dome overhead trembled and creaked in countless joints. The little world shivered, groaned as if it had lain too long in an age-old orbit. It began to move. Vague shapes stirred, crawled, walked if they could. Fantastic and near-fantastic figures came to the assembly. Huge or tiny, on their own legs or borrowed ones, they arrived, with or without arms, faces. The word had spread by voice, by moving lips, by sign languages of every sort.

"Remember, it will be hours or perhaps days before we're safe," said Docchi. His voice was growing hoarse. "It's up to us to see that Nona has all the time she needs."

"Where is she hiding?" asked someone from the crowd.

"I don't know. If I did, I still wouldn't tell you. It's our job to keep them from finding her."

"How?" demanded one near the front. "Fight the guards?"

"Not directly," said Docchi. "We have no arms in the sense of weapons. Many of us have no arms in any sense. All we can hope to do is obstruct their search. Unless someone has a better idea, this is what I plan:

"I want all the men, older women, and the younger ones who aren't suitable for reasons I'll explain later. The guards won't be here for another half hour—it will take that long to get them together and give them the orders that the Medicouncil must be working out now. When they do come, get in their way.

"How you do that, I'll leave to your imagination. Appeal to their sympathy as long as they have any. Put yourself in dangerous situations. They have ethics; at first they'll be inclined to help you. When they do, try to steal their weapons. Avoid physical violence as much as you can. We don't want to force them into retaliation. Make the most of that phase of their behavior. It won't last long."

Docchi paused and looked over the crowd. "Each of you will have to decide for himself when to drop that kind of resistance and start an active battle campaign. We have to disrupt the light and scanning and ventilation systems, for instance. They'll be forced to keep them in repair. Perhaps they'll try to guard these strategic points. So much the better for us—there will be fewer guards to contend with."

"What about me?" called a woman from far in back. "What do I do?"

"You are in for a rough time," Docchi promised her. "Is Jerian here?"

She elbowed her way to his side through the crowd.

"Jerian," said Docchi to the accidentals, "is a normal, pretty woman—outwardly. She has, however, no trace of a digestive system. The maximum time she can go without food and fluid injections is ten hours. That's why she's here."

Again Docchi scanned the group. "I need a cosmetech, someone who has her equipment with her."

A legless woman propelled herself forward. Docchi conferred with her. She seemed startled, but she complied. Under her deft fingers Jerian was transformed—into Nona.

"She will be the first Nona they'll find," explained Docchi, "because she can get away with the disguise longer. I think—I hope—they'll call off the search for a few hours while they test her. Eventually they are sure to find out. In Jerian's case, finger-prints or X-rays would reveal who she is. But that won't occur to them immediately. Nona is impossible to question, as you know, and Jerian will act exactly as Nona would.

"As soon as they discover that Jerian isn't Nona—well, they won't bother to be polite, if that's the word for it. The guards will like the idea of finding an attractive girl they can manhandle in the line of duty, especially if they think that will help them find Nona. It won't, of course. But it will hold up the search and that's what we want."

They stood still, no one moving. Women looked at each other in silent apprehension.

"Let's go," said Jordan grimly.

"Wait," advised Docchi. "I have one volunteer Nona. I need about fifty more. It doesn't matter if you're physically sound or not—we'll raid the lab for plastissue. If you think you can be made up to look like Nona, come forward."

Slowly, singly and by twos and threes, they came to him.

There were few indeed who wouldn't require liberal use of camouflage.

The rest followed Jordan out.

Mass production of an individual. Not perfect in every instance. Good enough to pass in most. Docchi watched approvingly resolved to all the law of the law.

ingly, suggesting occasional touches of makeup.

"She can't speak or hear," he reminded the volunteers. "Remember that at all times, no matter what they do. Hide in difficult places. After Jerian is taken and the search called off and then resumed, let yourselves be found one at a time. Every guard that has to take you for examination is one less to look for the real Nona. They have to find her soon or get off the asteroid."

The cosmetechs were busy; none stopped. There was one

who looked up.

"Get off?" she asked. "Why?"

"The Sun is getting smaller."

"Smaller!" exclaimed the woman.

He nodded. "Handicap Haven is leaving the Solar System."

Her fingers flew and molded the beautiful curve of a jaw where there had been none. Next, plastissue lips were applied.

Nona was soon hiding in half a hundred places.

And one more . . .

The orbit of Neptune was far behind and still the asteroid was accelerating. Two giant gravital units strained at the core of Handicap Haven. The third clamped an abnormally heavy gravity on the isolated world. Prolonged physical exertion was awkward and doubly exhausting. Hours turned into a day, but the units never faltered.

"Have you figured it out as precisely as you should?" asked Docchi easily. "You share our velocity away from the Sun. You'll have to overcome it before you can start going back."

The general ignored him. "If we could only turn off that

damned drive!"

Engineer Vogel shrugged sickly. "You try it," he suggested. "I don't want to be around when you do. It sounds easy: just a

gravital unit. But remember there's a good-sized nuclear pile involved."

"I know we can't," admitted the general, morosely looking at the darkness overhead. "On the other hand, we can take off and blow this rock apart from a safe distance."

"And lose all hope of finding her?" taunted Docchi.

"We're losing her anyway," Cameron commented sourly.

"It's not as bad as all that," consoled Docchi. "Now that you know where the difficulty is, you can always build another computer and furnish it with auxiliary senses. Or maybe build into it the facts of elementary astronomy."

Cautiously, he shifted his frail body under the heavy gravity. "There's another solution, though it may not appeal to you. I can't believe Nona is altogether unique. There must be others like her. So-called 'born' mechanics, maybe, whose understanding of machinery is a form of empathy we've never suspected. Look hard enough and you may find them, perhaps in the most unlikely or unlovely body."

General Judd grunted wearily, "If I thought you knew where she is-"

"You can try to find out," Docchi invited, glowing involuntarily.

"Forget about the dramatics, General," said Cameron in disgust. "We've questioned him thoroughly. Resistance we would have had in any event. He's responsible merely for making it more effective than we thought possible."

He added slowly: "At the moment, obviously, he's trying to tear down our morale. He doesn't have to bother. The situation is so bad that it looks hopeless. I can't think of a thing we can do that would help us."

The Sun was high in the center of the dome. Sun? More like a very bright star. It cast no shadows; the lights in the dome did. They flickered and with monotonous regularity went out again. The general swore constantly and emotionlessly until service was restored.

A guard approached with his captive. "I think I've found her, sir."

Cameron looked at the girl in dismay. "Guard, where's your decency?"

"Orders, sir," the man said.

"Whose orders?"

"Yours, sir. You said she was sound of body. How else could I find out?"

Cameron scowled and thrust a scalpel deep into the girl's thigh. She looked at him with a tear-stained face, but didn't move a muscle.

"Plastissue, as any fool can see," he commented dourly. The guard looked revolted and started to lead her out.

"Let her go," snapped the doctor. "Both of you will be safer, I think."

The girl darted away. The guard followed her, shuddering, his eyes filled with a self-loathing that Cameron realized would require hours of psychiatric work to remove.

Docchi smiled. "I have a request to make."

"Go ahead and make it," snorted the general. "We're likely

to give you anything you want."

"You probably will. You're going to leave without her. Very soon. When you do go, don't take all your ships. We'll need about three when we come to another solar system."

General Judd opened his mouth in rage.

"Don't you say anything you'll regret," cautioned Docchi. "When you get back, what will you report to your superiors? Can you tell them that you left in good order, while there was still time to continue the search? Or will they like it better if they know you stayed until the last moment? So late that you had to abandon some of your ships?"

The general closed his mouth and stamped away. Word-

lessly, Cameron dragged after him.

The last ship had blasted off and the rocket trails had faded into overwhelming darkness. The Sun, which had been trying

to lose itself among the other stars, finally succeeded. The asteroid was no longer the junkpile. It was a small world that had become a swift ship.

"We can survive," said Docchi. "Power and oxygen, we

have, and we can grow or synthesize our food."

He sat beside Anti's tank, which had been returned to the usual place. A small tree nodded overhead in the artificial breeze. It was peaceful enough. But Nona wasn't there.

"We'll get you out of the tank," promised Jordan. "When she comes back, we'll rig up a place where there's no gravity.

And we'll continue cold treatment."

"I can wait," said Anti. "On this world I'm normal."

Docchi stared forlornly about. The one thing he wanted to see wasn't there.

"If you're worrying about Nona," advised Anti, "don't. The guards were pretty rough with the women, but plastissue doesn't feel pain. They didn't find her."

"How do you know?"

"Listen," said Anti. The ground shivered with the power of the gravital units. "As long as they're running, how can you doubt?"

"If I could be sure-"

"You can start now," Jordan said. "First, though, you'd better get up and turn around."

Docchi scrambled to his feet. She was coming toward him.

She showed no sign of strain. Except for a slight smudge on her wonderfully smooth and scarless cheek, she might just have stepped out of a beauty cubicle. Without question, she was the most beautiful woman in the world. This world, of course, though she could have done well on any world—if she could have communicated with people as well as with machines.

"Where were you hiding?" Docchi asked, expecting no an-

swer.

She smiled. He wondered, with a feeling of helplessness, if machines could sense and appreciate her lovely smile, or whether they could somehow smile themselves.

"I wish I could take you in my arms," he said bitterly.

"It's not as silly as you think," said Anti, watching from the surface of the tank. "You don't have any arms, but she has two. You can talk and hear, but she can't. Between you, you're a complete couple."

"Except that she would never get the idea," he answered

unhappily.

Jordan, rocking on his hands, looked up quizzically. "I must be something like her. They used to call me a born mechanic; just put a wrench in my hand and I can do anything with a piece of machinery. It's as if I sense what the machine wants done to it. Not to the extent that Nona can understand, naturally. You might say it's reversed, that she's the one who can hear while I have to lip-read."

"You never just gabble," Docchi prompted. "You have something in mind."

Jordan hesitated. "I don't know if it's stupid or what. I was thinking of a kind of sign language with machines. You know, start with the simple ones, like clocks and such, and see what they mean to her. Since they'd be basic machines, she'd probably have pretty basic reactions. Then it's just a matter of—"

"You don't have to blueprint it," Docchi cut in excitedly. "That would be fine for determining elementary reactions, but I can't carry around a machine shop; it wouldn't be practical. There ought to be one variable machine that would be portable and yet convey all meanings to her."

"An electronic oscillator?"

Acid waves washed at the sides of the tank as Anti stirred impatiently. "Will you two great brains work it out in the lab, please? And when you get through with that problem, you'll have plenty more to keep you occupied until we get to the stars. Jordan and me, for instance. What future is there for a girl unless she can get married?"

"That's right," Docchi said. "I've got an idea we can do better than normal doctors. Being accidentals ourselves, we won't stop experimenting till we succeed. And we have hundreds of years to do it in."

Glowing, literally, with pleasure, he bent over for Jordan to climb on his back. Then he kissed Nona and headed for the laboratory.

Nona smiled and followed.

"There are some things you don't need words or machines to express," Anti called out. "Keep that in mind, will you?"

She submerged contentedly in the acid bath. Above the dome, the stars gleamed a bright welcome to the little world that flashed through interstellar space.

## TO MARRY MEDUSA

BY THEODORE STURGEON

"I'll bus' your face, Al," said Gurlick. "I gon' break your back. I gon' blow up your place, an' you with it, an' all your rotgut licker, who wants it? You hear me, Al?"

Al didn't hear him. Al was back of the bar in his place three blocks away, probably still indignantly red, still twitching his long bald head at the empty doorway through which Gurlick had fled, still repeating what all his customers had just witnessed: Gurlick cringing in from the slick raw night, fawning at Al, stretching his stubble in a ragged brown grin, tilting his head, half-closing his sick-green, muddy-whited eyes.

"Walkin' in here," Al would be reporting for the fourth time in nine minutes, "all full of good-ol'-Al this an' hiya-buddy that, an' you-know-me-Al, and how's about a little *you*-know; an' all I says is I know you all right, Gurlick, shuck on out o' here, I wouldn't give you sand if I met you on the beach; an' him spittin' like that, right on the bar, an' runnin' out, an' stickin' his head back in an' callin' me a —"

Sanctimoniously, Al would not sully his lips with the word. And the rye-and-bitters by the door would be nodding wisely and saying, "Man shouldn't mention a feller's mother, whatever," while the long-term beer would be clasping his glass, warm as

pablum and headless as Anne Boleyn, and intoning, "You was

right, Al, dead right."

Gurlick, four blocks away now, glanced back over his shoulder and saw no pursuit. He slowed his scamper to a trot and then a soggy shuffle, hunching his shoulders against the blowing mist. He kept on cursing Al, and the beer, and the rye-and-bitters, announcing that he could take 'em one at a time or all together one-handed.

He could do nothing of the kind, of course. It wasn't in him. It would have been success of a sort, and it was too late in life for Gurlick, unassisted, to start anything as new and different as success. His very first breath had been ill-timed and poorly done, and from then on he had done nothing right. He begged badly and stole when it was absolutely safe, which was seldom, and he rolled drunks providing they were totally blacked out, alone, and concealed. He slept in warehouses, boxcars, parked trucks. He worked only in the most extreme circumstances and had yet to last through the second week.

"I'll cut 'em," he muttered. "Smash their face for them . . ."

He sidled into an alley and felt along the wall to a garbage can he knew about. It was a restaurant garbage can and sometimes . . .

He lifted the lid and, as he did so, saw something pale slide away and fall to the ground. It looked like a bun, and he snatched at it and missed. He stooped for it, and part of the misted wall beside him seemed to detach itself and become solid and hairy; it scrabbled past his legs. He gasped and kicked out, a vicious, ratlike spasm.

His foot connected solidly and the creature rose in the air and fell heavily at the base of the fence, in the dim wet light from the street. It was a small white dog, three-quarters starved. It yipped twice, faintly, tried to rise and could not.

When Gurlick saw it was helpless, he laughed aloud and kicked it and stamped on it until it was dead, and with each blow his vengeance became more mighty. There went Al, and there the two barflies, and one for the cops, and one for all judges and jailers, and a good one for everyone in the world who owned anything, and to top it, one for the rain.

He was a pretty big man by the time he was finished.

Out of breath, he wheezed back to the garbage can and felt around until he found the bun. It was sodden and slippery, but it was half a hamburger which some profligate had left unfinished, and that was all that mattered. He wiped it on his sleeve, which made no appreciable difference to sleeve or bun, and crammed it into his mouth.

He stepped out into the light and looked up through the mist at the square shoulders of the buildings that stood around to watch him. He was a man who had fought and killed for what was rightfully his.

"Don't mess with me," he growled at the city.

A kind of intoxication flooded him. He felt the way he did at the beginning of that dream he was always having, where he would walk down a dirt path beside a lake, feeling good, feeling strong and expectant, knowing he was about to come to the pile of clothes on the bank. He wasn't having the dream just then, he knew; he was too cold and too wet, but he squared his shoulders anyway. He began to walk, looking up. He told the world to look out. He said he was going to shake it up and dump it and stamp on its fat face.

"You gon' to know Dan Gurlick passed this way," he said. He was perfectly right this time, because it was in him now.

It had been in the hamburger and before that in the horse from which most of the hamburger had been made, and before that in two birds, one after the other, which had mistaken it for a berry. Before that . . . it's hard to say.

When the first bird ate it, it sensed it was in the wrong place, and did nothing, and the same thing with the second. When the horse's blunt club of a tongue scooped it up with a clutch of meadow-grass, it had hopes for a while. It straightened itself out after the horse's teeth flattened it, and left the digestive

tract early, to shoulder its way beween cells and fibers until it rested in a ganglion.

There it sensed another disappointment, and high time too —once it penetrated into the neurone-chains, its nature would be irreversibly changed, and it would have been with the horse for the rest of his life. As, in fact, it was, but after the butcher's blade missed it, and the meat-grinder wrung it, pinched it, stretched it (but in no way separated any part of it from any other), it could still go on about its job when the time came.

Eight months in the deep-freeze affected it not at all, nor did hot fat. The boy who bit into the resulting hamburger was the only human being who ever saw it. It looked like a boiled raisin, or worse. The boy said so and got another free and it was dumped atop the garbage can, to be found and fought for by Gurlick.

The rain came down hard. Gurlick's exaltation faded, his shoulders hunched, his head went down. He slogged through the wet and soon sank to his usual level of feral misery. And there he stayed for a while.

This girl's name was Charlotte Dunsay and she worked in Accounting. She was open and sunny and she was a dish. She had rich brown hair with ruby lights in it, and the kind of topaz eyes that usually belong to a special kind of blonde. She had a figure that Paul Sanders, who was in Pharmaceuticals, considered a waste when viewed in the light of the information that her husband was a Merchant Marine officer on the Australia run. It was a matter of hours after she caught the attention of the entire plant (which was a matter of minutes after she got there) that news went around of her cheerful but unshakable "Thanks, but no, thanks."

Paul took this as an outright challenge, but he kept his distance and bided his time. When the water-cooler reported that her husband's ship had come off second best in a bout with the Great Barrier Reef and had limped to Hobart, Tasmania, for repairs, Paul decided that the day was upon him. He stated as

much in the locker room and got good odds—11 to 2—and somebody to hold the money—one of the suckers who gave him the cue for the single strategic detail which so far had escaped him.

He had the time (Saturday night), the place (obviously her apartment, since she wouldn't go out), and the girl. All he had to figure out was how to put himself on the scene, and when one of the suckers said, "Nobody gets into that place but a for-real husband or a sick kitten," he had the answer.

This girl had cried when one of the boss's tropical fish was found belly-up one morning. She had rescued a praying mantis from an accountant who was flailing it against the window with the morning *Times*, and after she let the little green monster out, she had rescued the accountant's opinion of himself with a comforting word and a smile that put dazzle-spots all over his work for the rest of the afternoon.

So on Saturday night, late enough so he would meet few people in the halls, but early enough so she wouldn't be in bed yet, Paul Sanders stopped for a moment by a mirror in the hall-way of her apartment house, regarded his rather startling appearance approvingly, winked at it, and then went to her door and began rapping softly and excitedly. He heard soft hurrying footsteps behind the door and began to breathe noisily, like someone trying not to sob.

"Who is it? What's the matter?"

"Please," he moaned against the panel, "please, please, Mrs. Dunsay, help me!"

She immediately opened the door a peering inch. "Oh, thank God," he breathed and pushed hard. She sprang back with her hands on her mouth and he slid in and closed the door with his back. She was ready for bed, as he had hardly dared to hope. The robe was a little on the sensible side, but what he could see of the gown was fine, just fine.

He said hoarsely, "Don't let them get me!"

"Mr. Sanders!" Then she came closer, comforting, cheering. "No one's going to get you. You come on in and sit down until

it's safe for you. Oh!" she gasped as he let his coat fall open, to reveal the shaggy rip and the bloodstain. "You're hurt!"

He gazed dully at the scarlet stain. Then he flung up his head and set his features in an approximation of those of the Spartan boy who denied all knowledge of a stolen fox while the fox, hidden under his toga, ate his entrails. He pulled his coat straight and buttoned it and smiled and said, "Just a scratch." Then he sagged, caught the doorknob behind him, straightened up, and again smiled. It was devastating.

"Oh-oh, come and sit down," she cried.

He leaned heavily on her but kept his hands decent, and she got him to the sofa. She helped him off with his coat and his shirt. It was indeed only a scratch, and she didn't seem to find the amount of blood too remarkable. A couple of cc swiped from

the plasma lab goes a long way on a white sport shirt.

He lay back limp and breathing shallowly while she flew to get scissors and bandages and warm water in a bowl, and averted his face from the light until she considerately turned it out in favor of a dim end-table lamp, and then he started the routine of not telling her his story because he was not fit to be here . . . she shouldn't know about such things . . . he'd been such a fool . . . and so on until she insisted that he could tell her anything, anything at all if it made him feel better.

So he asked her to drink with him before he told her because she surely wouldn't afterward, and she didn't have anything but some sherry, and he said that was fine. He emptied a vial from his pocket into his drink and managed to switch glasses with her, and when she tasted it, she frowned slightly and looked down into the glass, but by then he was talking a subdued, dark blue, convoluted streak that she must strain to hear and puzzle to follow.

In twenty minutes, he let it dwindle away to silence. She said nothing, but sat with slightly glazed eyes on her glass, which she held with both hands like a child afraid of spilling. He took it away from her and set it on the end table and took her pulse.

It was slower than normal and a good deal stronger. He looked at the glass. It wasn't empty, but she'd had enough. He moved over close to her.

"How do you feel?"

She took seconds to answer, and then said slowly, "I feel . . ." Her lips opened and closed twice, and she shook her head slightly and was silent, staring out at him from topaz eyes gone all black.

"Charlotte . . . Lottie . . . lonely little Lottie. You're lonesome. You've been so alone. You need me, li'l Lottie," he crooned, watching her carefully.

When she did not move or speak, he took the sleeve of her robe in one hand and, moving steadily and slowly, tugged at it until her hand slipped inside. He untied the sash with his free hand and took her arm and drew it out of the robe.

"You don't need this now," he murmured. "You are warm, so warm . . ." He dropped the robe behind her and freed her other hand. She seemed not to understand what he was doing. The gown was nylon tricot.

He drew her slowly into his arms. She raised her hands to his chest as if to push him away but there seemed to be no strength in them. Her head came forward until her cheek rested softly against his. She spoke into his ear quietly, without any particular force or expression.

"I mustn't do this with you, Paul. Don't let me. Harry is the . . . there's never been anyone but him. There never must be. I'm . . . something's happened to me. Help me, Paul. Help me. If I do it with you, I can't live any more. I'm going to have to die if you don't help me now."

She didn't accuse him in any way.

Not once.

The carcass of the old truck stood forgotten in the never visited back edge of a junkyard. Gurlick didn't visit it; he lived in it, more often than not. Sometimes the weather was too bitterly cold for it to serve him, and in the hottest part of the summer he stayed away from it for weeks at a time. But most of the time it served him well. It broke the wind and it kept out most of the rain; it was dirty and dark and cost-free, which three items made it pure Gurlick.

It was in this truck, two days after his encounter with the dog and the hamburger, that he was awakened from a deep sleep by . . . call it the Medusa.

He had not been having his dream of the pile of clothes by the bank of the pool, and of how he would sit by them and wait, and then of how *she* would appear out there in the water, splashing and humming and not knowing he was there. Yet. This morning there seemed not to be room in his head for the dream nor for anything else, including its usual contents.

He made some grunts and a moan, and ground his stubby yellow teeth together, and rolled up to a sitting position and tried to squeeze his pressured head back into shape from the outside. It didn't help. He bent double and used his knees against his temples to squeeze even harder, and that didn't help either.

The head didn't hurt, exactly. And it wasn't what Gurlick occasionally called a "crazy" head. On the contrary, it seemed to contain a spacious, frigid and meticulous balance, a thing lying like a metrical lesion on the inner surface of his mind.

He felt himself almost capable of looking at the thing, but, for all that it was in his head, it existed in a frightening *direction*, and at first he couldn't bring himself to look that way.

But then the thing began to spread and grow, and in a few rocking, groaning moments there wasn't anything in his head but the new illumination, this opening casement which looked out upon two galaxies and part of a third, through the eyes and minds of countless billions of individuals, cultures, hives, gaggles, prides, bevies, braces, herds, races, flocks and other kinds and quantities of sets and groupings, complexes, systems and pairings for which the language has as yet no terms; living in states liquid, solid, gaseous and a good many others with combinations and permutations among and between; swimming, fly-

ing, crawling, burrowing, pelagic, rooted, awash; and variously belegged, ciliated and bewinged; with consciousness which could be called the skulk-mind, the crash-mind, the paddle—, exaltation—, spring—, or murmuration-mind, and other minds too numerous, too difficult, or too outrageous to mention.

And, over all, the central consciousness of the creature itself (though "central" is misleading; the hive-mind is permeative)—the Medusa, the galactic man o' war, the superconscious of the illimitable beast, of which the people of a planet were here a nerve and there an organ, where entire cultures were specialized ganglia; the creature of which Gurlick was now a member and a part, for all that he was a minor atom in a simple molecule of a primitive cell—this mighty consciousness became aware of Gurlick and he of it.

He let himself regard it just long enough to know it was there, and then blanked ten-elevenths of his mind away from the very idea. If you set before Gurlick a page of the writings of Immanuel Kant, he would see it; he might even be able to read a number of the words. But he wouldn't spend any time or effort over it. He would see it and discard it from his attention, and if you left it in front of him, or held it there, he would see without looking and wait for it to go away.

Now, in its seedings, the Medusa had dropped its wrinkled milt into many a fantastic fossa. And if one of those scattered spores survived at all, it survived in, and linked with, the person

and the species in which it found itself.

If the host-integer was a fish, then a fish it would remain, acting as a fish, thinking as a fish; and when it became a "person" (which is what biologists call the individual polyps which make up the incredible colonies we call hydromedusae), it would not put away fishly things. On the contrary; it was to the interest of the Medusa that it keep its manifold parts specialized in the media in which they had evolved; the fish not only remained a fish, but in many cases might become much more so.

Therefore, in inducting Gurlick into itself, in the unequal

interflow of itself into Gurlick and Gurlick into itself, he remained—just Gurlick.

What Gurlick saw of the Medusa's environment(s), he would not look at. What the Medusa sensed was only what Gurlick could sense, and (regrettably for our pride of species) Gurlick himself. It could not, as might be supposed, snatch out every particle of Gurlick's information and experience, nor could it observe Gurlick's world in any other way than through the man's own eye and mind. Answers there might be, in that rotted repository, to the questions the Medusa asked, but they were unavailable until Gurlick himself formulated them.

This had always been a slow process with him. He thought verbally, and his constructions were put together at approximately oral speed. The end effect was extraordinary; the irresistible demands came arrowing into him from immensity, crossing light-years with considerably less difficulty than it found in traversing Gurlick's thin, tough layer of subjective soft-focus, of not-caring, not-understanding-nor-wanting-to-understand. But reach him they did, the mighty unison of voice with which the super-creature conveyed ideas . . . and were answered in Gurlick's own time, in his own way, and aloud in his own words.

And so it was that this scrubby, greasy, rotten-toothed nearilliterate in the filthy clothes raised his face to the dim light, and responded to the demand-for-audience of the most majestic, complex, resourceful and potent intellect in all the known universe: "Okay, okay. So whaddaya want?"

Gurlick was not afraid. Incredible as this might seem, it must be realized that he was now a member, a person of the creature; part of it. He no more thought to fear it than a finger might fear a rib. But at the same time his essential Gurlickness was intact—or, as has been pointed out, possibly more so. So he knew that something he could not comprehend wanted to do something through him of which he was incapable, and would unquestionably berate him because it had not been done . . .

But this was Gurlick! This kind of thing could hold no fears

and no surprises for Gurlick. Bosses, cops, young drunks and barkeeps had done just this to Gurlick all his life! And "Okay, okay! So whaddaya want?" was his invariable response, not only to a simple call, but also, and infuriatingly, to detailed orders. They had then to repeat their orders, or perhaps they would throw up their hands and walk away, or kick him and walk away. More often than not, the demand was disposed of, whatever it was, at this point, and that was worth a kick any time.

The Medusa would not give up. Gurlick would not listen, and would not listen, and . . . had to listen, and took the easiest way out, and subsided to resentful seething—as always, as ever for him. It is doubtful that anyone else on Earth could have found himself so quickly at home with the invader. In this very moment of initial contact, he was aware of the old familiar response of anyone to a first encounter with him—a disgusted astonishment, a surge of unbelief, annoyance, and dawning frustration.

"So whaddaya want?"

The Medusa told him what it wanted, incredulously, as one explaining the utter and absolute obvious, and drew a blank from Gurlick. There was a moment of disbelief and then a forceful repetition of the demand.

And Gurlick still did not understand. Few humans would, for not many have made the effort to comprehend the nature of the hive-mind—what it must be like to have such a mind, and further, to be totally ignorant of the fact that any other kind of mind could exist.

For in all its eons of being, across and back and through and through the immensities of space it occupied, the Medusa had never encountered intelligence except as a phenomenon of the group. It was aware of the almost infinite variations in kind and quality of the *gestalt* psyche, but so fused in its experience and comprehension were the concepts "intelligence" and "group" that it was genuinely incapable of regarding them as separable things. That a single entity of any species was capable of so much as lucid thought without the operation of group mecha-

nisms was outside its experience and beyond its otherwise nearomniscience. To contact any individual of a species was—or had been until now—to contact the entire species.

Now it pressed against Gurlick, changed its angle and pressed again, paused to ponder, came back again and, puzzling, yet again to do the exploratory, bewildered things a man might do, faced with the opening of and penetration through some artifact he did not understand.

There were tappings and listenings, and (analogously) pressures this way and that, as if to find a left-hand thread. There were scrapings as for samples to analyze, proddings and pricks as for hardness tests, polarized rayings as if to determine lattice structures. And in the end there was a—call it a pressure test, the procedure one applies to clogged tubing or to oxide-shorts on shielded wire: blow it out. Take what's supposed to be going through and cram an excess down it.

Gurlick sat on the floor of the abandoned truck, disinterestedly aware of the distant cerebration, computation, discussion and conjecture. A lot of gabble by someone who knew more than he did about things he didn't understand. Like always.

Uh!

It had been a thing without sight or sound or touch, but it struck like all three, suffused him for a moment with some unbearable tension, and then receded and left him limp and shaken. Some mighty generator somewhere had shunted in and poured its product to him, and it did a great many things inside him somehow; and all of them hurt, and none was what was wanted.

He was simply not the right conduit for such a force. He was a solid bar fitted into a plumbing system, a jet of air tied into an electrical circuit; he was the wrong material in the wrong place and the output end wasn't hooked up to anything at all.

Spectacular, the degree of mystification which now suffused the Medusa. For ages untold, there had always been some segment somewhere which could come up with an answer to anything; now there was not. That particular jolt of that particular force ought to have exploded into the psyche of every rational being on Earth, forming a network of intangible, unbreakable threads leading to Gurlick and through him to Medusa itself. It had always happened that way—not almost always, but always. This was how the creature expanded. Not by campaign, attack, siege, consolidation, conquest, but by contact and influx. Its "spores," if they encountered any life-form which the Medusa could not control, simply did not function. If they functioned, the Medusa flowed in. *Always*.

From methane swamp to airless rock, from sun to sun through two galaxies and part of a third flickered the messages, sorting, combining, test-hypothesizing, calculating, extrapolating. And these flickerings began to take on the hue of fear. The Medusa had never known fear before.

To be thus checked meant that the irresistible force was resisted, the indefensible was guarded. Earth had a shield, and a shield is the very next thing to a weapon. It was a weapon, in the Medusa's lexicon; for expansion was a factor as basic to its existence as Deity to the religious, as breath or heartbeat to a single animal; such a factor may not, must not be checked.

Earth suddenly became a good deal more than just another berry for the mammoth to sweep in. Humanity now had to be absorbed, by every measure of principle, of gross ethic, of life.

And it must be done through Gurlick, for the action of the "spore" within him was irreversible, and no other human could be affected by it. The chances of another being in the same sector at the same time were too remote to justify waiting, and Earth was physically too remote from the nearest Medusa-dominated planet to allow for an attack in force or even an exploratory expedition, whereby expert mind might put expert hands (or palps or claws or tentacles or cilia or mandibles) to work in the field.

No, it had to be done through Gurlick, who might be—must be—manipulated by thought emanations, which are non-physical and thereby exempt from physical laws, capable of skipping across a galaxy and back before a light-ray can travel a hundred yards.

Even while, after that blast of force, Gurlick slumped and scrabbled dazedly after his staggering consciousness, and as he slowly rolled over and got to his knees, grunting and pressing his head, the Medusa was making a thousand simultaneous computations and setting up ten thousand more. From the considerations of a space-traveling culture deep in the Coalsack Nebula came a thought in the form of a speculative analogy:

As a defense against thick concentrations of cosmic dust, these creatures had designed spaceships which, on approaching a cloud, broke up into hundreds of small streamlined parts which would come together and reunite when the danger was past. Could that be what humanity had done? Had they a built-in mechanism, like the chipmunk's tail, the sea-cucumber's ejectible intestines, which would fragment the hive-mind on contact from outside, break it up into two and a half billion specimens like this Gurlick?

It seemed reasonable. In its isolation as the only logical hypothesis conceivable by the Medusa, it seemed so reasonable as to be a certainty.

How could it be undone then and humanity's total mind restored? Therein lay the Medusa's answer. Unify humanity (it thought: *re*-unify humanity) and the only problem left would be that of influx. If that influx could not be done through Gurlick directly, other ways might be found; it had never met a hive-mind yet that it couldn't enter.

Gasping, Gurlick grated, "Try that again, you gon' kill me, you hear?"

Coldly examining what it could of the mists of his mind, the Medusa weighed that statement and doubted it. On the other hand, Gurlick was, at the moment, infinitely valuable. It now knew that he could be hurt, and organisms which can be hurt

can be driven. It realized also that Gurlick might be more useful, however, if he could be enlisted.

To enlist an organism, you find out what it wants and give it a little in a way that indicates promise of more. It asked Gurlick then what he wanted.

"Lea'me alone," Gurlick said.

The response to that was a flat negative, with a faint stirring of that wrenching, explosive force it had already used. Gurlick

whimpered, and the Medusa asked him again.

"What do I want?" whispered Gurlick. He ceased, for the moment, to use words, but the concepts were there. They were hate and smashed faces, and the taste of liquor, and a pile of clothes by the bank of a pond: she saw him sitting there and was startled; then she smiled and said, Hello, Handsome. What did he want? . . .

The Medusa at this point had some considerable trouble interrupting. Gurlick, on the subject of what Gurlick wanted, could go on with surprising force for a very long time. The Medusa found it possible to understand this resentment, surely the tropistic flailing of something amputated, something denied full function, robbed, deprived. And, of course, insane.

Deftly, the Medusa began making promises. The rewards were described vividly indeed, and in detail that enchanted Gurlick. They were subtly implanted feedback circuits from his own imaginings and they dazzled him. And from time to time there was a faint prod from that which had hurt him, just to remind him that it was still there.

At last, "Oh, sure, sure," Gurlick said. "I'll find out about that, about how people can get put together again. An' then, boy, I gon' step on their face."

So it was, chuckling, that Daniel Gurlick went forth from

his wrecked truck to conquer the world.

Dimity Carmichael sat back and smiled at the weeping girl. "Sex," she told Caroline, "is, after all, so unnecessary."

Caroline knelt on the rug with her face hidden in the couch

cushion, her nape bright red from weeping, the end strands of her hair wet with tears.

She had come unexpectedly, in mid-afternoon, and Dimity Carmichael had opened the door and almost screamed. She had caught the girl before she could fall, led her to the couch. When Caroline could speak, she muttered about a dentist, about how it had hurt, how she had been so sure she could make it home but was just too sick, and, finding herself here, had hoped Dimity would let her lie down for a few minutes . . .

Dimity had made her comfortable and then, with a few sharp unanswerable questions ("What dentist? What is his name? Why couldn't you lie down in his office? He wanted you out of there as soon as he'd finished, didn't he? In fact, he wasn't a dentist and he didn't do the kind of operations dentists do, isn't that so?") she had reduced the pale girl to this sodden, sobbing thing huddled against the couch. "I've known for a long time how you were carrying on. And you finally got caught."

It was at that point, after thinking it out in grim, self-satisfied silence, that Dimity Carmichael said sex was, after all, so unnecessary. "It certainly has done you no good. Why did you give in, Caroline? You didn't have to."

"I did, I did . . ."

"Nonsense. Say you wanted to and we'd be closer to the truth. No one has to."

Caroline said something—"I love (or loved) him so," or some such. Dimity sniffed. "Love, Caroline, isn't that. Love is everything else there can be between a man and a woman, without that."

Caroline sobbed.

"That's your test, you see," explained Dimity Carmichael. "We are human beings because there are communions between us which are not experienced by—by rabbits, we'll say. If a man is willing to make some great sacrifice for a woman, it might be a proof of love. Considerateness, chivalry, kindness, patience, the sharing of great books and fine music—these are the things

that prove a man. It is hardly a demonstration of manhood for a man to prove himself merely as capable as a rabbit."

Caroline shuddered. Dimity Carmichael smiled tightly.

Caroline spoke.

"What? What's that?"

Caroline turned her cheek to rest it in her clenching hand. Her eyes were squeezed closed. "I said . . . I just can't see it the way you do. I can't."

"You'd be a lot happier if you did."

"I know, I know . . ." Caroline sobbed.

Dimity Carmichael leaned forward. "You can, if you like. Even after the kind of life you've lived—oh, I know how you were playing with the boys from the time you were twelve years old—but that can all be wiped away, and this will never bother you again. If you'll let me help you."

Caroline shook her head exhaustedly. It was not a refusal, but instead doubt, despair.

"Of course I can," said Dimity, as if Caroline had spoken

her doubts aloud. "You just do as I say."

She waited until the girl's shoulders were still, until she lifted her head away from the couch, turned to sit on her calves, looked sidewise up at Dimity from the corners of her long eyes. "Do what?" Caroline asked forlornly.

"Tell me what happened-everything."

"You know what happened."

"You don't understand. I don't mean this afternoon—that was a consequence and we needn't dwell on it. I want the cause. I want to know exactly what happened to get you into this."

"I won't tell you his name."

"His name," said Dimity Carmichael, "is legion. I don't care about that. What I want you to do is to describe to me exactly what happened, in every last detail, to bring you to *this*," and she waved a hand at the girl, and her "dentist," and all the parts of her predicament.

"Oh," said Caroline faintly. Suddenly she blushed. "I-I

can't be sure just wh-which time it was."

"That doesn't matter either," said Dimity flatly. "Pick your own. For example, the first time with this latest one. All right? Now tell me what happened—every last little detail, from second to second."

Caroline turned her face into the upholstery again. "Oh . . .

why?"

"You'll see." She waited for a time, and then said, "Well?" and again, "Look, Caroline, we'll peel away the sentiment, the bad judgment, the illusions and delusions, and leave you free. As I am free. You will see for yourself what it is to be that free."

Caroline closed her eyes, making two red welts where the

lids met. "I don't know where to begin . . ."

"At the beginning. You had been somewhere—a dance, a club?"

"A . . . a drive-in."

"And then he took you-"

"Home. His house."

"Go on."

"We got there and had another drink and—it happened, that's all."

"What happened?"

"Oh, I can't, I can't talk about it! Don't you see?"

"I don't see. This is an emergency, Caroline. You do as I tell you. Just talk." She paused and then said quietly, "You got to his house."

The girl looked up at her with one searching, pleading look, and, staring down at her hands, began speaking rapidly. Dimity Carmichael bent close to listen, and let her go on for a minute, then stopped her. "You have to say exactly how it was. Now—this was in the parlor."

"L-living room."

"Living room. You have to see it all again—drapes, pictures, everything. The sofa was in front of the fireplace, is that right?"

Caroline haltingly described the room, with Dimity repeating, expanding, insisting. Sofa here, fireplace there, table with drinks, window, door, easy chair. How warm, how large, what do you mean red, what red were the drapes? "Begin again so I can see it."

More swift, soft speech, more interruption. "You wore what?"

"The black faille with the velvet trim and that neckline, you know—"

"Which has the zipper-"

"In the back."

"Go on."

After a time, Dimity stopped her with a hand on her back. "Get up off the floor. I can't hear you. Get up, girl." Caroline rose and sat on the couch. "No, no; lie down. Lie down," Dimity whispered.

Caroline lay down and put her forearms across her eyes. It took a while to get started again, but at last she did. Dimity drew up an ottoman and sat on it, close, watching the girl's mouth.

"Don't say it," she said at one point. "There are names for these things. Use them."

"Oh, I-just couldn't."

"Use them."

Caroline used them.

"But what were you feeling all this time?"

"F-feeling?"

"Exactly."

Caroline tried.

"And did you say anything while this was going on?"

"No, nothing. Except-"

"Well?"

"Just at first," whispered the girl. She moved and was still again, and her concealing arms clamped visibly tighter against her eyes. "I think I went . . ." and her teeth met, her lips curled back, her breath hissed in sharply.

Dimity Carmichael's lips curled back and she clenched her teeth and sharply drew in her breath. "Like that?"

"Yes."

"Go on. Did he say anything?"

"No. Yes. Yes, he said, 'Caroline, Caroline, Caroline,'" she crooned.

"Go on."

She went on. Dimity listened, watching. She saw the girl smiling and the tears that pressed out through the juncture of forearm and cheek. She watched the faint flickering of white-edged nostrils. She watched the breast in its rapid motion, not quite like that which would result from running up stairs, because of the shallow shiver each long inhalation carried, the second's catch and hold, the gasping release.

"Ah-h-h-h!" Caroline screamed suddenly, softly. "Ahh . . . I thought he loved me! I did think he loved me!" She wept.

"That's all . . ."

"No, it isn't. You had to leave, get ready to leave. Hm? What did he say? What did you say?"

Finally when Caroline said, ". . . and that's all," there were no questions to ask. Dimity Carmichael rose and picked up the ottoman and placed it carefully where it belonged by the easy chair, and sat down. The girl had not moved.

"Now how do you feel?"

Slowly the girl took down her arms and lay looking at the ceiling. She wet her lips and let her head fall to the side so she could look at Dimity Carmichael, composed in the easy chair—a chair not too easy, but comfortable for one who liked a flat seat and a straight back. The girl searched Dimity Carmichael's face, looking apparently for shock, confusion, anger, disgust. She found none of these, nothing but thin lips, dry skin, cool eyes.

Answering at last, she said, "I feel . . . awful." She waited, but Dimity Carmichael had nothing to say. She sat up painfully and covered her face with her hands. She said, "Telling it was

making it happen all over again, almost real. But-"

Again a silence.

"-but it was like . . . doing it in front of somebody else. In front of-"

"In front of me?"

"Yes, but not exactly."

"You did do it in front of someone—yourself. You will never be in such a situation again," Dimity Carmichael intoned, her voice returning and returning to the same note like some soft insistent buzzer, "without hearing yourself tell it, every detail, every sight and sound of it, to someone else. Except that the happening and the telling won't be weeks apart, like this time. They'll be simultaneous."

"But the telling makes it all so . . . cheap, almost . . .

funny!"

"It isn't the telling that makes it that way. The act is itself ridiculous, ungraceful, altogether too trivial for the terrible price one pays for it. Now you can see it as I see it; now you will be unable to see it any other way. Go wash your face."

She did, and came back looking much better, with her hair combed and the furrows gone from her brows and the corners of her long eyes. With the last of her makeup gone, she looked even younger than usual; to think she was actually two years older than Dimity Carmichael was incredible, incredible . . .

She slipped on her jacket and took up her topcoat and handbag. "I'm going. I—feel a lot better. I mean about . . . things."

"It's just that you're beginning to feel as I do about . . .

things."

"Oh!" Caroline cried from the door, from the depths of her troubles, her physical and mental agonies, the hopeless complexity of simply trying to live through what life presented. "Oh, I wish I was like you! I wish I'd always been like you!" And she went out.

Dimity Carmichael sat for a long time in the not-quite-easy chair with her eyes closed. Then she rose and went into the bedroom and began to take off her clothes. She needed a bath; she felt proud. She had a sudden recollection of her father's face showing a pride like this. He had gone down into the cesspool to remove a blockage when nobody else would do it. It had made him quite sick, but when he came up, unspeakably filthy and every nerve screaming for a scalding bath, it had been with that kind of pride.

Mama had not understood that nor liked it. She would have borne the unmentionable discomforts of the blocked sewer indefinitely rather than have it known even within the family that Daddy had been so soiled. Well, that's the way Daddy was. That's the way Mama was. The episode somehow crystallized the great difference between them, and why Mama had been so glad when he died, and how it was that Dimity's given name—given by him—was one which reflected all the luminance of wickedness and sin, and why Salome Carmichael came to be known as Dimity from the day he died. No cesspools for her. Clean, crisp was little Dimity, decent, pleated, skirted and cozy all her life.

To get from her bedroom into the adjoining bath—seven steps—she bundled up in the long robe. Once the shower was adjusted to her liking, she hung up the robe and stepped under the cleansing flood. She kept her gaze, like her thoughts, directed upward as she soaped.

The detailed revelation she had extracted from Caroline flashed through her mind, all of it, in a second, but with no detail missing. She smiled at the whole disgusting affair with a cool detachment. In the glass door of the shower stall, she saw the ghost-reflection of her face, the coarse-fleshed, broad nose, the heavy chin with its random scattering of hairs, the strong square clean yellow teeth.

I wish I was like you! I wish I'd always been like you! Caroline had said that, slim-waisted, full-breasted Caroline, Caroline with the mouth which, in relaxation, pouted to kiss me, Caroline with the skin of a peach, whose eyes were long jewels of a rare cut, whose hair was fine and glossy and inwardly emberradiant. I wish I was like you . . .

Could Caroline have known that Dimity Carmichael had yearned all her life for those words spoken that way by Caroline's kind of woman? For were they not the words Dimity herself repressed as she turned the pages of magazines, watched the phantoms on the stereophonic, technicolored, wide deep unbearable screen?

It was time now for the best part of the shower, the part Dimity looked forward to most. She put her hand on the control and let it rest there, ecstatically delaying the transcendent moment.

... be like you ... perhaps Caroline would, one day, with luck. How good not to need all that, how fine and clear everything was without it! How laughingly revolting, to have a man prove the power of a rabbit's preoccupations with his animal strugglings and his breathy croonings of one's name, "Salome, Salome, Salome . . ." (I mean, she corrected herself suddenly and with a shade of panic, Caroline, Caroline, Caroline.)

In part because it was time, and part because of a swift suspicion that her thoughts were gaining a momentum beyond her control and a direction past her choice, she threw the control hard over to *Cold*, and braced her whole mind and body for that clean (surely sexless) moment of total sensation by which she punctuated her entire existence.

As the liquid fire of cold enveloped her, the lips of Dimity Carmichael turned back, the teeth met, the breath was drawn in with a sharp, explosive hiss.

Gurlick sank his chin into his collarbones, hunched his shoulders, and shuffled. "I'll find out," he promised, muttering. "You jus' let me know what you want, I'll find out f'ya. Then, boy, look out."

At the corner, sprawled out on the steps of an abandoned candy store, he encountered what at first glance seemed to be an odorous bundle of rags. He was about to pass it when he stopped. Or was stopped.

"It's on'y Freddy," he said disgustedly. "He don't know

nothin' hardly."

"Gah dime bo?" asked the bundle, stirring feebly, and extending a filthy hand which flowered on the stem of an impossibly thin wrist.

"Well, sure I said somebody oughta know," growled Gurlick, "but not him, f'godsakes."

"Gah dime bo? Oh . . . It's Danny. Got a dime on ya,

Danny?"

"All right, all right, I'll ast 'im!" said Gurlick angrily, and at last turned to Freddy. "Shut up, Freddy. You know I ain't got no dime. Listen, I wanna ast you somethin'. How could we get all put together again?"

Freddy made an effort which he had apparently not considered worth while until now: he focused his eyes. "Who—you

and me? What you mean, put together?"

"I tole you!" said Gurlick, not speaking to Freddy; then, at the mingled pressure of threat and promise, he whimpered in exasperation and said, "Just tell me can we do it or not, Freddy."

"What's the matter with you, Danny?"

"You gon' tell me or aincha?"

Freddy blinked palely and seemed on the verge of making a mental effort. Finally he said, "I'm cold. I been cold for three

years. You got a drink on you, Danny?"

There wasn't anybody around, so Gurlick kicked him. "Jerk," he said, tucked his chin down, and shuffled away. Freddy watched him for a while, until his gritty lids got too heavy to

hold up.

Two blocks further, Gurlick saw somebody else and tried to cross the street. He was not permitted to. "No!" he begged. "No, no, no! You can't ast every single one you see." Whatever he was told, it was said in no uncertain terms, because he whined, "You gon' get me in big trouble, jus' you wait."

Ask he must; ask he did. The plumber's wife, who stood a head taller than he and weighed twice as much, stopped sweeping her stone steps as he shuffled toward her, head still down but eyes up, and obviously not going to scuttle past as his kind usually did.

He stopped before her, looking up. She would tower over him if he stood on a box; as it was, he was on the sidewalk and she on the second step. He regarded her like a country cousin examining a monument. She looked down at him with the nauseated avidity of a witness to an automobile accident.

He put a hand on the side of his head and screwed up his eyes. The hand fell away; he gazed at her and croaked, "How

can we get put together again?"

It seemed a long noisy while before the immense capacity of her lungs was exhausted by her first great ring of laughter, but when it was over, it brought her face down again, which served only to grant her another glimpse of Gurlick's anxious filthy face, and caused another paroxysm.

He left her laughing and headed for the park. Numbly he cursed the woman and all women, and all their husbands, and all their forebears and descendants.

Into the park the young spring had brought slim grass, treebuds, dogs, children, old people and a hopeful ice-cream vendor. The peace of these beings was leavened by a scattering of adolescents who had found the park on such a day more attractive than school, and it was three of these who swarmed into Gurlick's irresolution as he stood just inside the park, trying to find an easy way to still the demand inside his head.

"Dig the creep," said the one with HEROES on the back of his jacket, and another: "Or-bit!" and the three began to circle Gurlick, capering like stage Indians, holding fingers out from their heads and shrilling "Bee-beep! Bee-beep" satellite signals.

Gurlick turned back and forth for a moment like a weathervane in a williwaw, trying to sort them out. "Giddada year," he

growled.

"Bee-beep!" screamed one of the satellites. "Stand by fer re-yentry!" The capering became a gallop as the orbits closed, swirled around him in a shouting blur, and at the signal "Burnout!" they stopped abruptly and the one behind Gurlick dropped to his hands and knees while the other two pushed. Gurlick hit the ground with a whoosh, flat on his back with his arms and legs in the air. Around the scene, one woman cried out indignantly, one old man's mouth popped open with shock, and everyone else, everyone else, laughed and laughed.

"Giddada year," gasped Gurlick, trying to roll over and get

his knees under him.

One of the boys solicitously helped him to his feet, saying to another, "Now, Rocky, ya shoonta. Ya shoonta." When the trembling Gurlick was upright and the second of the trio—the "Hero"—down on hands and knees behind him again, the solicitous one gave another push and down went Gurlick again. Gurlick, now dropping his muffled pretenses of threat and counterattack, lay whimpering without trying to rise. Everybody laughed and laughed, all but two, and they didn't do anything. Except move closer, which attracted more laughers.

"Space Patrol! Space Patrol," yelled Rocky, pointing at the

approaching blue uniform. "Four o'clock high!"

"Ess-cape velocity!" one of them barked; and with their antenna-fingers clamped to their heads and a chorus of shrill beebeeps, they snaked through the crowd and were gone.

"Bastits. Lousy bastits. I'll kill-um, the lousy bastits," Gur-

lick wept.

"Ah right. Ah right! Break it up. Move along. Ah right," said the policeman. The crowd broke it up immediately ahead of him and moved along sufficiently to close the gap behind, craning in gap-mouthed anticipation of another laugh . . . laughter makes folks feel good.

The policeman found Gurlick on all fours and jerked him to his feet, a good deal more roughly than Rocky had done. "Ah

right, you, what's the matter with you?"

The indignant lady pushed through and said something about hoodlums. "Oh," said the policeman, "hoodlum, are ye?"

"Lousy bastits," Gurlick sobbed.

The policeman quelled the indignant lady in mid-protest

with a bland, "Ah right, don't get excited, lady; I'll handle this. What you got to say about it?" he demanded of Gurlick.

Gurlick, half suspended from the policeman's hard fist, whimpered and put his hands to his head. Suddenly nothing around him, no sound, no face, pressed upon him more than that insistence inside. "I don't care there is lotsa people, don't make me ast now!"

"What'd you say?" demanded the policeman truculently.

"Okay, okay!" Gurlick cried to the Medusa, and to the policeman: "All I want is, tell me how we c'n get put together again."

"What?"

"All of us," said Gurlick. "Everybody in the world."

"He's talking about world peace," said the indignant woman. There was laughter. Someone explained to someone else that the bum was afraid of the Communists. Someone else heard that and explained to the man behind him that Gurlick was a Communist. The policeman heard part of that and shook Gurlick. "Don't you go shootin' your mouth off around here, or it's the cooler for you."

Gurlick sniveled and mumbled, "Yessir, yessir," and sidled cringing away.

"Ah right. Move along. Show's over. Ah right, there . . ."

Gurlick ran. He was out of breath before he began to run, so his wind lasted him only to the edge of the park, where he reeled against the railing and clung there to whimper his breath back again. He stood with his hands over his face, his fingers trying to press back at that thing inside him, his mouth open and noisy with self-pity and anoxia. A hand fell on his shoulder and he jumped wildly.

"It's all right," said the indignant woman. "I just wanted to let you know everybody in the whole world isn't cruel and mean."

Gurlick looked at her, working his mouth. She was in her fifties, round-shouldered, bespectacled and most earnest. She

said, "You go right on thinking about world peace. Talking about it, too."

He was not yet capable of speaking. He gulped air.

"You poor man." She fumbled in an edge-flaked patent leather pocketbook and found a quarter. She held it and sighed as if it were an heirloom, and handed it to him. He took it unnoticing and put it away. He did not thank her. He asked, "Do you know?" He pressed his temples in that newly developed compulsive gesture. "I got to find out, see? I got to."

"Find out what?"

"How people can get put back together again."

"Oh," she said. "Oh, dear." She mulled it over. "I'm afraid I don't know just what you mean."

"Y'see?" he informed his inner tormentor, agonized. "Ain't

nobody knows-nobody!"

"Please explain it a little," the woman begged. "Maybe there's someone who can help you, if I can't."

Gurlick said hopelessly, "It's about people's brains, see what

I mean, how to make all the brains go together again."

"Oh, you poor man . . ." She looked at him pityingly, clearly certain that his brains indeed needed putting together again, and Well, at least he realizes it, which is a sight more than most of us do. "I know! Dr. Langley's the man for you. I clean for him once a week, and believe me, if you want to know somebody who knows about the brain, he's the one. He has a machine that draws wiggly lines and he can read them and tell what you're thinking."

Gurlick's vague visualization of such a device flashed out to the stars, where it had an electrifying effect. "Where's it at?"

"The machine? Right there in his office. He'll tell you all about it; he's such a dear, kind man. He told me all about it, though I'm afraid I didn't quite—"

"Where's it at?"

"Why, in his office. Oh, you mean where. Well, it's 13 Deak Street, on the second floor. Look, you can almost see it from here. Right there where the house with the—"

Without another word, Gurlick put down his chin and hunched his shoulders and scuttled off.

"Oh, dear," murmured the woman worriedly, "I do hope he doesn't bother Dr. Langley too much. But then he wouldn't; he does believe in peace." She turned away from her good deed and started home.

Gurlick did not bother Dr. Langley for long, and he did indeed bring him peace.

There was a mad boy in Rome, and an angry warrior in Africa whose yams were being stolen at night, and there was the thief who stole them. All over the world people, with all their hearts, did the difficult things they must do to be human beings, and learned what they had to learn, paying what it cost them. Two and three-quarter billions . . . two and three-quarter billion subjective planets, some circling close to each other and to light, and others far out and cold in the lonely dark; but all separate, isolated, discrete. Commissar, peasant, potentate, the children, the old ones, the insane, the underprivileged—each basically alone.

Guido, the boy in Rome, had been born during the fighting at Anzio, and was found by an unrrateam a year and a half later, living with some wild children, maggoting the bones of the ruined town. He was full of music, to a degree notable even in a country full of music. Before he could talk, he could whistle, and he would whistle any music he heard after one hearing. In the shuffle of souls that followed, he was taken in by a Corfu shepherd who, in the next ten years, kicked the music out of the boy, or perhaps he kicked it down.

The shepherd was a smuggler, and though he needed the boy's strong back and hard hands, he wanted nothing near him which might attract attention. Guido dared not utter a phrase of music, not a note. The shepherd developed a high skill in detection; he could be aware of music welling up in the boy before Guido himself knew of it, and would knock him down and kick him and his unborn melodies. And when the association between

music and punishment was strong enough, there was no more music from the boy—and too much unkillably, unquellably inside him.

After the shepherd died, Guido turned into something not quite human. He committed a series of ingenious nuisances which for a long time were lost in the seethe of the city, unconnected as they seemed to be with each other. He smashed some stained-glass windows, and he broke the leg of a beggar over a curbstone; he took a toy from a child and threw it into the river; he vandalized a print shop.

And at last a detective with rather more sight, more insight than most found the thread upon which was strung these episodes; for the stained glass was one of the windows of the Chapel of the Annunciation, and choir practice was in session; the beggar was one who sang for his supper; the child's toy was a harmonica; the print shop was printing sheet music. The detective contrived to give Guido a violin, and there was, for Guido, a burst of light, and would be, in time, a very explosion of music from him . . .

And the warrior, Mbala, began to guard his yam patch at night, which was by custom the duty of his dead father, as Mbala would one day die and then guard the yam patch of his sons. But Mbala's faith in this old belief was shaken, for all he could agree that his father was supposed to guard against devils, not against men, and it was manifestly a man who was stealing the yams.

The thief, Nuyu, had once had faith in such beliefs too, but he no longer believed in anything at all but his own clever hands.

They were, in their own theology, Mbala and Nuyu, backslider and atheist respectively.

And one night, while Mbala watched and Nuyu hid, waiting him out, there came from the sky a floating, glowing sphere. It sank to the edge of the yam patch and, not quite touching the ground, slowly circled the field; and where it had passed, the thick tangle of bush which surrounded the cultivated land was

cleared away, and in its place a thin drift of white, cold material which changed to water in a minute or two.

Now it happened that the sphere was an untenanted and automatic machine, and that the weed it harvested and processed was astralagous vetch, which has a high affinity for selenium, and the builders of the machine needed all the selenium they could get.

But to Nuyu the thief, who was hiding in the vetch at the time, this was retribution not only for his current sins, but all his past ones, cast as it was in the strange figure of a spirit guarding the yams—shades of his childhood legends, so long laughed away!

And to Mbala, this was his father, not only discovering the thief (who came howling and gibbering to huddle in contrite terror against Mbala) but at the same time clearing more land for him.

After the sphere was gone, falling upward and away to the north (where it had detected another stand of vetch), Mbala did not, as he had earlier intended, kill his thief. Instead, they returned to the village, companions in revelation, each at the peak of a species of that rare ecstasy, the religious experience: one confirmed, the other converted.

THESE WERE people, these are anecdotes dwelt upon for their element of the extraordinary. But each man alive has such a story, unique unto himself, of what is in him and of its molding by the forces around him, and of his interpretations of those forces. Here a man sees a machine as a god, and there a man sees a god as a mere kind of angry argument; and another uses the angry argument of others quite as if it were a machine. Yet for all his ability to work in concert with his fellows, and to induce some sympathy in their vibrations, he remains isolated; no one knows exactly how another feels.

At the very climax of sensation, Man approaches unconsciousness . . . unconsciousness of what? Why, of all around him; never of himself.

"You Doctor Langley?"

The doctor said, "Good God."

Dear, kind man he might be to his cleaning lady, but to Gurlick he was just another clean man full of knowledges and affairs which Gurlick wouldn't understand, plus the usual, fore-seeable anger, disgust and intolerance Gurlick stimulated wherever he went. In short, just another one of the bastits to hate.

Gurlick said, "You know about brains." The doctor said, "Who sent you here?"

"You know what to do to put people's brains together again."

"What? Who are you? What do you want anyway?"

"Look," said Gurlick, "I got to find this out, see. You know how to do it or not?"

"I'm afraid," said the doctor icily, "that I can't answer a question I don't understand."

"So ya don't know anything about brains."

The doctor sat tall behind a wide desk. His face was tall and narrow, and in repose fell naturally into an expression of arrogance. No better example in all the world could have been found of the epitome of everything Gurlick hated in his fellow-man. The doctor was archetype, coda, essence; and, in his presence, Gurlick was so unreasonably angry as almost to forget how to cringe.

"I didn't say that," said Langley.

He looked at Gurlick steadily for a moment, openly selecting a course of action: Throw him out? Humor him? Or study him? He observed the glaring eyes, the trembling mouth, the posture of fear-driven aggressiveness.

He said, "Let's get something straight. I'm not a psychiatrist." Aware that this creature didn't know a psychiatrist from an accountant, he explained, "I mean I don't treat people who have problems. I'm a physiologist, specializing on the brain. I'm just interested in how brains do what they do. If the brain was a motor, you might say I am the man who writes the manual that the mechanic studies before he goes to work. That's all I am, so before you waste your own time and mine, get that straight. If

you want me to recommend somebody who can help you with whatev—"

"You tell me," Gurlick barked, "you just tell me that one thing and that's all you got to do."

"What one thing?"

Exasperated, adding his impatience with all his previous failures to his intense dislike of this new enemy, Gurlick growled, "I tole ya." When this got no response, and when he understood from the doctor's expression that it would get none, he blew angrily from his nostrils and explained, "Once everybody in the world had just the one brain, see what I mean? Now they all took apart. All you got to tell me is how to stick 'em together again."

"You seem to be pretty sure that everybody—how's that again?—had the same brain once."

Gurlick listened to something inside him. Then, "Had to be like that," he said.

"Why did it have to be?"

Gurlick waved a vague hand. "All this. Buildin's, cars, tools, 'lectric, all like that. This don't git done without the people all think with like one head."

"It did get done that way, though. People can work together without—thinking together. That is what you mean, isn't it—all thinking at once, like a hive of bees?"

"Bees, yeah."

"It didn't happen that way with people. What made you think it did?"

A startled computation was made among the stars, and, given the axioms which had proved unalterably and invariably true heretofore, namely, that a species did not reach this high a level of technology without the hive-mind to organize it, there was only one way to account for the doctor's incredible statement—providing he did not lie—and Gurlick, informed of this conclusion, did his best to phrase it. "I guess what happened was everybody broke all apart, they on their own now, they just don't

remember no more. I don't remember it, you don't remember it, that one time you and me and everybody was part of one great big brain."

"I wouldn't believe that," said the doctor, "even if it was

true."

"Sure not," Gurlick agreed, obviously and irritatingly taking the doctor's statement as a proof of his own. "Well, I still got to find out how to stick 'em all together again."

"You won't find it out from me. I don't know. So why don't

you just go and-"

"You got a machine, it knows what you're thinkin'," said Gurlick suddenly.

"I have a machine which does nothing of the kind. Who told you about me, anyway?"

"You show me that machine."

"Certainly not. Look, this has been very interesting, but I'm busy and I can't talk to you any more. Now be a good—"

"You got to show it to me," said Gurlick in a terrifying whisper, for through his fogbound mind had shot his visions (she's in the water up to her neck, saying, Hello, Handsome, and he just grins, and she says, I'm coming out, and he says, Come on then, and slowly she starts up toward him, the water down to her collarbones, to her chest, to—) and a smoky curl of his new agony. He had to get this information. He *must*.

The doctor pressed himself away from his desk a few inches in alarm. "That's the machine over there. It won't make the slightest sense to you. I'm not trying to hide anything from you—it's just that you wouldn't understand it."

Gurlick sidled over to the equipment the doctor had pointed to. He stood looking at it for a time, flashing a cautious ratlike glance toward the doctor from time to time, and pulling at his mouth. "What you call this thing?"

"An electroencephalograph. Are you satisfied?"

"How's it know what you're thinkin'?"

"It doesn't. It picks up electrical impulses from a brain and

turns them into wavy lines on a strip of paper."

Watching Gurlick, the doctor saw clearly that in some strange way, his visitor was not thinking of the next question; he was waiting for it. He could see it arrive.

"Open it up," said Gurlick.

"What?"

"Open it. I got to look at the stuff inside it."

"Now look here! I-"

Again that frightening hiss: "I got to see it."

The doctor sighed in exasperation and pulled open the file drawer of his desk. He located a manual, slapped it down on the desk, leafed through and opened it. "There's a picture of the machine. This is a wiring diagram. If it makes any sense to you, it'll tell you more than a look inside would tell you. I hope it tells you that the thing's far too complicated for a man without train—"

Gurlick snatched up the manual and stared at it. His eyes glazed and cleared. He put the manual down and pointed. "These here lines is wires?"

"Yes . . ."

"This here?"

"A rectifier. It's a tube. You know what a tube is."

"Like radio tubes. Electric is in these here wires?"

"This can't mean anyth-"

"What's this here?"

"Those little lines? Ground. Here, and here, and over here, the current goes to ground."

Gurlick placed a grimy fingertip on the transformer symbol. "This changes the electric. Right?"

Dumfounded, Langley nodded.

Gurlick said, "Regular electric comes in here. Some other kind comes in here. What comes in here, huh?"

"That's the detector. The input. The electrodes. I mean whatever brain the machine is hooked up to feeds current in there."

"It ain't very much."

"It ain't," mimicked the doctor weakly, "very much."

"You got one of those strips with the wavy lines?"

Wordlessly, the doctor opened a drawer, found a trace and tossed it on top of the diagram. Gurlick pored over it for a long moment, referring twice to the wiring diagram, then threw it down. "Okay. Now I found out."

"You found out what?"

"What I wanted."

"Will you be kind enough to tell me just what you found?"

"God," said Gurlick disgustedly, "how sh'd I know?"

Langley shook his head, ready to laugh at this mystifying and irritating visitation. "Well, if you've found it, you don't have to stick around."

"Shut up," said Gurlick, cocking his head, closing his eyes. Langley waited.

It was like hearing one side of a phone conversation, but there was no phone. "How the hell I'm supposed to do that?" Gurlick complained at one point, and, later, "I gon' need money for anything like that. No, I can't. I can't, I tell ya; you just gon' git me in th' clink . . . what you think he gon' be doin' while I take it?"

"Who are you talking to?" Langley demanded.

"I dunno," said Gurlick. "Shut up now." He fixed his gaze on the doctor's face, and for seconds it was unseeing. Then, suddenly, it was not, and Gurlick spoke to him: "I got to have money."

"I'm not giving any handouts this season. Now get out of here."

Gurlick, showing all the signs of an unwelcome internal goading, came around the desk and repeated his demand. As he did so, he saw for the very first time that Doctor Langley sat in a wheelchair.

That made all the difference in the world to Gurlick.

Henry was tall. He stood tall and had a surprisingly adult face, which made him all the more ridiculous as he sat through school day after day, weeping. He did not cry piteously nor with bellows of rage and outrage, but almost silently, with a series of widely spaced, soft, difficult sniffs. He did what he was told (get in line . . . move your chairs, it's story time . . . fetch the puzzles . . . put away the paints), but he did not speak and would not play or dance or sing or laugh. He would only sit, stiff as a spike, and sniff. Henry was five and kindergarten was tough for him. Life was tough for him.

"Life is tough," his father was fond of saying, "and the little

coward might as well learn."

Henry's mother disagreed, but deviously. She lied to everyone concerned—to her husband, to Henry's teacher, to the school psychologist and the principal and to Henry himself. She told her husband she was shopping in the mornings, but instead she was sitting in the corner of the kindergarten room watching Henry crying. After two weeks of this, the psychologist and the principal corralled her and explained to her that the reality of home involved having her at home, the reality of school involved not having her at school, and Henry was not going to face the reality of school until he could experience it without her.

She agreed immediately, because she always agreed with anyone who had a clear opinion about anything, went back to the room, told the stricken Henry that she would be waiting just outside, and marched out. She completely overlooked the fact that Henry could see her from the window, see her walk down the path and get into her car and drive away. If he had any composure left after that, it was destroyed a few minutes later when, having circled the block and concealed her car, she crept back past the *Keep off the Grass* sign and spent the rest of the morning peeping in the window.

Henry saw her right away, but the teacher and the principal didn't catch onto it for weeks. Henry continued to sit stiffly and hiss out his occasional sobs, wondering numbly what there was about school so terrifying as to make his mother go to such

lengths to protect him, and, whatever it was, feeling silent horror of it.

Henry's father did what he could about Henry's cowardice. It pained him because, though he was certain it didn't come

from his side, other people might not know that.

He told Henry ghost stories about sheeted phantasms which ate little boys, and then sent him up to bed in the dark, in a room where there was a hot-air register opening directly into the ceiling of the room below. The father had troubled to spread a sheet over the register, and when he heard the boy's door open and close, he shoved a stick up through the register and moaned. The white form rising up out of the floor elicited no sound or movement from Henry, so the father went upstairs laughing, to see the effect he had not heard.

As stiff as ever, straight and tall, Henry stood motionless in the dark, so his father turned on the light and looked him over, and then gave him a good whaling.

"Five years old," he told the mother when he got back down-

stairs, "and he wets his pants yet."

He jumped out shouting at Henry from around corners and hid in closets and made animal noises and he gave him ruthless orders to go out and punch eight- and ten-year-olds in the nose and warmed his seat for him when he refused, but he just couldn't seem to make the little sissy into anything else.

"Blood will tell," he used to say knowingly to the mother who had never stood up to anyone in her life and had manifestly tainted the boy. But he clung to the hope that he could do

something about it, and he kept trying.

Henry was afraid when his parents quarreled, because the father shouted and the mother wept; but he was afraid when they did not quarrel too. This was a special fear, raised to its peak on the occasions when the father spoke to him pleasantly, smiling. Undoubtedly the father himself did not realize it, but his pattern for punishing the boy was invariably a soft-voiced, smiling approach and a sudden burst of brutality, and Henry had become

incapable of discriminating between a genuine pleasantry and

one of these cheerful precursors to punishment.

Meanwhile, his mother coddled and cuddled him secretly and unsystematically, secretly violated his father's deprivations by contrabanding to him too much cookies and candy, yet all the while turned a cold and unresponsive back to any real or tacit plea for help in the father's presence.

Henry's natural curiosity, along with his normal rebelliousness, had been thoroughly excised when they first showed themselves in his second and third years, and at five he was so trained that he would take nothing not actually handed to him by a recognized authority, go nowhere and do nothing unless and until clearly instructed to do so. Children should be seen and not heard. Do not speak unless spoken to.

"Why didn't you poke that kid right in the nose? Why? Why?" "Daddy, I—" "Shaddup, you little yellow-belly. I don't

want to hear excuses."

So tall little, sad little Henry sat sniffing in kindergarten, and was numbly silent everywhere else.

After clubbing Dr. Langley with the floor-lamp, Gurlick rummaged around as ordered, and, bearing a bundle, went shopping. The Medusa permitted him to shop for himself first, quite willing to concede that he knew the subtleties of his own matrix better than it did. He got a second-hand suit from a hockshop in the tenderloin district, and a shave and a trim at the barber college.

Esthetically, the improvement was negligible; socially, it was enormous. He was able to get what he wanted, though none of it was easy, since he personally knew the names of none of

the things he was compelled to buy.

Probably the metal samples were hardest of all to acquire; he had to go into an endless succession of glassy-eyed silences before a bewildered lab-supply clerk undertook to show him a periodic table of the elements. Once he had that, things moved more rapidly.

By pointing and mumbling and asking and trancing, he acquired lab-demonstration samples of nickel, aluminum, iron, copper, selenium, carbon and certain others. He asked for but could not afford deuterium, four-nines pure tantalum, and sixnines silver. The electrical-supply houses frustrated him deeply on the matter of small-gauge wire with a square cross-section, but someone directed him to a jewelry-findings store and he finally had what he wanted.

By now he was burdened with a wooden crate rigged, by an accommodating clerk, into something approximating a footlocker in size and shape, with a rope handle to carry it by. His destination was decided after a painful prodding session by the Medusa, which dug out of Gurlick's unwilling brain a memory that Gurlick himself had long ago let vanish-a brief and unprofitable stab at prospecting, or rather at carrying the pack for a friend who was stabbing at it, years ago. The important facet of the memory was an abandoned shack miles from anywhere, together with a rough idea of how to get there.

So Gurlick took a bus and another bus, and stole a jeep and abandoned it, and at last, cursing his tormentors, slavering for his

dream, and wailing his discomfort, he walked.

Heavy woods, an upland of scrub pine and dwarf maple, then a jagged rock ridge-that was it; and the roofless remnant of the shack like a patch of decay between and against the stained

tooth-roots of the snaggly ridge.

More than water, more than food or to be left alone, Gurlick wanted rest, but he was not allowed it. Panting and sniffling, he fell to his knees and began to fumble with the ropes on his burden. He took out the mercury cells and the metal slugs and the wire and tube-sockets, and began to jumble them together.

He didn't know what he was doing and he didn't have to. The work was being done by an aggregate of computing wills scattered across the heavens, partly by direct orders, partly by a semidirect control, brain to neurone, bypassing that foggy

swamp which comprised Gurlick's consciousness.

Gurlick disliked the whole thing mightily, but except for a lachrymose grumble, no protest was possible. So he blubbered and slaved, and did not, could not, let up until it was finished.

When it was finished, Gurlick was released. He stumbled away from it, as if a rope under tension had tied him and was suddenly cut. He dropped heavily, reared up on his elbows to blink at the thing, and then exhaustion overcame him and he slumped and slept.

When he fell asleep, the thing was a tangle of components, possessing (to any trained terrestrial eye) a certain compelling symmetry and an elaborate uselessness (but how useless would seem a variable frequency oscillator to a wise Bushman or a savage from Madison Avenue?); but when he awoke, the picture was different. Very different.

What Gurlick had built was not, in actuality, a matter receiver, although it acted as if such a thing were a possibility. It was, rather, a receiver and amplifier for a certain "band" in the "thought" "spectrum"—each of these terms being analogous and general.

The first receiver, and its be-Gurlicked attachments, turned information into manipulation, and constructed, from the elemental samples Gurlick had supplied it, a second and much more efficient machine of far greater capacity. This in turn received and manipulated yet a third receiver and manipulator; and this one was a heavy-duty device. The process was, in essence, precisely that of the sailor who takes a heaving-line to draw in a rope which brings him a hawser.

In a brief span of hours, machines were making machines to use available matter to make machines which would scout out and procure locally unavailable matter, which was returned to the site and used by other machines to make yet others, all specialized, and certain of these in immense numbers.

Gurlick came unbidden out of that dream, where, as he sat on the bank on the pile of clothes, shiny black and red and an edge of lacy white, he was greeted (*Hello*, *Handsome*) by her who so boldly (after he refused to go away) began to come up out of the water, slowly and gleaming in the sunlight, the water now down to her waist, and she was beginning to smile—

He awoke in the midst of an incredible clanking city. Around him were row upon row of huge blind machines, spewing forth more machines by the moment:

Tanklike things with long snake necks and heads surrounded by a circlet of trumpets; silver balls ten feet in diameter, which now and then would flick silently into the air, too fast to be believed, too silent; low, wide, massive devices which slid snaillike along roads of their own making, snouted with a projector which put out a strange beam which would have been like light if it were not cut off at the far end as if by an invisible wall; and with these, sniffing along the rocks, some of which trembled and slumped; and then there would be a movement up the beam to the machine, and from behind the machine, silvery ingots were laid like eggs while fine gold dust gouted off to the side.

Gurlick awoke surrounded by this, blinking and staring stupidly. It was some minutes later that he realized where he was—atop a column of earth, ten feet in diameter and perhaps thirty feet high. All around, for hundreds of yards, the ground had been excavated and . . . used.

At the edge of his little plateau was a small domed box which, when his eye fell on it, popped open and slid a flat bowl of hot, mushlike substance toward him. He picked it up and smelled it. He tasted it, shrugged, grunted, raised the bowl to his lips and dozed its contents into his mouth with the heel of his hand. Its warmth in his belly was soothing, then puzzling, then frightening, the way it grew. He put his hands to his belt-line and abruptly sat down, staring at his numb and disobedient legs.

Dazed, he looked out across the busy scape, and saw approaching him a stilted device with endless treads for feet and a turtlelike housing, perhaps a dozen feet in diameter, approach-

ing. It straddled his imprisoning column of earth, achieving a sort of mechanical tip toe, and the carapace began to descend over him and all his perch, like a great slow candle-snuffer. He now could not speak, nor could he sit up any longer; he fell back and lay helpless, staring up and silently screaming . . .

But as the device, its underside alive with more wriggling tool-tipped limbs than has a horseshoe crab, slowly covered him, he was flooded with reassurance and promise, a special strength (its specialty: to make him feel strong but in no wise be strong) and the nearest thing to peace that he had ever known. He was informed that he was to undergo a simple operation, and that it

was good, oh, good. He was informed why:

The spore, the "raisin," had been life or its surrogate. It had traversed space physically, bodily, and it had finished its function and its capabilities with its invasion of Gurlick. But the transfer of the life-essence of all the Medusa into all of humanity was something that Earth-built machines could not accomplish. Only life can transmit life. A very slight alteration indeed—an adjustment of isotopes in certain ionized elements in Gurlick's ductless glands—would make the membership of humanity in the corpus of the Medusa a certainty.

The machines now abuilding would effectively restore (the Medusa still unswervingly operated from a conviction that this was a restoration) the unity of the human species, its hive-mind, so that each "person" could reach, and be reached by, all persons; but the fusion with the Medusa would be Gurlick's special chore and would take place on the instant that his seed married with the ovum of a human female, much like—he received two pictures: a pair of bees in nuptial flight, then a huge, busy, buzzing hive—with, of course, himself in the all-powerful tended center. But with the difference, he was given to understand without understanding, that it would somehow be simultaneous.

As the machine slowly closed over him, its deft limbs already performing the first of a hundred delicate manipulations, it caught up his dream and congratulated him on it, and gave it detail and depth his creative poverty had never made possible to

him before, so that he lived it realer than real, from the instant of approach (and a degree of anticipation which might have destroyed him had he felt it earlier) to the moments of consummation, so violent they shook the Earth and sent the sky itself acrinkle with ripples of delighted color.

And more: for in these tactile inventions there was no human limitation, and it was given to him to proceed again, and yet again, without exhaustion or dulling familiarity, either through the entire episode or through any smallest part of it, whether it be the thrill of seeing the clothes (shiny black and scarlet, and the tumbled frosting of lace-edged white) or the pounding, fainting climax.

Always, too, was the laughing offhand promise that any conquest of Gurlick's would be such a peak, or a higher one; let him wallow in his dream because he loved it, but let him understand also that it was only one of many, the symbol of any, the quality of all.

So, while it built its machines to fuse ("again") the scattered psyche of humanity, it got Gurlick—good—and—ready.

If it isn't now, boy, Paul Sanders told himself, it never will be. Keeping one hand between the girl's gossamer-clad shoulder-blades, he slid gently off the sofa, stood, stooped, and lifted Charlotte Dunsay in his arms.

Dimity (née Salome) Carmichael had put in a long day. Full of her thoughts of it, she put her thoughts by; standing in her showerstall, she slipped into a delicious suspension, her hand resting on the chrome handle marked Hot—Cold.

In Rome, a mad boy walked, incapable of hate, no longer hunted, his pressured rebellions having been caught at the kindling point and flung into a violin case. There was nothing left in Guido, no room for anything in Guido, but a heady joy and a fierce passion for this hard-gleaming, carven miracle under his arm, waiting as sensitive as a naked nerve the hungry reach of his unshackled talent. No lover, no miser, no acolyte on Earth loved woman or money or Master more than Guido loved this

violin; no whelping wolverine, no wounded water buffalo was quite so watchful for an enemy.

Henry, five years old, slept as usual flat on his back and face straight up, arms rigid, fists clenched under and pinned down by his buttocks, and his ankles together. He was having a nightmare, soundlessly, of being surrounded by gentle smiling fathers, some of whom wore the masks of the other kids in his class, and storekeepers, and passing puppydogs, but who were really just smiling fathers, dressed up and being gentle at the very verge of exploding in his face.

And between him and all the fathers was a loving goddess with soft hands full of forbidden lollipops and peanut-butter sandwiches to be passed to little boys in the dark when they had been sent to bed without their suppers because they were little cowards; this goddess was there to care for him and protect him, but when the explosion came, with this breath or the next or the one after, the puppies and children and grocers and fathers would whisk through to him as if the goddess weren't there at all; and while they did what they would do to him, she would still be there smiling and ready with guilty lollipops, not knowing what the fathers were doing to him . . .

And under this nightmare was the color of hopelessness, the absolute certainty that to awake from it would be to emerge into it; the dream and the world were one now, fused and identical.

They left the kraal, all of them, the infants carried dangling from headbands or piggyback, the toddlers awed and huddling together, the adults hushed and wondering; and, leading them, Mbala who had regained his faith and Nuyu who had found his. The village had not far to go, kraal to yam patch; and yet it was a pilgrimage of sorts, the devout fired by the transfigured, coming to witness the miracle of the cleared field.

These are motes among the millions, remarked upon for that about them which is remarkable, yet different only insofar as each is different *from*, or has a difference *of*, some quality, and pattern of qualities, repeated two and three-quarter billion

living times under this sun. There is a place in this narrative for all those close enough to each of us to be called You, and for that far more limited and select company (for many can call a man You), the privileged who are entitled to call themselves "I" (so few may do this, no two the same). Peon, peasant, fellahin, jibaro, mass-men with their hard hands: matador, mariner, apothecary, salesman, tilt-tongued with their special cants, canted each one to a special askew; this is their tale too.

Gurlick lay hooded and unaware, passive under the submicroscopic manipulations of the machine which brought his special membership in the Medusa to his seed. So he did not observe the change in the mighty operations around him, when the egglaying snail-gaited miners drew in and darkened the snouts of light, and fell neatly apart to have their substance incorporated in other, more needed machines; and these in turn complete their special tasks and segment and disperse to others which still needed them, until at last there remained only the long-necked, tank-treaded, trumpet-headed ones, and enough silver spheres to carry them, in their multi-thousands, to their precisely mapped destinations.

There was no provision for failure, for there would be no failure. The nature of the electroencephalograph, and of its traces, clearly showed to the transcendent science of the Medusa exactly what was lacking in the average mind which kept it from being a common mind.

The net would be comparatively simple to cast and draw shut, for it found the potent base of the hive mentality alive and awaiting it, showing itself wherever humans blindly moved in the paths of other humans, purely because other humans so moved; wherever friends apart impulsively sat down to write one another simultaneous letters, wherever men in groups (cartels, committees, mobs, and nations) divided their intelligence by their numbers and let that incredible quotient chart their course.

The possible or probable nature of a human hive, once (re)-established, was a question hardly explored, because it was hardly

important. Once united, humanity would join the Medusa, because the Medusa always (not almost, not "in virtually every case," but *always*) infused the hives it touched.

So the factory area rumbled to silence, and the noiseless spheres swept over the storage yard and scooped up their clusters of long-necked projectors, fell away up with them, flashed away to all the corners of Earth, ready to place the projectors wherever their emanations (part sound, part something else) would reach masses of humans.

They could not reach all humans, but they would reach most, and the established hive would then draw in the rest. No human would escape; none could; none would want to.

Then, somewhere in this flawless, undivided, multi-skilled entity, Gurlick would plant a tiny fleck of himself, and at the instant of fusion between it and a living ovum, the Medusa would spread through it like crystallization through a supersaturated solution.

Just another rash of saucer-sightings, thought the few observers, and recipients of their observations, in the brief minutes left to them to think as they had always thought.

Some of the military had, in these minutes, a harrowing perplexity. Anything tracked at such speeds as the radars reported must, with small variations, appear somewhere along an extrapolated path; the higher the speed, the finer the extrapolation.

The few recordings made of the flick and flash of these objects yielded flight-paths on which the objects simply did not appear. It was manifestly impossible for them to check and drop straight to their destinations at such velocities; they did, however, and before the theoreticians could finish their redefinition of "impossible," they and all their co-workers, colleagues, acquaint-ances, cohabitants, heirs and assigns were relieved of the necessity to calculate.

It happened so quickly, one minute a heterogeneous mass of seething non-communicants, the next, the end of Babel.

He stood motionless with the girl in his arms, ready to put her down on the sofa; and then, without a start, without a word of wonderment, Paul Sanders set her on her feet and stood supporting her with a firm arm around her shoulders until her head cleared and she could stand alone.

There was nothing said, because there was in that moment nothing to be said. In a split second there was orientation of a transcendent nature—nothing as crude as mutual mind-reading, but an instant and permeating acknowledgment of relationships, I to you, we to the rest of the world; the nature of a final and overriding decision, and the clear necessity of instant and specific action.

Together, Paul Sanders and Charlotte Dunsay left her apartment. The hallway was full of people in all stages of dress—all moving wordlessly, purposefully. No one paid Charlotte, in

her nylon nightgown, the slightest attention.

They walked to the elevator bank. She paused before it with a half-dozen other people, and he opened the door of the fire stairs and sprang up them two at a time. Emerging on the roof, he went to the kiosk which sheltered the elevator motor and cables, twisted off the light padlock with one easy motion, opened the door and entered. He had never been here before in his life; yet without hesitation he reached to the left and scooped up a five-foot slice bar which lay across the grating, and ran with it down the fire stairs.

Without glancing at floor numbers, he left the fire stairs on the fourth floor, turned left and ran down the hall. The last door on the right opened as he reached it; he did not glance at the old lady who held it for him, nor did she speak. He sped through a foyer, a living room, and a bedroom, opened the window at the far right and climbed out.

There was a narrow ledge on which he could barely keep his balance and carry the heavy bar as well, yet he managed it. The chief enemy of a balancing man is the poison of fear which permeates him: I'll fall! I'll fall! but Paul felt no fear at all. He made a rapid succession of two-inch sidewise shuffles until

he reached the big eyebolt from which there hung, out and down, the huge chain supporting one end of a massive theater marquee. Here he turned sidewise and squatted, brought his bar up over his shoulder and, reaching down, thrust the tip through the fourth link of the chain. Then he waited.

The street below—what he could see of it—seemed at first glance to be normally tenanted, with about as many people about as one might expect at this hour of a Saturday night. But then it could be seen that nobody strolled—everyone walked briskly and with purpose; one or two people ran, the way they ran indicating running to, not from anything. He saw Charlotte Dunsay cross the street, swinging along on her bare feet, and enter a show-room where computing machines were on display. Though the place had been closed since noon, it was now open and lighted, and full of people silently and rapidly working.

There came a sound, and more than a sound, a deep pervasive ululation which seemed at first to be born in all the air and under the Earth, sourceless. But as it grew louder, Paul heard it more from his left, and finally altogether from the corner of the building. Whatever was making that sound was crawling slowly up the street to take its place at the intersection, a major one where three avenues crossed.

Patiently, Paul Sanders waited.

From his soundless nightmare, Henry soundlessly awoke. He slid out of bed and trotted out of his room, past his parents' open door—they were awake, but he said nothing, and if they saw him, they said nothing either. Henry padded down the stairs and out into the warm night. He turned downtown at a dog-trot and ran for three blocks south, one west, and two south. He may or may not have noticed that while the traffic lights still operated, they were no longer obeyed by anyone, including himself. Uncannily, cars and pedestrians set their courses and their speeds and held them, regardless of blind corners, passing and repassing each other without incident and with no perceptible added effort.

Henry had been aware for some time of the all but subsonic

hooting and of its rapid increase in volume as he ran. When he reached the big intersection, he saw the source of the sound on the same street he ran on, but past the corner where the theater stood. It was a heavy tanklike machine, surmounted by a long flexible neck, on top of which four horns, like square megaphones or speakers, emitted the sound. The neck weaved back and forth, tilting the horns and changing their direction in an elaborate repetitive motion, which had the effect of adding a slow and disturbing vibrato to the sound.

Henry dashed across the street and under the side-street marquee. He came abreast of the thing just as it was about to enter the intersection.

Without once breaking stride, Henry turned and dived straight into the small space between the drive-spindle of the machine's tread and its carrier rollers. His blood spouted, and on it the spindle spun for a moment; the other track, still driving, caused the machine to swerve suddenly and bump up on the sidewalk under the marquee.

Paul Sanders, at the very instant the child had leaped, and before the small head and hands entered the machine's drive, leaned out and down and jammed the chisel point of his slice-bar hard through the fourth link of the chain. Plunging outward, his momentum carried the bar around the chain and, as his weight came upon it, gave the chain a prodigious twist.

The eyebolt pulled out of the building wall with a screech, and the corner of the marquee sagged and then, as the weight of the chain came upon it, and Paul Sanders' muscular body with it, the marquee let go altogether and came hammering down on the machine.

In a welter of loose bricks, sheet-tin, movie-sign lettering and girders, the machine heaved mightily, its slipping treads grating and shrieking on the pavement. But it could not free itself. Its long neck and four-horned head twitched and slammed against the street for a moment, and then the deep howl faded and was gone, and the head slumped down and lay still.

Four men ran to the wreckage, two of them pushing a dolly

on which rode an oxy-acetylene outfit. One man went instantly to work taking measurements with scale, micrometer and calipers. Two others had the torch going in seconds and fell to work testing for a portion of the machine which might be cut away. The fourth man, with abrasive rasps and a cold chisel, began investigating the dismantling of the thing.

And meanwhile, in unearthly silence and with steady determination, people passed and repassed, on foot, in cars, and went about their business. No crowd collected. Why should it?

Everybody knew.

The entire village population, with Mbala and Nuyu at their head and the witch-doctor following, were within two hundred yards of Mbala's yam patch when the thing came down from the sky. It was broad daylight here, so the ghostly luminous moonlet effect was missing; but the shape of the projector as it dangled by invisible bands from the sphere was outré enough, unprecedented enough, to bring a gasp of astonishment and fear from the villagers. Mbala stopped and bowed down and called his father's name, and all the people followed suit.

The sphere dropped rapidly to the yam patch, which happened to be in a spot known locally as Giant's Voice—a flat area surrounded by four great ship's prow monoliths, the result of some ancient cataclysm which cleft the hill north and south, and again northwest by southeast. It was said that a man could shout here and be heard around the world. Exaggeration or no, it was, judging by the photograph taken by the selenium miner, an ideal position for a projector, and here it was.

The sphere set down its burden and started up again without pause, swift as a bouncing ball. The projector began its wavering bass hooting, which swept out through the echoing clefts of the Giant's Voice, rolled down upon the villagers, and silenced

their chant as if it had blotted it up.

There was a moment—mere seconds—of frozen inaction, and then half the warriors turned as one man and plunged away through the jungle. The rest, and all the women and children, drew together, over four hundred of them, and poured swiftly up the slope toward the yam patch. No one said a word or made a sound, yet when they choked the space between two of the stone steeples, half the people ran into the clearing, skirting its edge, while half squatted where they were, blocking their avenue from side to side. The runners reached the north opening, filled it, and also squatted, wordless and waiting.

Directly across from the first group, in the westward opening, there was movement, as one, two, a dozen, a hundred heads appeared, steadily and quietly approaching. It was the Ngubwe, neighboring villagers with whom there was a tradition, now quiescent, of wife-stealing and warfare going back to the most ancient days. Mbala's people and the Ngubwe, though aware of each other at all times, were content to respect each other's privacy and each cultivate his own garden, and for the past thirty years or so, there had been room enough for everybody.

Now three openings to the rock-rimmed plateau were filled with squatting, patient natives. Even the babies were silent. For nearly an hour there was no sound but the penetrating, disturbing howl of the projector, no motion but its complex, hypnotic pattern of weavings and turnings. And then there was a new sound.

Blast after shrill blast, the angry sound approached, and the waiting people rose to their feet. The women tore their clothes to get bright rags, the men filled their lungs and emptied them,

and filled them again, getting ready.

Through the open southern gateway, four warriors erupted, howling and capering. Hard on their heels came a herd of furious elephants, three, four, seven—nine in all, one old bull, two young ones, four cows and two calves, distraught, angry, goaded beyond bearing. The fleeing warriors separated, two to the right, two to the left, sprinted to and disappeared in the crowds waiting there.

The big bull trumpeted shrilly, wheeled, and charged to the right, only to face nearly two hundred shricking, capering people.

He swerved away, his momentum carrying him along the rock wall and to the second opening, where he met the same startling cacophony. The other elephants, all but one young bull and one of the calves, thundered along behind him, and when he drew up as if to wheel and attack the second group, he was pounded and pressed from behind by his fellows.

By now quite out of his great fearless placid mind, he put up his trunk, turned his mighty shoulders against those who pressed him, and found himself glaring at this noisy, shining

thing in the center of the clearing.

He shrieked and made for it, followed by the bellowing herd. The noisy, shining thing moved on its endless treads, but not swiftly enough, nor far enough, nor in enough places at once to avoid the tons of hysteria which struck it. The elephants tore off its howling head and its neck, in three successive broken bits, and shouldered it over on its side and then on its back. The howling stopped with deafening suddenness when the head came off, but the tracks kept treading air for minutes.

Elephants were used in Berlin, too, on the machine which landed in the park near the famous zoo, though this was a more disciplined performance by trained animals who did exactly as they were told.

In China, a projector squatted in a cleft in the mountains, under a railroad trestle, and began hooting into the wind. An old nomad with arthritis hobbled out of the rocks and pulled two spikes, shifted one rail. A half-mile down the track, the engineer and fireman of a locomotive pulling a combination passenger-freight train with over four hundred people aboard wordlessly left their posts, climbed back over the tender and uncoupled the locomotive from the first car. There was, on the instant, a man at every handwheel on the train. It coasted to a stop, while far ahead the locomotive thundered over the edge of the trestle and was crushing the projector before the alien machine could move a foot.

In Baffin Land, a group of Eskimo hunters stood transfixed,

watching a projector squatting comfortably on mounded and impassable pack ice and, in the crisp air, blaring its message across the wastes to the ears of four and possibly five widely scattered settlements. The hunters had not long to wait; high above the atmosphere, a mighty Atlas missile approached, and, while still well below their horizon, released a comparatively tiny sliver, the redoubtable Hawk.

The little Hawk came shrieking out of the upper air, made a wide half-circle to kill some of its excess velocity, and then zeroed in on the projector with the kind of accuracy the old-time Navy bombardiers would brag about: "I dropped it right down his stack."

From then on, missiles got most of the projectors, though, in crowded areas, other means were found. In Bombay, a projector took its greatest toll—one hundred and thirty-six, when a mob simply overran one of the machines and tore it to pieces with their bare hands. And, in Rome, one man dispatched four of them and came out of it unscathed.

One man?

A boy, rather, walking along the elevated section of the new highway over the hills just north of Rome, who paused for not more than three seconds in his steady walk, then wordlessly turned and entered the Lagonda which drifted up to the curb just then. It was driven by a bright-eyed young woman, not excessively pretty, but of that unusual pure Italian type with pale red hair and green eyes. She had nothing to say, but drove the overpowered, scalded-cat Lagonda with a light touch and a sure hand.

As if on some unseen cue, the boy opened the door, slipped out on the running board, and inched forward to lodge himself firmly between the hood and the flaring fender, his knee hooked over the bracket which supports the great moon of a headlight.

Bent against the wind of their speed, he unclamped his arm from the violin case he had been clutching all this while, opened it and took out the violin, letting the case flap away like a misshapen bat. Stolidly he broke the violin in two, separating neck from soundbox, and with his teeth pulled the four pegs, freeing the strings. He let the soundbox flutter off and splinter on the steel-bound curb, and with the fingerboard of the violin in his hand, its curled scroll uppermost, he unhooked his knee from the headlight brace and got his free hand on it instead. There he crouched, slit-eyed.

As the elevated road swept in a broad curve to the left, the girl tooled the car as far as she could into the left lane, then put on a burst of speed which made the boy Guido's muscles crack, and shot diagonally across the road and up on the sidewalk at the right. At the last possible instant, she wrenched the wheel and swerved away from the hard teeth of the railings, and Guido sprang up and out, soaring high over the sidehill, hurtling

through the air at nearly eighty kilometers per hour.

For her velocity to the microsecond, for his altitude and trajectory to seven decimal places, the best computing minds on Earth had done their utmost, matching these factors to all the others: his height and weight and the strength of his legs, the fact that of all pedestrians in the area at the time, he alone should possess such an object as the neck and carven scroll of a violin, which, it happened, was precisely the right size and curvature capable of disabling a vital membrane in the throat of the projectors at one blow; all matched with the observed trajectory of a descending sphere which carried, not one, but four projectors, obviously to a place in the City of Seven Hills where, by landing at the same place and moving apart a minimal distance, they could blanket a maximum area and number of people.

At the very peak of his parabola, and past it into the sharp descending curve, his free arm and both legs snapped like a trap around the intertwined necks of the four projectors. They were bound so that their heads were one atop the other. Guido shinnied upward far enough to reach the topmost, and crammed his shaped and hardened club into its horn. He silenced it and, with three quick blows, the other three, striking the last just

as the whole package touched Earth.

The sphere began its bounce skyward angrily, but fouled in the coils of a giant steel-cored rope mat, one of those used to muffle blasting in built-up areas. The mat had been hung like a great curtain under the viaduct, and arranged to fall out and down as the sphere dipped low. A cluster of silent, sweating people waiting there caught the corner ropes and instantly anchored the mat to girders and concrete piers, and the sphere lunged and lunged upward until suddenly it began to grow hot and then fell leadenly to the ground.

Guido helped take it apart to find out how it worked.

There she stands the water beading her bright body her head to one side the water sparkling off her hair, she smiles, says All Right Handsome What Are You Going to Do About It?

A soft rumble and a glare of light: sky. Crash! A brighter, unbearable flash of light on light, a sharp smell of burning chemicals, a choking cloud of dust and smoke and the patter-patter of falling debris. Confusion, bewilderment, disorientation and growing anger at the deprivation of a dream.

The sharp command to every sentience, mechanical or not, on the entire hilltop: Get Gurlick out of here!

A flash of silver overhead, then a strange overall sticky, porechoking sensation, like being coated with warm oil, and, underneath, the torn hill dwindles away. There are still hundreds of projectors left, row on row of them, but from the size of the terraces where they are parked, there must have been hundreds of thousands more.

Crash! A half-dozen of the projectors bulge skyward and fall back in shatters and shards. Look there, a flight of jets. See, two silver spheres, dodging, dancing; then the long curve of a seeking missile points one out, and the trail and the burst make a bright ball on a smoky string, painted across the sky. Crash! Crash! Even as the scarred hill disappears in swift distance, the parked projectors can be seen bursting skyward, a dozen and a dozen and a score of them, pressing upward through the rain of pieces from those blasted a breath or a blink ago; and Cra—

No, not crash this time, but a point, a porthole, a baywindow looking in to the core of hell, all the colors and all too bright, growing, growing, too, too big to be growing so fast, taking the hilltop, the hillside, the whole hill lost in the ball of brilliance.

And for minutes afterward, hanging stickily by something invisible, frighteningly in midair under the silver sphere, but not feeling wind or acceleration or any of the impossible turns as the sphere whizzes along low, hedge-hopping, ground-hugging, back-tracking and hovering to hide; for minutes and minutes afterward, through the drifting speckles of overdazzled eyeballs, the pastel column can be seen rising and rising flatheaded over the land, thousands and thousands of feet, building a roof with eaves, the eaves curling and curling out, or are they the grasping fingers of rows and rows of what devils who have climbed up the inside of the spout, about to put up what hellish faces?

"Bastits," Gurlick whimpered, "tryin' to atom-bomb me. You

tell 'em who I am?"

No response. The Medusa was calculating to capacity—to its immense, infinitely varied capacity. It had expected to succeed in unifying the mind of humanity. It had correctly predicted its certainty of success and the impossibility of failure.

But success like this?

Like this: In the first forty minutes, humanity destroyed seventyone per cent of the projectors and forty-three per cent of the spheres. To do this, it used everything and anything that came to hand, regardless of the cost in lives or materiel:

It put out its fire by smothering it with its mink coat. It killed its rattlesnake by hitting it with the baby. It moved, reactive and accurate and almost in reflex, like a man holding a burning stick, and as the heat increases near one finger, it will release and withdraw and find another purchase while he thinks of other things. It threw a child into the drive of a projector because he fit, and because he contained the right amount of the right grade of lubricant for just that purpose at just that time.

It could understand in microseconds that the nearest thing to the exact necessary tool for tearing the throat out of a projector would be the neck and scroll of a violin.

And like this: Beginning in the forty-first minute, humanity launched the first precision weapon against the projectors, having devised and produced a seeking mechanism which would infallibly find and destroy projectors (though they did not radiate in the electromagnetic spectrum, not even infrared) and then made it compact enough to cram into the warhead of a Hawk, and, further, applied the Hawk to the powerful Atlas.

And this was only the first.

In the fifty-second minute—that is, less than an hour after the Medusa pushed the button to unify the mind of Man humanity was using hasty makeshifts of appalling efficiency, devices which reversed the steering commands of the projectors (like the one which, under its own power, walked off the Hell Gate Bridge into eighty feet of water) and others that rebroadcast the projectors' signals 180° out of phase, nullifying them.

At the ninety-minute mark, humanity was knocking out two of every three flying spheres it saw, not by accurate aiming (because as yet humanity couldn't tool up to countermeasure inertialess turns at six miles per second) but by an ingenious application of the theory of random numbers, by which they placed proximity missiles where the sphere wasn't but almost certainly would be—and all too often was.

The Medusa had anticipated success. But to sum up: success like this? For hadn't humanity stamped out every operable instrument of the Medusa's invasion (save Gurlick, about whom they couldn't know) in just two hours and eight minutes?

This incredible species, uniquely possessed of a defense against the Medusa (the Medusa still stubbornly insisted) in its instant, total fragmentation at the invader's first touch, seemed uniquely to possess other qualities as well. It would be wisemore: it was imperative—that Earth be brought into the fold where it would have to take orders.

Hence-Gurlick.

It swept Gurlick back into its confidence, told him that in spite of the abruptness of his awakening, he was now ready to go out on his own. It described to him his assignment, which made Gurlick snicker like an eight-year-old behind the barn, and assured him that it would set up for him the most perfect opportunity its mighty computers could devise. Speed, however, was of the essence—which was all right with Gurlick, who spat on his hands and made cluck-cluck noises from his back teeth and wrinkled up half his face with an obscene wink, and snickered again to show his willingness.

The sphere hovered now at treetop level over heavily wooded ground, keeping out of sight while awaiting the alien computation of the best conceivable circumstances for Gurlick's project. This might well have proved lengthy, based as it was on Gurlick's partial, mistaken, romantic, deluded and downright pornographic information, and might even have supplied some highly amusing conclusions, since they would have been based on logic, and Gurlick's most certainly were not.

These diverting computations were lost, however, and lost forever when the sphere dropped dizzyingly, released Gurlick so abruptly that he tumbled, and informed him that he was on his

own-the sphere had been detected.

Growling and grumbling, Gurlick sprawled under the trees and watched the sphere bullet upward and away, and a moment later, the appearance of a Hawk, or rather its trail, scoring the sky in a swift reach like the spread of a strain-crack in window glass.

He did not see the inevitable, but heard it in due course, the faint distant thump against the roof of the world which marked the end of the sphere's existence—and very probably the end of all the Medusa's artifacts on Earth.

He said an unprintable syllable, rolled over and eyed the woodlands with disfavor. This wasn't going to be like flying over it like a bug over a carpet, with some bigbrain doing all your thinking for you. On the other hand . . . this was the payoff. This was where Gurlick got his—where at long last he could strike back at a whole world full of bastits.

Full of wonder, the human hive contemplated itself and its works, its gains, its losses and its new nature.

First, there was the intercommunication—a thing so huge, so different, that few minds could previously have imagined it. No analogy could suffice; no concepts of infinite telephone exchanges, or multi-sideband receivers, could hint at the quality of that gigantic cognizance. To describe it in terms of its complexity would be as impossible—and as purblind—as an attempt to describe fine lace by a description of each of its threads. It had, rather, *texture*. Your memory, and his and his, and hers over the horizon's shoulder—all your memories are mine.

More: your personal orientation in the framework of your own experiences, your I-in-the-past, is also mine.

More: your skills remain your own (is great music made less for being shared?) but your sensitivity to your special subject is mine now, and your pride in your excellence is mine now.

More: though bound to the organism, mankind, as never before, I am I as never before. When Man has demands on me, I am totally dedicated to Man's purpose. Otherwise, within the wide, wide limits of mankind's best interests, I am as never before a free agent; I am I to a greater degree, and with less obstruction from within and without, than ever before possible.

For gone, gone altogether, are individual man's hosts of pests and devils, which in strange combinations have plagued us all in the past: the They-don't-want-me devil, the Suppose-they-find-out devil, the twin imps of They-are-lying-to-me and They-are-trying-to-cheat-me; gone, gone is I'm-afraid-to-try, and They-won't-let-me, and I-couldn't-be-loved-if-they-knew.

Along with the imps and devils, other things disappeared—things regarded throughout human history as basic, thematic, keys to the structures of lives and cultures.

Now if a real thing should disappear, a rock or a tree or a handful of water, there will be thunder and a wind and other violence, depending upon what form the vanished mass owned. Or if a great man disappears, there is almighty confusion in the rush to fill the vacuum of his functions.

But the things which disappeared now proved their unreality by the unruffled silence in which they disappeared. Tariffs, taxes, boundaries and frontiers, hatred and suspicion of humans by humans, and language itself (except as part of an art) with all the difficulties of communication between languages and within them.

In short, removed now was mankind's cess-gland, the secretions of which had poisoned its body since it was born, distorting decencies like survival and love into greed and lust, turning Achievement ("I have built") into Position ("I have power").

So much for humanity's new state-of-being. As to its abilities, they were simply based, straightforward. There are always many ways to accomplish anything, but only one of them is really best. Which of them is best-that is the source of all argument on the production of anything, the creator of factions among the designers, and the first enemy of speed and efficiency.

But when humanity became a hive and needed something -as, for example, the adaptation of the swift hunting missile Hawk to the giant carrier Atlas-the device was produced without considerations of pride or profit, without waste motion, and without interpersonal friction of any kind. The decision was

made, the job was done.

In those heady first moments, anything and everything available was used—but with precision. Later (by minutes) fewer ingenious stopgaps were used, more perfect tools were shaped from the materials at hand. And still later (by hours) there was full production of new designs. Mankind now used exactly the right tool for the jobs it had to do . . .

And within it, each individual flowered, finding freedoms to be, to act, to take enrichment and pleasure as never before.

What were the things that Dimity (Salome?) Carmichael had always needed, wanted to do? She could do them now.

An Italian boy, Guido, packed taut with talent, awaited the

arrival of the greatest living violinist from behind a now-collapsed Iron Curtain; they would hereafter spend their lives and do their work together.

The parents of a small stiff boy named Henry contemplated, as all the world contemplated, what had happened to him and why, and how totally impossible it would be for such a thing ever to happen again. Sacrifice there must be from time to time, even now; but never again a useless one. Everyone now knew, as if in personal memory, how fiercely Henry had wanted to live in that flash of agony which had eclipsed him.

All Earth shared the two kinds of religious experience discovered by the Africans Mbala and Nuyu, wherein one had become confirmed in his faith and the other had found it. What, specifically, had brought to them it was of no significance; the fact of their devotion was the important thing to be shared, for it is in the finest nature of humanity to worship, fight it as he sometimes may. The Universe being what it is, there is always plus ultra, plus ultra—powers and patterns beyond understanding, and more beyond these when these are understood. Out there is the call to which faith is the natural response and worship the natural approach.

Such was humanity when it became a hive—a beautiful entity, balanced and fine; self-sufficient and wondrously alive. A pity, in a way, that such a work of art was to exist in this form

for so brief a time . . .

Gurlick, alone of humans insulated from the human hive, member of another, sensed none of this. Driven, hungry through a whole spectrum of appetites, full of resentment, he shuffled through the woods. He had been vaguely aware of the outskirts of a town not far from where the silver sphere had set him down. He would, he supposed, find what he wanted there, though wanting it was the only thing quite clear to him. How he was to get it was uncertain; but get it he must.

He was aware of the presence within him of the Medusa, observing, computing, but—not directing, cognizant as it was of

the fact that the fine details of such an operation must be left to the species itself. Had it had its spheres and other machines available, there might have been a great deal it could do to assist Gurlick. But now—he was on his own.

He was in virgin forest, the interlocked foliage overhead dimming the mid-morning sunshine to an underwater green, and the footing was good, there being little underbrush and a gentle downslope. Gurlick gravitated downhill, knowing he would encounter a path or a road sooner or later, and monotonously cursed his empty stomach, his aching feet, and his enemies.

He heard voices.

He stopped, shrank back against a treetrunk, and peered. For a moment, he could detect nothing, and then, off to the right, he heard a sudden musical laugh. He looked toward the sound and saw a brief motion of something blue. He came out of hiding and, scuttling clumsily from tree to tree, went to investigate.

There were three of them, girls in their mid-teens, dressed in halters and shorts, giggling over the chore of building a fire in a small clearing. They had a string of fish, pike and lake trout, and a frying pan, and seemed completely and hilariously pre-occupied.

Gurlick, from a vantage point above them, chewed on his lower lip and wondered what to do. He had no delusions about approaching openly and sweet-talking his way into their circle. It would be far wiser, he knew, to slip away and go looking elsewhere, for something surer, safer. On the other hand . . .

He heard the crackle of bacon fat as one of the girls dropped the tender slivers into the frying pan. He looked at the three lithe young bodies, and at the waiting string of fish, half of which were scaled and beheaded, and quietly moaned. There was too much of what was wanted down there for him to turn his back.

Then a curl of fragrance from the bacon reached him and toppled his reason. He rose from his crouch and in three bounds was down the slope and in their midst, moaning and slavering. One of the youngsters bounded away to the right, one to the left. The third fell under his hands, shrieking.

"Now you jus' be still," he panted, trying to hold his victim, trying to protect himself against her hysterical slappings, writhings, clawings. "I ain't goin' to hurt you if you jus'—uh!"

He was bowled right off his feet by one of the escapees, who had returned at a dead run and crashed him with a hard shoulder. He rolled over and found himself staring up at the second girl who had run away, as she stood over him with a stone the size of a grapefruit raised in both hands. She brought it down; it hit Gurlick on the left cheekbone and the bridge of his nose, and filled the world with stars and brilliant tatters of pain.

He fell back, wagging his head, pawing at his face, trying to get some vision back and kick away the sick dizziness, and when at last he could see again, he was alone with the campfire,

the frying pan, the string of fish.

"Li'l bastits," he growled, holding his face. He looked at his hands, on which were flecks of his own blood, swore, turned in a circle as if to find and pursue them, and then squatted before the fire, reached for two cleaned fish and dropped them hissing into the pan.

Well, he'd got that much out of it, anyway.

He had eaten four of the fish and had two more cooking when he heard voices again, a man's deep "Which way now? Over here?" and a girl's answer, "Yes, where the smoke's coming from."

Jailbait . . . of course, of *course* they'd have gone for help! Gurlick cursed them all and lumbered downslope, away from the sound of voices. Boy, he'd messed up, but good. The whole hillside would be crawling with people hunting him. He had to get out of here.

He moved as cautiously as he could, quite sure he was being watched by hundreds of eyes, yet seeing no one until he glimpsed two men off to his left and below him. One had binoculars on a strap around his neck, the other a shotgun.

Gurlick, faint with terror, slumped down between a treetrunk and a rock, and cowered there until he could hear their voices, and while he heard them, and after he heard them, with their curt certain syllables and their cold lack of mercy.

When all was quite quiet again, he rose, and at that moment became aware of an aircraft sound. It approached rapidly, and he dropped back into his hiding place, trembling, and peeped up at the glittering patches of blue in the leafy roof. The machine flew directly overhead, low, too slowly—a helicopter. He heard it thrashing the air off to the north, downhill from him, and for a while he could not judge if it was going or coming or simply circling down there.

In his pride, he was convinced that its business was Gurlick and only Gurlick, and in his ignorance he was certain it had seen him through the thick cover.

It went away at last and the forest returned to its murmuring silence. He heard a faint shout behind and above him, and scuttled from cover and away from the sound. Pausing for breath, he caught another glimpse of the man with the shotgun off to his left, and escaped to the right and down.

And, thus pursued and herded, he came to the water's edge. There was a dirt path there and no one in sight; and it was warm and sunny and peaceful. Slowly, Gurlick's panic subsided and, as he walked along the path, there was a deep throb of anticipation within him. He'd gotten away clean; and had out-distanced his enemies and now, enemies, beware!

The path curved closer to the bank of the lake. Alders stood thick here, and there was the smell of moss. The path turned and the shade was briefly darker here, at the verge of the floods of gold over the water. And there by the path it lay, the little pile of fabric, bright red, shiny black, filmy white with edges iced with lace . . .

Gurlick stopped walking, stopped breathing until his chest hurt. Then he moved slowly past this incredible, impossible consolidation of his dream, and went to the bushes at the water's edge.

She was out there-she.

He made a sharp wordless sound and stood forward, away from the bushes. She turned in the water and stared at him, her eyes round.

Emancipated now, free to be what she had always wished to be, and to do what she needed to do without fear or hesitation; swimming naked in the sun, sure and fearless, shameless; utterly oriented within herself and herself within the matrix of humanity and all its known data, Salome Carmichael stood up in the water, under the sun, and said, "Hello, Handsome."

So ended humanity within its planetary limits; so ended the self-contained, self-aware species-hive which had for such a brief time been able to feel, to the ends of its world, its multifarious self. The end came some hours after the helicopter—the same one which had set her down by the pond—had come for Salome Carmichael, which it had the instant Gurlick quit the scene. Gurlick had seen it, from where he crouched guiltily in the bushes. After it had gone away, he slowly climbed to his feet and made his way back to the pond. He hunkered down with his back to a tree and regarded the scene unwinkingly.

It had been right there, on the moss.

Over there had lain the pretty little heap of clothes, so clean, so soft, so very red, shiny black, the white so pretty. The strangest thing that had ever happened to him in his whole life had happened here, stranger than the coming of the Medusa, stranger than the unpeopled factory back there in the mountains, stranger even than the overwhelming fact of this place, of her being here, of the unbelievable coincidence of it all with his dream. And that strangest thing of all was that once, when she was here, she had cried out, and he had then been gentle.

He had been gentle with all his heart and mind and body, for a brief while flooded, melted, swept away by gentleness. No wrinkled raisin from out of space, no concept like the existence of a single living thing so large it permeated two galaxies and part of a third, could be so shockingly alien to him, everything he was and had ever been, as this rush of gentleness.

Its microscopic seed must have lain encysted within him all his life, never encountering a single thing, large or small, which could warm it to germination. Now it had burst open, burst him open, and he was shocked, shaken, macerated as never before in his bruised existence.

He crouched against the tree and regarded the moss, and the lake, and the place where the red and the black and the lace had lain, and wondered why he had run away. He wondered how he could have let her go. The gentleness was consuming him even now . . . he had to find somewhere to put it down, but there wouldn't be anyone else, anyone or anything, for him to be gentle to, anywhere in the world.

He began to cry. Gurlick had always wept easily, his facile tears his only outlet for fear, and anger, and humiliation, and spite. This, however, was different. This was very difficult to do, painful in the extreme, and impossible to stop until he was racked, wrung out, exhausted. It tumbled him over and left him groveling on the moss. Then he slept, abruptly, his whipped consciousness fleeing away to the dark.

What can travel faster than light?

Stand here by me, friend, on this hillside, under the black and freckled sky. Which stars do you know—Polaris? Good. And the bright one yonder, that's Sirius. Look at them now: at Polaris, at Sirius. Quickly now: Polaris, Sirius. And again: Sirius, Polaris.

How far apart are they? It says in the book, thousands of light-years. How many? Too many: never mind. But how long does it take you to flick your gaze from one to the other and back? A second? A half-second next time, then a tenth? You can't say that nothing, absolutely nothing, has traveled between the two. Your vision has: your attention has.

You now understand, you have the rudiments of under-

standing what it is to flick a part of yourself from star to star, just as (given the skill) you may shift from soul to soul.

With such a shift, down such a path, came the Medusa at the instant of its marriage to humanity. In all the history of humanity, the one instant (save death) of most significance is the instant of syngamy, the moment of penetration by the sperm of the ovum. Yet almost never is there a heralding of this instant, nor a sign: it comes to pass in silence and darkness, and no one ever knows but the mindless flecks of complex jelly directly involved.

Not so now; and never before, and never again would marriage occur with such explosion. A microsecond after that melding, Gurlick's altered seed to the welcoming ovum of a human, the Medusa of space shot down its contacting thread, an unerring harpoon carrying a line to itself, and all of its Self following in the line, ready to reach and fill humanity, make of it a pseudopod, the newest member of its sprawling corpus.

But if the Medusa's bolt can be likened to a harpoon, then it can be said that the uprushing flood it met was like a volcano. The Medusa had not a micro-microsecond in which to realize what had happened to it. It did not die; it was not killed any more than humanity would have been killed had the Medusa's plan been realized. Humanity would have become a "person" of the illimitable creature.

But now . . .

Now, instead, humanity became the creature; flooded it, filled it to its furthermost crannies, drenched its most remote cells with the Self of humankind. Die? Never that; the Medusa was alive as never before, with a new and different kind of life, in which its slaves were freed but its motivations unified; where the individual was courted and honored and brought special nutrients, body and mind, and where, freely, "want to" forever replaced "must."

And all for want of a datum: that intelligence might exist in individuals, and that dissociated individuals might cooperate

and yet not be a hive. For there is no structure on Earth which could not have been built by rats, were the rats centrally directed and properly motivated.

How could the Medusa have known? Thousands upon thousands of species and cultures throughout the galaxies have technological progress as advanced as that of Earth, and are yet composed of individuals no more highly evolved than termites, lemurs or shrews. What slightest hint was there for the Medusa that a hive-humanity would be a different thing than a super-rat?

Humanity had passed the barriers of language and of individual isolation on its planet. It passed the barriers of species now, and of isolation in its cosmos. As available to Guido as the faith of Mbala now became the crystal symphonies of the black planets past Ophiuchus. Charlotte Dunsay, reaching across the world to her husband in Hobart, Tasmania, might share with him a triple sunrise in the hub of Orion's great Nebula.

As one man could share the *being* of another here on Earth, so both, and perhaps a small child with them, could fuse their inner selves with some ancient contemplative mind leeched to the rocks in some roaring methane cataract, or soar with some insubstantial life-forms adrift where they were born in the high layers of some dense planet's atmosphere.

So ended mankind, to be born again as hive-humanity; so ended the hive of Earth to become starman, the immeasurable, the limitless, the growing; maker of music beyond music, poetry beyond words, and full of wonder, full of worship.

So too ended Gurlick, the isolated, alone among humankind denied membership in the fusion of humans, full of a steaming fog, aglow with his flickerings of hate and the soft shine of corruption, member of something other than humankind. For, while humanity had been able to read him (and his dream) and herd him through the forest to its fulfillment, it had never been able to reach his consciousness, blocked as it was by the thought-lines of the Medusa.

These lines, however, were open still, and when humanity became Medusa, it flooded down to Gurlick and made him welcome. Comel it called, and whirled him up and outward, showing and sharing its joy and strength and pride, showering him with wonders of a thousand elsewheres and a hundred heres; it showed him how to laugh at the most rarefied technician's joke and how to feel the structure of sestinae and sonnets, of bridges and Bach. It spoke to him saying We and granting him the right to regard it all and say I.

And more: he had been promised a kingship, and now he had it, for all this sentient immensity acknowledged to him its debt, and let him but make the phantom of a wish of a thought, and his desires would be fulfilled.

And it was at this that humanity swirled and steadied, perplexed. For Gurlick, numb and passive as he tossed like a chip on their ocean of wonders, had a wish, and had it, and had it.

True, none of this could have come about without him. This result could not have been with anyone else in his place, so—true enough—he was owed a debt. Pay it then.

Pay the debt; you do not reward a catalyst by changing it, the unchanging, into something else. So—take away hunger and poverty (of body and soul), deprivation and discomfort and humiliation, and you take away the very core of his being—his sole claim to superiority.

Don't ask him to look out among the stars and join in the revelries of giants. Don't thank him, don't treat him, and above all, do not take away from him his reasons to hate: they have become his life.

So they paid him, meticulously to the specifications he himself (though all unknowing) set up.

And as long as he lived, there would be a city corner holding drab streets and fumes, suddenly sullen pedestrians and careless, dangerous aimers of trucks and cabs; obligingly moist unbearable heat and bitter cold; and bars where Gurlick could go and put in his head, whining for a drink, and bartenders would obediently send him out into the wet with his hatred, back to a wrecked truck in a junkyard where he might lie in the dark and dream that dream of his.

"Bastits," Gurlick would mutter in the dark, hating . . . happy. "Lousy bastits."

between a co. And henced the disclosure and other conventions

## NATURAL STATE

BY DAMON KNIGHT

The most promising young realie actor in Greater New York, everyone agreed, was a beetle-browed Apollo named Alvah Gustad. His diction, which still held overtones of the Under Flushing labor pool, the unstudied animal grace of his movements and his habitually sullen expression enabled him to dominate any stage not occupied by an unclothed woman at least as large as himself. At twenty-six, he had a very respectable following among the housewives of Manhattan, Queens, Jersey and the rest of the seven boroughs. The percentage of blown fuses resulting from subscribers' attempts to clutch his realized image was extraordinarily low—Alvah, his press agents explained with perfect accuracy, left them too numb.

Young Gustad, who frequently made his first entrance water-beaded as from the shower, with a towel girded chastely around his loins, was nevertheless in his private life a modest and slightly bewildered citizen, much given to solitary reading, and equipped with a perfect set of the conventional virtues.

These included cheerful performance of all municipal duties and obligations—like every right-thinking citizen, Gustad held down two jobs in summer and three in winter. At the moment, for example, he was an actor by day and a metalsreclamation supervisor by night.

Chief among his less tangible attributes, was that emotion which in some ages has been variously described as civic pride or patriotism. In A.D. 2064, as in B.C. 400, they amounted to the same thing.

Behind the Manager's desk, the wall was a single huge slab of black duroplast, with a map of the city picked out in pinpoints of brilliance. As Gustad entered with his manager and his porter, an unseen chorus of basso profundos broke into the strains of The Slidewalks of New York. After four bars, it segued to New York, New York, It's a Pip of a Town and slowly faded out.

The Manager himself, the Hon. Boleslaw Wytak, broke the reverent hush by coming forward to take Alvah's hand and lead him toward the desk. "Mr. Gustad—and Mr. Diamond, isn't it? Great pleasure to have you here. I don't know if you've met all these gentlemen. Commissioner Laurence, of the Department of Extramural Relations—Director Ostertag, of the Bureau of Vital Statistics—Chairman Neddo, of the Research and Development Board."

Wytak waited until everyone was comfortably settled in one of the reclining chairs which fitted into slots in the desk, with cigars, cigarettes, liquor capsules and cold snacks at each man's elbow. "Now, Mr. Gustad—and Mr. Diamond—I'm a plain blunt man and I know you're wondering why I asked you to come here today. I'm going to tell you. The City needs a man with great talent and great courage to do a job that, I tell you frankly, I wouldn't undertake myself without great misgivings." He gazed at Gustad warmly, affectionately but sternly. "You're the man, Alvah."

Little Jack Diamond cleared his throat nervously. "What kind of a job did you have in mind, Mr. Manager? Of course, anything we can do for our city . . ."

Wytak's big face, without perceptibly moving a muscle,

somehow achieved a total change of expression. "Alvah, I want you to go to the Sticks."

Gustad blinked and tilted upright in his chair. He looked

at Diamond.

The little man suddenly seemed two sizes smaller inside his box-cut cloth-of-silver tunic. He gestured feebly and wheezed, "Wake-me-up!" The porter behind his chair stepped forward alertly, clanking, and flipped open one of the dozens of metal and plastic boxes that clung to him all over like barnacles. He popped a tiny capsule into his palm, rolled it expertly to thumband-finger position, broke it under Diamond's nose.

A reeking-sweet green fluid dripped from it and ran stickily

down the front of Diamond's tunic.

"Dumbhead!" said Diamond. "Not cream de menthy, a wake-me-up!" He sat up as the abashed servant produced another capsule. "Never mind." Some color was beginning to come back into his face. "Blotter!" A wad of absorbent fibers. "Vacuum!" A lemon-sized globe with a flaring snout. "Gon-Stink! Presser!"

Gustad looked back at the Manager. "Your Honor, you mean you want me to go into the Sticks? I mean," he said, groping for words, "you want me to play for the Muckfeet?"

"That is just exactly what I want you to do." Wytak nodded toward the Commissioner, the Director, and the Chairman. "These gentlemen are here to tell you why. Suppose you start, Ozzie."

Ostertag, the one with the fringe of yellowish white hair around his potato-colored pate, shifted heavily and stared at Gustad. "In my bureau, we have records of population and population density, imports and exports, ratio of births to deaths and so on that go back all the way to the time of the United States. Now this isn't known generally, Mr. Gustad, but although New York has been steadily growing ever since its founding in 1646, our growth in the last thirty years has been entirely due to immigration from other less fortunate cities.

"In a way, it's fortunate-I mean to say that we can't expand

horizontally, because it has been found impossible to eradicate the soil organisms—" a delicate shudder ran around the group—"left by our late enemies. And as for continuing to build vertically—well, since Pittsburgh fell, we have been dependent almost entirely on salvaged scrap for our steel. To put it bluntly, unless something is done about this situation, the end is in sight. Not alone of this administration, but of the city as well. Now the reasons for this—ah—what shall I say . . ."

With his head back, staring at the ceiling, Wytak began to speak so quietly that Ostertag blundered through another phrase and a half before he realized he had been superseded as interlocutor.

"Thirty years ago, when I first came to this town, an immigrant kid with nothing in the whole world but the tunic on my back and the gleam in my eye, we had just got through with the last of the Muckfeet Wars. According to your history books, we won that war. I'll tell you something—we were licked!"

Alvah squirmed uncomfortably as Wytak raised his head and glanced defiantly around the desk, looking for contradiction. The Manager said, "We drove them back to the Ohio, thirty years ago. And where are they now?" He turned to Laurence. "Phil?"

Laurence rubbed his long nose with a bloodless forefinger. "Their closest settlement is twelve miles away. That's to the southwest, of course. In the west and north—"

"Twelve miles," said Wytak reflectively. "But that isn't the reason I say they licked us. They licked us because there are twenty million of us today . . . and about one hundred fifty million of them. Right, Phil?"

Laurence said, "Well, there aren't any accurate figures, you know, Boley. There hasn't been any census of the Muckfeet for almost a century, but—"

"About one hundred fifty million," interrupted Wytak. "Even if we formed a league with every other city on this continent, the odds would be heavily against us—and they breed like

flies." He slapped the desk with his open palm. "So do their filthy animals!"

A shudder rippled across the group. Diamond shut his eyes tight.

"There it is," said Wytak. "Rome fell. Babylon fell. The same thing can happen to New York. Those illiterate savages will go on increasing year by year, getting more ignorant and more degraded with every generation . . . and a century from now—or two, or five—they'll be the human race. And New York . . ."

Wytak turned to look at the map behind him. His hand touched a button and the myriad tiny lights went out.

Gustad was not an actor who wept readily, but he felt tears welling over his eyelids. At the same time, the thought crossed his mind that, competition being what it was in the realies, it was a good thing that Wytak had gone into politics instead of acting.

"Sir," he said, "what can we do?"

Wytak's eyes were focused far away. After a moment, his head turned heavily on his massive shoulders, like a gun turret. "Chairman Neddo has the answer to that. I want you to listen carefully to what he's going to tell you, Alvah."

Neddo's crowded small face flickered through a complicated series of twitches, all centripetal and rapidly executed. "Over the past several years," he said jerkily, "under Manager Wytak's direction, we have been developing certain devices, certain articles of commerce, which are designed, especially designed, to have an attraction for the Muckfeet. Trade articles. Most of these, I should say all of—"

"Trade articles," Wytak cut in softly. "Thank you, Ned. That's the phrase that tells the story. Alvah, we're going to go back to the principles that made our ancestors great. Trade—expanding markets—expanding industries. Think about it. From the Arctic Ocean to the Gulf of Mexico, there are some 150 million people who haven't got a cigarette lighter or a wristphone or a realie set among them. Alvah, we're going to civilize the

Muckfeet. We've put together a grab-bag of modern science, expressed in ways their primitive minds can understand—and you're the man who's going to sell it to them! What do you say to that?"

This was a familiar cue to Gustad—it had turned up for the fiftieth or sixtieth time in his last week's script, when he had played the role of a kill-crazy sewer inspector, trapped by flood waters in the cloacae of Under Brooklyn. "I say—" he began, then realized that his usual response was totally inappropriate. "It sounds wonderful," he finished weakly.

Wytak nodded in a businesslike way. "Now here's the program." He pressed a button, and a relief map of the North American continent appeared on the wall behind him. "Indicator." Wytak's porter put a metal tube with a shaped grip into his hand—a tiny

spot on the map fluoresced where he pointed it.

"You'll swing down to the southwest until you cross the Tennessee, then head westward about to here, then up through the Plains, then back north of the Great Lakes and home again. You'll notice that this route keeps you well clear of both Chicago and Toronto. Remember that—it's important. We know that Frisco is working on a project similar to ours, although they're at least a year behind us. If we know that, the chances are that the other Cities know it too, but we're pretty sure there's been no leak in our own security. There isn't going to be any."

He handed the indicator back. "You'll be gone about three months..."

Diamond was having trouble with his breathing again.

". . . You'll have to rough it pretty much—there'll be room in your floater for you and your equipment, and that's all."

Diamond gurgled despairingly and rolled up his eyes. Gus-

tad himself felt an unpleasant sinking sensation.

"You mean," he asked incredulously, "I'm supposed to go all by myself—without even a porter?"

"That's right," said Wytak. "You see, Alvah, you and I are civilized human beings—we know there are so many indispensa-

ble time and labor saving devices that nobody could possibly carry them all himself. But could you explain that to a Muckfoot?"

"I guess not."

"That's why only a man with your superb talents can do this job for the City. Those people actually live the kind of sordid brutal existence you portray so well in the realies. Well, you can be as rough and tough as they are—you can talk their own language, and they'll respect you."

Gustad flexed his muscles slightly, feeling pleased but not altogether certain. Then a new and even more revolting aspect of this problem occurred to him. "Your Honor, suppose I got along too well with the Muckfeet? I mean suppose they invited me into one of their houses to—" he gagged slightly—"eat?"

Wytak's face went stony. "I am surprised that you feel it necessary to bring that subject up. All that will be covered very thoroughly in the briefing you will get from Commissioner Laurence and Chairman Neddo and their staffs. And I want you to understand, Gustad, that no pressure of any kind is being exerted on you to take this assignment. This is a job for a willing, cooperative volunteer, not a draftee. If you feel you're not the man for it, just say so now."

Gustad apologized profusely. Wytak interrupted him, with the warmest and friendliest smile imaginable. "That's all right, son, I understand. I understand perfectly. Well, gentlemen, I

think that's all."

As soon as they were alone, Diamond clutched Gustad's sleeve and pulled him over to the side of the corridor. "Listen to me, Al boy. We can still pull you out of this. I know a doctor that will make you so sick you couldn't walk across the street. He wouldn't do it for everybody, but he owes me a couple of—"

"No, wait a minute. I don't-"

"I know, I know," said Diamond impatiently. "You'll get your contract busted with Seven Boroughs and you'll lose a couple months, maybe more, and you'll have to start all over again

with one of the little studios, but what of it? In a year or two, you'll be as good as—"

"Now wait, Jack. In the first-"

"Al, I'm not just thinking about my twenty per cent of you. I don't even care about that—it's just money. What I want, I want you should still be alive next year, you understand what I mean?"

"Look," said Gustad, "you don't understand, Jack. I want to go. I mean I don't exactly want to, but—" He pointed down the corridor to the window that framed a vista of gigantic columns, fiercely brilliant below, fading to massive darkness above, with a million tiny floater-lights drifting like a river of stardust down the avenue. "Just look at that. It took thousands of years to build! I mean if I can keep it going just by spending three months . . .

"And besides," he added practically, "think of the publicity."

## II

The foothill country turned out to be picturesque but not very rewarding. Alvah had bypassed the ancient states of Pennsylvania and Maryland as directed, since the tribes nearest the city were understood to be still somewhat rancorous. By the end of his first day, he was beginning to regard this as a serious understatement.

He had brought his floater down, with flags flying, loud-speakers blaring, colored lights flashing and streamers flapping gaily behind him, just outside an untidy collection of two-story beehive huts well south of the former Pennsylvania border. He had seen numerous vaguely human shapes from the air, but when he extruded his platform and stepped out, every visible door was shut, the streets were empty, and there was no moving thing in sight, except for a group of singularly unpleasant-looking animals in a field to his right.

After a few moments, Gustad shut off the loudspeakers and listened. He thought he heard a hum of voices from the nearest building. Suppressing a momentary qualm, he lowered himself

on the platform stair and walked over to the building. It had a single high window, a crude oval in shape, closed by a discolored pane.

Standing under this window, Alvah called, "Hello in there!"
The muffled voices died away for a moment, then buzzed as busily as ever.

"Come on out-I want to talk to you!"

Same result.

"You don't have to be afraid! I come in peace!"

The voices died away again, and Alvah thought he saw a dim face momentarily through the pane. A single voice rose on an interrogative note.

"Peace!" Alvah shouted.

The window slid abruptly back into the wall and, as Alvah gaped upward, a deluge of slops descended on him, followed by a gale of coarse laughter.

Alvah's immeditate reaction, after the first dazed and gasping instant, was a hot-water-and-soap tropism, carrying with it an ardent desire to get out of his drenched clothes and throw them away. His second, as imperious as the first, had the pure flame of artistic inspiration—he wanted to see how many esthetically satisfying small pieces one explosive charge would make out of

Under no conditions, said the handbook he had been required to memorize, will you commit any act which might be interpreted by the Muckfeet as aggressive, nor will you make use of your weapons at any time, unless such use becomes necessary

for the preservation of your own life.

that excrescence-shaped building.

Alvah wavered, grew chilly and retired. Restored in body,

but shaken in spirit, he headed south.

Then there had been his encounter with the old man and the animal. Somewhere in the triangle of land between the Mississippi and the Big Black, at a point which was not on his itinerary at all, but had the overwhelming attraction of being more than a thousand air-miles from New York, he had set the floater down near another sprawling settlement.

As usual, all signs of activity in and around the village promptly disappeared. With newly acquired caution, Alvah sat tight. Normal human curiosity, he reasoned, would drive the Muckfeet to him sooner or later—and even if that failed, there was his nuisance value. How long could you ignore a strange object, a few hundred yards from your home, that was shouting, waving flags, flashing colored lights and sending up puffs of pink-and-green smoke?

Nothing happened for a little over an hour. Then, half dozing in his control chair, Alvah saw two figures coming toward him across the field.

Alvah's ego, which had been taking a beating all day, began to expand. He stepped out onto the platform and waited.

The two figures kept coming, taking their time. The tall one was a skinny loose-jointed oldster with a conical hat on the back of his head. The little one ambling along in front of him was some sort of four-footed animal.

In effect, an audience of one—at any rate, it was Alvah's best showing so far. He mentally rehearsed his opening lines. There was no point, he thought, in bothering with the magic tricks or the comic monologue. He might as well go straight into the sales talk.

The odd pair was now much closer, and Gustad recognized the animal half of it. It was a so-called watchdog, one of the incredibly destructive beasts the Muckfeet trained to do their fighting for them. It had a slender, supple body, a long feline tail and a head that looked something like a terrier's and something like a housecat's. However, it was not half as large or as frightening in appearance as the pictures Alvah had seen. It must, he decided, be a pup.

Two yards from the platform, the oldster came to a halt. The watchdog sat down beside him, tongue lolling wetly. Alvah turned off the loudspeakers and the color displays.

"Friend," he began, "I'm here to show you things that will

astound you, marvels that you wouldn't believe unless you saw them with your own—"

"You a Yazoo?"

Thrown off stride, Alvah gaped. "What was that, friend?"

"Ah said—you a Yazoo?"

"No," said Alvah, feeling reasonably positive.

"Any kin to a Yazoo?"

"I don't think so."

"Git," said the old man.

Unlikely as it seemed, a Yazoo was apparently a good thing to be. "Wait a second," said Alvah. "Did you say Yazoo? I didn't understand you there at first. Am I a Yazoo! Why, man, my whole family on both sides has been—" what was the plural of Yazoo?

"Ah'll count to two," said the old man. "One."

"Now wait a minute," said Alvah, feeling his ears getting hot. The watchdog, he noticed, had hoisted its rump a fraction of an inch and was staring at him in a marked manner. He flexed his right forearm slightly and felt the reassuring pressure of the pistol in its pop-out holster. "What makes you Muckfeet think you can—"

"Two," said the oldster, and the watchdog was a spreadeagled blur in midair, seven feet straight up from the ground.

Instinct took over. Instinct had nothing to do with pistols or holsters, or with the probable size of a full-grown Muckfoot watchdog. It launched Alvah's body into a backward standing broad jump through the open floater door, and followed that with an economical underhand punch at the control button inside.

The door slammed shut. It then bulged visibly inward and rang like a gong. Sprawled on the floor, Gustad stared at it incredulously. There were further sounds—a thunderous growling and a series of hackle-raising shrieks, as of hard metal being gouged by something even harder. The whole floater shook.

Alvah made the control chair in one leap, slammed on the power switch and yanked at the steering bar. At an altitude of

about a hundred feet, he saw the dark shape of the watchdog leap clear and fall, twisting.

A few seconds later, he put the bar into neutral and looked down. Man and watchdog were moving slowly back across the field toward the settlement. As far as Alvah could tell, the beast was not even limping.

Alvah's orders were reasonably elastic, but he had already stretched them badly in covering the southward leg of his route in one day. Still, there seemed to be nothing else to do. Either there was an area somewhere on the circuit where he could get the Muckfeet to listen to him, or there wasn't. If there was, it would make more sense to hop around until he found it, and then work outward to its limits, than to blunder straight along, collecting bruises and insults.

And if there wasn't—and this did not bear thinking about—then the whole trip was a bust.

Alvah switched on his communicator and tapped out the coded clicks that meant, "Proceeding on schedule"—which was a lie—"no results yet"—which was true. Then he headed north.

Nightfall overtook him as he was crossing the Ozark Plateau. He set the floater's controls to hover at a thousand feet, went to bed and slept badly until just before dawn. With a cup of kaffin in his hand, he watched this phenomenon in surprised disapproval: The scattered lights winking out below, the first colorless hint of radiance, which illuminated nothing, but simply made the Universe seem more senselessly vast and formless than before; finally, after an interminable progression of insignificant changes, the rinds of orange and scarlet, and the dim Sun bulging up at the rim of the turning Earth.

It was lousy theater.

How, Alvah asked himself, could any human being keep himself from dying of sheer irrelevance and boredom against a background like that? He was aware that billions had done so, but his general impression of history was that people who didn't have a city always got busy improving themselves until they could build one or take one away from somebody else. All but the Muckfeet . . .

Once their interest has been engaged, said the handbook at one point, you will lay principal stress upon the competitive advantages of each product. It will be your aim to create a situation in which ownership of one or more of our products will be not only an economic advantage, but a mark of social distinction. In this way, communities which have accepted the innovations will, in order to preserve and extend the recognition of their own status, be forced to convert members of neighboring communities.

Well, maybe so.

Alvah ate a Spartan breakfast of protein jelly and citron cakes, called in the coordinates and the time to the frog-voiced operator in New York, and headed the floater northward again.

The landscape unrolled itself. If there were any major differences between this country and the districts he had seen yesterday, Alvah was unable to discern them. In the air, he saw an occasional huge flapping shape, ridden by human figures. He avoided them, and they ignored him. Below, tracts of dark-green forest alternated predictably with the pale green, red or violet of cultivated fields. Here and there across the whole visible expanse, isolated buildings stood. At intervals, these huddled closer and closer together and became a settlement. There were perhaps more roads as he moved northward, dustier ones. That was all.

The dustiness of these roads, it occurred to Alvah, was a matter that required investigation. The day was cloudless and clear; there was no wind at Alvah's level, and nothing in the behavior of the trees or cultivated plants to suggest that there was any farther down.

He slowed the floater and lowered it toward the nearest road. As he approached, the thread of ocher resolved itself into an irregular series of expanding puffs, each preceded by a black dot, the overall effect being that of a line of black-and-tan exclamation points. They seemed to be moving barely perceptibly, but were actually, Alvah guessed, traveling at a fairly respectable clip.

He transferred his attention to another road. It, too, was filled with hurrying dots, as was the next—and all the traffic was heading in approximately the same direction, westward of Alvah's course.

He swung the control bar over. The movement below, he was able to determine after twenty minutes' flying, converged upon a settlement larger than any he had yet seen. It sprawled for ten miles or more along the southern shore of a long and exceedingly narrow lake. Most of it looked normal enough—a haphazard arrangement of cone-roofed buildings—but on the side away from the lake, there was a fairly extensive area filled with what seemed to be long, narrow sheds. This, in turn, was bounded on two sides by a strip of fenced-in plots in which, as nearly as Alvah could make out through the dust, animals of all sizes and shapes were penned. It was this area which appeared to be the goal of every Muckfoot in the central Plains.

The din was tremendous as Alvah floated down. There were shouts, cries, animal bellowings, sounds of hammering, occasional blurts of something that might be intended to be music, explosions of laughter. The newcomers, he noted, were being herded with much confusion to one or another of the fenced areas, where they left their mounts. Afterward, they straggled across to join the sluggish river of bodies in the avenues between the sheds.

No one looked up or noticed the dim shadow of the floater. Everyone was preoccupied, shouting, elbowing, blowing an instrument, climbing a pole. Alvah found a clear space at some distance from the sheds—as far as he could conveniently get from the penned animals—and landed.

He had no idea what this gathering was about. For all he knew, it might be a war council or some kind of religious observance, in which case his presence might be distinctly unwelcome. But in any case, there were customers here.

He looked dubiously at the stud that controlled his atten-

tion-catchers. If he used them, he would only be following directives, but he had a strong feeling that it would be a *faux pas* to do so in this situation. At the other extreme, the obvious thing to do was to get out and go look for someone in authority. This would involve abandoning the protection of the floater, however, and he might blunder into some taboo place or ceremony.

Evidently his proper course was to wait unobtrusively until he was discovered. On the other hand, if he stayed inside the floater with the door shut, the Muckfeet might take more alarm than if he showed himself. Still, wasn't it possible that they would be merely puzzled by a floater, whereas they would be angered by a floater with a man on its platform? Or, taking it from another angle . . .

The hell with it.

Alvah ran the platform out, opened the door and stepped out. He was relieved when, as he was considering the delicate problem of whether or not to lower the stair, a small group of men and urchins came into view around the corner of the nearest shed, a dozen yards away from him.

They stopped when they saw him, and two or three of the smallest children scuttled behind their elders. They exchanged looks and a few words that Alvah couldn't hear. Then a pudgy little man with a fussed expression crowded forward, and the rest followed him at a discreet distance.

"Hello," said Alvah tentatively.

The little man came to a halt a yard or so from the platform. He had a white badge of some kind pinned to his shapeless brown jacket, and carried a sheaf of papers in his hand. "Who might you be?" he asked irritably.

"Alvah Gustad is my name. I hope I'm not putting you peo-

ple out, parking in your area like this, Mr.-"

"Well, I should hope to spit you is, though. Supposed to be a tent go up right there. Got to be one by noon. What did you say your name was, Gus what?"

"Gustad. I don't believe I caught your name, Mr.-"

"Don't signify what my name is. We're talking about you. What clan you belong to?"

"Uh-Flatbush," said Alvah at random. "Look, as long as I'm in the way here, you just tell me where to move to and-"

"Some little backwoods clan, I never even *heard* of it," said the pudgy man. "I'll tell you where you can *move* to. You can just haul that thing back where you come from. Gustad—Flatbush! You ain't on my list, I know that."

The other Muckfeet had moved up gradually to surround the little man. One of them, a lanky sad-faced youngster, nudged him with his elbow. "Might just check and see, Jake."

"Well, I ought to know. My land, Artie, I got my work to

do. I can't spend all day standing here."

Artie's long face grew more mournful. "You thought them Keokuks wasn't on the list, either."

"Well-all right then, rot it." To Alvah: "What's your marks?"

Alvah blinked. "I don't-"

"Come down offa there." Jake turned impatiently to a man behind him. "Give'm a stake." As Alvah came hesitantly down the stair, he found he was being offered a sharpened length of wood by a seamy-faced brown man, who carried a bundle of others like it under his arm.

Alvah took it, without the least idea of what to do next. The brown man watched him alertly. "You c'n make your marks with that," he volunteered and pointed to the ground between them.

The others closed in a little.

"Marks?" said Alvah worriedly.

The brown man hesitated, then took another stake from his bundle. "Like these here," he said. "These is mine." He drew a shaky circle and put a dot in the center of it. "George." A figure four. "Allister—that's me." A long rectangle with a loop at each end. "Coffin—that's m' clan."

Jake burst out, "Well, crying in a bucket, he knows that! You know how to sign your name, don't you?"

"Well," said Alvah, "yes." He wrote Alvah Gustad and, as

an afterthought, added Flatbush.

There were surprised whistles. "Wrote it just as slick as Doc!" said a ten-year-old tow-headed male, bug-eyed with awe.

Take stared at Alvah, then spun half around to wave his papers under Artie's nose. "Well, you satisfied now, Artie Brumbacher? I guess that ain't on my list, is it?"

"No," Artie admitted, "I guess it ain't-not if you can read the list, that is."

Everybody but Alvah laughed, Jake louder than anyone. "All right," he said, turning back to Alvah, "you just hitch up your brutes and get that thing out of here. If you ain't gone by the time I-"

"Jake!" called a businesslike female voice, and a small figure came shouldering through the crowd. "They need you over in the salamander shed-the Ouincies are ready to move in, but there's some Sullivans ahead of them." She glanced at Alvah, then at the floater behind him. "You having any trouble here?"

"All settled now," Jake told her. "This feller ain't on the

list. I just give him his marching orders."

"Look, if I can say something-" Alvah began.

The girl interrupted him. "Did you want to exhibit something at the Fair?"

"That's right," said Alvah gratefully. "I was just trying to

explain-"

"Well, you're late, but maybe we can squeeze you in. You won't sell anything, though, if it's what I think it is. Let me see that list, Take."

"Now wait a minute," said Jake indignantly. "You know we ain't got room for nobody that ain't on the list. We got enough trouble-"

"The Earth-movers won't be here from Butler till tomorrow," said the girl, examining the papers. "We can put him in there and move him out again when they get here. You need any equipment besides what you brought?"

"No," said Alvah. "That would be fine, thanks. All I need

is a place-"

"All right. Before you go, Jake, did you tell those Sullivans they could have red, green and yellow in the salamander shed?" "Well, sure I did. That what it says right there."

She handed him back the papers and pointed to a line. "That's Quincy, see? Dot instead of a cross. Sullivans are supposed to have that corner in the garden truck shed, keep the place warm for the seedlings, but they won't budge till you tell them it was a mistake. Babbishes and Stranahans are fit to be tied. You get over there and straighten them out, will you? And don't worry too much about him."

Jake snorted and moved away, still looking ruffled. The girl turned to Alvah. "All right, let's go."

Unhappy but game, Alvah turned and climbed back into the floater with the girl close behind him. The conditioning he'd had just before he left helped when he was in the open air, but in the tiny closed cabin of the floater the girl's triply compounded stench was overpowering.

How did they live with themselves?

She leaned over the control chair, pointing. "Over there,"

she said. "See that empty space I'm pointing at?"

Alvah saw it and put the floater there as fast as the generator would push it. The space was not quite empty—there were a few very oddly assorted Muckfeet and animals in it, but they straggled out when they saw him hovering, and he set the floater down.

To his immense relief, the girl got out immediately. Alvah followed her as far as the platform.

## III

In a tailor shop back in Middle Queens, the proprietors, two brothers named Wynn, whose sole livelihood was the shop, stared glumly at the bedplate where the two-hundred-gallon Klenomatic ought to have been.

"He say anything when he took it away?" Clyde asked.

Morton shrugged and made a sour face.

"Yeah," said Clyde. He looked distastefully at a dead cigar and tossed it at the nearest oubliette. He missed.

"He said a month, two months," Morton told him. "You know what that means."

"Yeah."

"So I'll call up the factory," Morton said violently. "But I know what they're gonna tell me. Give us a deposit and we'll put you on a waiting list. Waiting list!"

"Yeah," said Clyde.

In a factory in Under Bronnix, the vice president in charge of sales shoved a thick folder of coded plastic slips under the nose of the vice president in charge of production. "Look at those orders," he said.

"Uh-huh," said Production.

"You know how far back they go? Three years. You know how much money this company's lost in unfilled orders? Over two million—"

"I know. What do you expect? Every fabricator in this place is too old. We're holding them together with spit and string. Don't bother me, will you, Harry. I got my own—"

"Listen," said Sales. "This can't go on much longer. It's up to us to tell the Old Man that he's got to try a bigger bribe on the Metals people. Mortgage the plant if we have to—it's the only thing to do."

"We have more mortgages now than the plant is worth."

Sales reddened. "Nick, this is serious. Last fall, it looked like we might squeeze through another year, but now . . . You know what's going to happen in another eight, ten months?" He snapped his fingers. "Right down the drain."

Production blinked at him wearily. "Bribes are no good any

more, Harry. You know that as well as I do. They're out."

"Well, then what are we going to do?"

Production shook his head. "I don't know. I swear to God, I don't know."

Over in Metals Reclamation Four, in Under and Middle Jersey, the night shift was just beginning. In the blue-lit cavern of Ferrous, this involved two men, one bald and flabby, the other gray and gnarled. They exchanged a silent look, then each in turn put his face into the time clock's retinoscope mask. The clock, which had been emitting a shrill irritating sound, gurgled its satisfaction and shut up.

"Well, that's it," said the gray one. "I'll be your work gang

and you be mine, huh?"

The flabby one spat. "Wonder what happened to Turk."

"Who cares? I never liked him."

"Just wondering. Yesterday he's here, today where is he? Labor pool, army—" he spat again, with care—"repair, maintenance... He was fifteen years in this department. I was just wondering."

"Scooping sewage, probably. That's about his speed." The gray man shambled over to the control bench opposite and looked at the indicators. Then he lighted a cigarette.

"Nothing in the hoppers?" the flabby one asked.

"Nah. They ought to put Turk in the hoppers. He had metal in his goddam teeth. Actual metal!"

"Turk wasn't old," the flabby one said reproachfully. "No more than sixty."

"I never liked him."

"First it was the kid—you know, Pimples. Then, lessee, the next one was that big guy, the realie actor—"

"Gustad. The hell with him."

"Yeah, Gustad. What I mean is, where do they go to? It's the same thing on my three-to-seven shift, over in Yeasts. Guys I knew for ten, fifteen, twenty years on the same job. All of a sudden, they're gone and you never see them. Must be a hell of a thing, starting all over again somewhere else—guys like that—I mean you get set in your ways, kind of."

His eyes were patient and bewildered in their watery pouches. "Guys like me—no kids, nobody that gives a damn about 'em. Kind of gives you the jumps to think about it. You know what I mean?"

The gray one looked embarrassed, then irritated, then defiant. "Aah," he said, and produced a deck of cards from his kit the grimy coating on the creaseless, frayless plastic as lovingly built and preserved as the patina in a meerschaum. "Cut for deal. Come on! Let's play."

"I'll have to know what you going to exhibit," the girl said. "For the Fair records."

"Labor-saving devices," Alvah told her, "the latest and best products of human ingenuity, designed to-"

"Machines," she said, writing. She added, looking up, "There's a fee for the use of the fairground space. Since you're only going to have it for a day, we'll call it twenty twains."

Alvah hesitated. He had no idea what a twain might be—it had sounded like "twain." Evidently it was some sort of crude Muckfoot coinage.

"Afraid I haven't got any of your money," he said, producing a handful of steels from his belt change-meter. "I don't suppose these would do?"

The girl looked at him steadily. "Gold?" she said. "Precious stones, platinum, anything of that kind?" Alvah shook his head. "Sure?" Alvah shrugged despairingly. "Well," she said after a moment, "maybe something can be arranged. I'll let you talk to Doc about it, anyhow. He'll have to decide. Come on."

"Just a minute," Alvah said, and ducked back into the floater. He found what he was looking for and trotted outside again.

"What's that?" asked the girl, looking at the bulky kit at his waist.

"Just a few things I like to have with me."

"Mind showing me?"

"Well-no." He opened the kit. "Cigarette lighter, flashlight,

shaver, raincoat, heater, a few medicines over here, jujubes, food concentrates, things like that. Uh, I don't know why I put this in here—it's a distress signal for people who get lost in the subway."

"You never can tell," said the girl, "when a thing like that

will come in handy."

"That's true. Uh, this thing that looks like two dumbbells and a corkscrew . . ."

"Never mind," said the girl. "Come along."

The first shed they passed was occupied by things that looked like turtles with glittery four-foot shells. In the nearest stall, a man was peeling off from one of the beasts successive thin layers of this shell-stuff, which turned out to be colorless and transparent. He passed them to a woman, who dipped them into a basin and then laid them on a board to dry. The ones at the far end of the row, Alvah noticed, had flattened into discs.

The girl apparently misread his expression as curiosity. "Glass tortoise," she told him. "For windows and so on. The young ones have more hump to their shells—almost spherical to start with. Those are for bottles and bowls and things."

Alvah blinked noncommittally.

They passed a counter on which metal tools were displayed—knives, axes and the like. Similar objects, Alvah noted automatically, had only approximately similar outlines. There seemed to be no standardization at all.

"These are local," the girl said. "The metal comes from Iron Pits, just a few miles south of here."

In the next shed was a long row of upright rectangular frames, most of them empty. One near the end, however, was filled with some sort of insubstantial film or fabric. A tiny scarlet creature was crawling rapidly up and down this gossamer substance, working its way gradually from left to right.

"Squareweb," the girl informed him. "This dress I'm wear-

ing was made that way."

Alvah verified his previous impression that the dress was opaque. Rather a pity, since it was also quite handsomely filled

out. Not, he assured himself, that it made any difference—the girl was a Muckfoot, after all.

Next came a large cleared space. In it were half a dozen animals that resembled nothing in nature or nightmare except each other. They were wide and squat and at least six feet high at the shoulder. They had vaguely reptilian heads, and their scaly hides were patterned in orange and blue, rust and vermil-

ion, yellow and poppy-red.

The oddest thing about them, barring the fact that each had three sets of legs, was the extraordinary series of protuberances that sprouted from their backs. First came an upright, slightly hollow shield sort of thing, set crossways behind the first pair of shoulders. Behind that, something that looked preposterously like an armchair—it even had a bright-colored cushion—and then a double row of upright spines with a wide space between them.

"Trucks," said the girl.

Alvah cleared his throat. "Look, Miss-"

"Betty Jane Hofmeyer. Call me B. J. Everybody does."

"All right—uh—B. J. I wonder if you could explain something to me. What's wrong with metal? And plastic, and things like that. I mean why should you people want to go to so much trouble and—and mess, when there are easier ways to do things better?"

"Each," she said, "to his own taste. We turn here."

A few yards ahead, the Fair ended and the settlement proper began with an unusually large building—large enough, Alvah estimated, to fill almost an entire wing of a third-class hotel in New York. Unlike the hovels he had seen farther south—which looked as if they had been excreted—it was built of some regular, smooth-surfaced material, seamless and fairly well shaped.

Alvah was so engrossed in these and other considerations that it wasn't until the girl turned three steps inside the doorway, impatiently waiting, that he realized a minor crisis was at hand—he was being invited to enter a Muckfoot dwelling.

"Well, come on," said B. J.

Refuse any offers of food, transportation, etc., said the handbook, firmly, but as diplomatically as possible. Employ whatever subterfuge the situation may suggest, such as, "Thank you, but my doctor has forbidden me to touch fur," or, "Pardon me, but I have a sore throat and am unable to eat."

Alvah cleared his throat frantically. The situation did not suggest anything at all. Luckily, however, his stomach did.

"Maybe I'd better not come in," he said. "I don't feel very

well. Maybe if I just sit down here quietly-"

"You can sit down inside," said the girl briskly. "If there's anything wrong with you, Doc will look you over."

"Well," Alvah asked desperately, "couldn't you bring him

out here for a minute? I really don't think-"

"Doc is a busy man. Are you coming or not?"

Alvah hesitated. There were, he told himself, only two possibilities, after all: (a) he would somehow manage to keep his breakfast, and (b) he wouldn't.

The nausea began as a faint, premonitory twinge when he stepped through the doorway. It increased steadily as he followed B. J. past cages filled with things that chirruped, croaked, rumbled, rustled or simply stared at him. The girl didn't invite comment on any of them, for which Alvah was grateful. He was too busy concentrating on trying not to concentrate on his misery.

For the same reason, he did not notice at what precise point the cages gave way to long rows of potted green plants. Alvah was just beginning to wonder if he would live to see the end of them when, still following B. J., he turned a corner and came upon a cleared space with half a dozen people in it.

One of them was the sad-faced youth, Artie. Another was a stocky man, all chest and paunch and no neck at all, who was talking to Artie while the others stood and listened. B. J. stopped

and waited quietly. Alvah, perforce, did the same.

"—just a few seedlings and a couple of one-year-olds for now—we'll see how they go. If you have more room later on . . . What else was I going to tell you?" The stocky man rumpled his

hair nervously. "Oh, look, Artie, I had a copy of the specifications for you, but the fool bird got into a fight with a mirror and broke his . . . Wait a second." He turned abruptly. "Hello, Beej. Come along to the library for a second, will you?"

He turned again and strode off, with Artie, B. J. and Alvah

in his wake.

The room they entered was, from Alvah's point of view, the worst he had struck yet. It was a hundred feet long by fifty wide, and everywhere—perched on the walls and on multi-leveled racks that ran the length of the room, darting through the air in flutters of brilliance—were tiny raucous birds, feathered in every prismatic shade, green, electric blue, violet, screaming red.

"Mark seven one-oh-three!" Bither shouted. The roomful of birds took it up in a hideous echoing chorus. An instant later, a sudden flapping sound turned itself into an explosion of color and alighted on the stocky man's shoulder, preening its feathers with a blunt green beak. "Rrk," it said and then, quite clearly, "Mark seven one-oh-three."

The stocky man made a perch of one forefinger and handed the thing across to Artie's shoulder. "I can't give you this one. It's the only copy I got. You'll have to listen to it and remember what you need."

"I'll remember." Artie glanced at the bird on his shoulder and said, "Magnus utility tree."

The stocky man looked around, saw B. J. "Now, Beej, is it

important? Because-"

"Magnus utility tree," the bird was saying. "Thrives in all soils, over ninety-one per cent resistant to most rusts, scales and other infestations. Edible from root to branch. Young shoots and leaves excellent for salads. Self-fertilizing. Sap can be drawn in second year for—"

"Doc," said the girl clearly, "this is Alvah Gustad. From New York, Alvah, meet Doc Bither,"

"-golden orangoes in spring and early summer, Bither aperries in late summer and fall. Will crossbreed with-"

"New York, huh?" said Bither. "You a long way from home,

young— Excuse me. Artie?"

"—series five to one hundred fifteen. Trunks guaranteed straight and rectilinear, two-by-four at end of second year, four-by-six at—"

"I all set, Doc."

"-mealie pods and winterberries-"

"Fine, all right." He took B. J.'s arm. "Let's go someplace we can talk."

"—absorb fireproofing and stiffening solutions freely through roots . . ."

Bither led the way into a small, crowded room. "Now," he said,

peering intently at Alvah, "what's the problem?"

B. J. explained briefly. Then they both stared at Alvah. Sweat was beaded coldly on his brow and his knees were trembling, but he seemed to have stabilized the nausea just below the critical point. The idea, he told himself, was to convince yourself that the whole building was a realie stage and all the objects in it props. Wasn't there a line to that effect in one of the classics—The Manager of Copenhagen, or perhaps Have It Your Own Way?

"What do you think?" Bither asked.

"Might try him out."

"Um. Damn it, I wish we hadn't run out of birds. Can you take this down for me, Beej? I'll arrange for the Fair rental fee, Alvah, if you just answer a few questions."

It sounded innocuous enough, but Alvah felt a twinge of

suspicion. "What kind of questions?"

"Just personal questions, like how old, what you do for a living."

"Twenty-six. I'm an actor."

"Always been an actor?"

"No."

"What else you done?"

"Labor."

"What kind?" B. J. asked.

"Worked with his hands, he means," Bither told her. "Parents laborers, too?"

"Yes."

B. J. and Bither exchanged glances. Alvah shifted uncomfortably. "If that's all . . ."

"One or two more. I want you to tell me, near as you can, when was the first time you remember knowing that our clothes and our animals and us and all the things we make smelled bad?"

It was too much. Alvah turned and lurched blindly out the

door. He heard their voices behind him:

". . . minutes."

". . . alley door!"

Then there were hands on him, steering him from behind as he stumbled forward at a half-run. They turned him right, then left and finally he was out in the cool air, not a moment too soon.

When he straightened, wiping tears away, he was alone, but a moment later the girl appeared in the doorway.

"That's all," she said distantly. "You can start your exhibition whenever you want."

## IV

The magic tricks went over fairly well—at least nobody yawned. The comic monologue, however, was a flat failure, even though the piece had been expertly slanted for a rural audience and, by all the laws of psychostatics, should have rated at least half a dozen boffs. ("So the little boy came moseying back up the road, and his grandpa said to him, 'Why didn't you drive them hogs out of the corn like I told you?' And the little fellow piped up, 'Them ain't hogs—them's shoats!'")

Alvah launched hopefully into his sales talks and demonstrations.

The all-purpose fireless lifetime cooker was received with blank stares. When Alvah fried up a savory batch of proteinpaste fritters and offered to hand them out, nobody responded but one small boy, and his mother hauled him down off the platform stair by the slack of his pants.

Smiling doggedly, Alvah brought out the pocket-workshop power tools and accessories. This, it appeared, was more like it. An interested hum went up as he drilled three holes of various sizes in a bar of duroplast, then sawed through it from end to end and finally cut a mortise in one piece, a tenon in the other, and fitted them together. A few more people drifted in.

"And now, friends," said Alvah, "if you'll continue to give me your kind attention . . ."

The next item was the little giant power-plant for the home, shop or office. Blank stares again. Alvah picked out one Muckfoot in the front row—a blear-eyed, open-mouthed fellow, with hair over his forehead and a basket under his arm, who seemed typical—and spoke directly to him. He outdid himself about the safety, economy, efficiency and unobtrusiveness of a little giant power-plant. He explained its operation in words a backward two-year-old could understand.

"A little giant," he concluded, leaning over the platform rail to stare hypnotically into the Muckfoot's eyes, "is the power-plant for you!"

The fellow blinked, slowly produced a dark-brown lump of something from his pocket, slowly put it into his inattentive mouth, and as slowly began to chew.

Alvah breathed deeply and clutched the rail. "And now," he said, giving the clincher, "the marvel of the age—the super-speed runabout!" He pressed the button that popped open a segment of the floater's hull and lowered the gleaming little two-wheeled car into view.

"Now, friends," he said, "just to demonstrate the amazing qualities of this miracle of modern science—is there any gentleman in the crowd who has an animal he fancies for speed?"

For the first time, the Muckfeet reacted according to the charts.

Shouts rocketed up: "Me, by damn!" "Me!" "Right here, mister!" "Yes, sir!"

"Friends, friends!" said Alvah, spreading his hands. "There won't be time to accommodate you all. Choose one of you to represent the rest!"

"Swifty!" somebody yelped, and other voices took up the cry. A red-haired young man began working his way back out of the crowd, propelled by gleeful shouts and slaps on the back.

Alvah took an indicator and began pointing out the salient features of the runabout. He had not got more than a quarter of the way through when the redhead reappeared, mounted astride an animal which, to Alvah's revolted gaze, looked to be part horse, part lynx, part camel and part pure horror.

To the crowd, evidently, it was one of nature's finest efforts. Alvah swallowed bile and raised his voice again. "Clear a space

now, friends-all the way around!"

It took time, but eventually self-appointed deputies began to get the crowd moving. Alvah descended, carrying two bright marker poles, and, followed by the inquisitive redhead, set one up at either side of the enclosure, a few yards short of the boundary.

"This will be the course," he told Swifty. "Around these markers and the floater—that thing I was standing on. We'll do ten laps, starting and finishing here. Is that all right?"

"All right with me," said the redhead, grinning more widely

than before.

There were self-appointed time-keepers and starters, too. When Alvah, in the runabout, and the redhead, on his monster, were satisfactorily lined up, one of them bellowed, "On y' marks—Git set . . ." and then cracked a short whip with a noise out of all proportion to its size.

For a moment, Alvah thought Swifty and his horrid mount had simply disappeared. Then he spotted them, diminished by perspective, halfway down the course, and rapidly getting smaller. He slammed the power bar over and took off in pursuit. Around the first turn, it was Swifty, with Alvah nowhere. In the stretch, Alvah was coming up fast on the outside. Around the far turn, he was two monster lengths behind and, in the stretch again, they were neck and neck. Alvah kept it that way for the next two laps and then gradually pulled ahead. The crowd became a multicolored streak, whirling past him. In the sixth lap, he passed Swifty again—in the eighth, again—in the tenth, still again—and when he skidded to a halt beyond the finish post, fluttering its flags with the wind of his passage, poor old Swifty and his steaming beast were still lumbering halfway down the stretch.

"Now, friends," said Alvah, triumphantly mounting the platform again, "in a moment, I'm going to tell you how you, yourselves, can own this wonderful runabout and many marvels more—but first, are there any questions you'd like to ask?"

Swifty pushed forward, grinless, looking like a man smitten

by lightning. "How many to a get?" he called.

Alvah decided he must have misunderstood. "You can have any number you want," he said. "The price is so reasonable—but I'm going to come to that in a—"

"I don't mean how many will you sell. How many to a get?" Alvah looked blank. "How many calves, or colts, or whatever, is what I want to know."

There was a general murmur of agreement. This, it would seem, was what everybody wanted to know.

Appalled, Alvah corrected the misapprehension as quickly and clearly as he could.

"Mean to say," somebody called, "they don't breed?"

"Certainly not. If one of them ever breaks down—and, friends, they're built to last—you get it repaired or buy another."

"How much?" somebody in the crowd yelled.

"Friends, I'm not here to take your money," Alvah said. "We just want—"

"Then how we going to pay for your stuff?"

"I'm coming to that. When two people want to trade,

friends, there's usually a way. You want our products. We want metals—iron, aluminum, chromium—"

"Suppose a man ain't got any metal?"

"Well, sir, there are a lot of other things we can use besides metal. Natural fruits and vegetables, for instance."

The slack-faced yokel in the first row, the one with the basket under his arm, roused himself for the first time. His mouth closed, then opened again. "What kind?"

"Natural products, friend. You know, the kind your greatgranddad ate. We use a lot every year for table delicacies, even—"

The yokel came halfway up the platform stair. His gnarled fingers dipped into the basket and came up with a smooth redgold ovoid. He shoved it toward Alvah. "You mean," he said incredulously, "you wouldn' eat that?"

Gulping, Alvah backed away a step. The Muckfoot came after him. "Raise 'em myself," he said plaintively, holding out the red fruit. "I tell you, they're just the juiciest, goodest— Go ahead, try one."

"I'm not hungry," Alvah said desperately. "I'm on a diet. Now if you'll just step down quietly, friend, till after the—"

The Muckfoot stared at him, holding the fruit under Alvah's nose. "You mean you won't try it?"

"No," said Alvah, trying not to breathe. "Now go on back down there, friend—don't crowd me."

"Well," said the Muckfoot, "then durn you!" And he shoved the disgusting thing squashily into Alvah's face.

Alvah saw red. Blinking away a glutinous film of juice and pulp, he glimpsed the yokel's face, spread into a hideous grin. Waves of laughter beat about his ears. Retching, he brought up his right fist in an instinctive roundhouse swing that clapped the yokel's grin shut and toppled him over the platform rail, basket, flying fruit and all.

The laughter rumbled away into expectant silence. Alvah fumbled in his kit for tissues, scrubbed a wad of them across his face and saw them come away daubed with streaky red. He hurled them convulsively into the crowd and, leaning over the rail, shouted thickly, "Lousy stinking filthy Muckfeet!"

Muckfoot men in the front ranks turned and looked at each other solemnly. Then two of them marched up the platform stair and, behind them, another two.

Still berserk, Alvah met the first couple with two violent kicks in the chest. This cleared the stair, but he turned to find three more candidates swarming over the rail. He swung at the nearest who ducked. The next one seized Alvah's arm with both hands and toppled over backward. Alvah followed, head foremost, and landed with a jar that shook him to his toes.

The next thing he knew, he was lying on the ground surrounded by upward of twenty thick seamless boots, choking on dust, and getting the daylights methodically kicked out of him.

Alvah rolled over frantically, climbed the first leg that came to hand, got his back against the platform and, by dint of cracking skulls together, managed in two brisk minutes to clear a momentary space around him. Another dim figure lunged at him. Alvah clouted it under the ear, whirled and vaulted over the rail onto the platform.

His gun popped out into his hand.

For just a moment, he was standing alone, feeling the pistol grip clenched hard in his dirt-caked palm and able to judge exactly how long he had before half a dozen Muckfeet would swarm up the stair and over the rail. The crowd's faces were sharp and clear. He saw Artie and Doc Bither and Jake, his mouth open to howl, and he saw the girl, B. J., in a curious posture—leaning forward, her right arm thrust out and down. She had just thrown something at him.

Alvah saw the gray-white blur wobbling toward him. He tried to dodge, but the thing struck his shoulder and exploded with a papery pop. For a bewildering instant, the air was full of dancing bright particles. Then they were gone.

Alvah didn't have time to wonder about it. He thumbed

the selector over to Explosive, pointed the gun straight up and squeezed the trigger.

Nothing happened.

There were two Muckfeet half over the rail and three more coming up the stair. Incredulous, still aiming at the air, Alvah tried again—and again. The gun didn't work.

Three Muckfeet were on the platform, four more right behind them. Alvah spun through the open door and slapped at

the control button. The door stayed open.

The Muckfeet were massed in the doorway, staring in like visitors at an aquarium. Alvah dived at the power bar, shoved it over. The floater didn't lift.

"Holly! Luke!" called a clear voice outside, and the Muckfeet turned. "Leave him alone. He's got enough troubles now."

Alvah was pawing at the control board.

The lights didn't work.

The air-conditioner didn't work.

The scent-organ didn't work.

The musivox didn't work.

One of the Muckfeet put his head in at the door. "Reckon he has," he said thoughtfully and went away again. Alvah heard his voice, more faintly. "You do something, B. J.?"

"Yes," said the girl, "I did something."

Moving warily, Alvah went outside. The girl was standing just below the platform, watching as the Muckfoot men filed down the stair.

"You!" he said to her.

She paid him no attention. "Just one of those things, Luke," she said.

Luke nodded solemnly. "Well, the Fair don't come but once a year." He and the other men moved past her into the crowd, each one acquiring a train of curiosity-seekers as he went. The crowd began to drift away.

A familiar voice yelped, "Ride'm out on a razorback is what

I say!"

A chorus of "Now, Jake!" went up. There were murmurs of dissent, of inquiry, of explanation. "Time for the poultry judging!" somebody called, and the crowd moved faster.

Alvah went dazedly down and climbed into the runabout.

He waggled its power bar. No response.

He tore open his kit and began frantically hauling out one glittery object after another, holding each for an instant and then throwing it on the ground. The razor, the heater, the vacuum cleaner, the sonotube, the vibromasseur.

Swifty rode by, at ease atop his horse-lynx-camel-horror. He

was whistling.

The crowd was almost gone. Among the stragglers was Jake, fists on his pudgy hips, his choleric cheeks gleaming with sweat and satisfaction.

"Well, Mister High-and-Mighty," he called, "what are you

going to do now?"

That was just what Alvah was wondering. He was about a thousand miles from home by air-probably more like fifteen hundred across-country. He had no transportation, no shelter, no power tools, no equipment. He had, he realized with horror, been cut off instantly from everything that made a man civilized.

What was he going to do?

## V

Manager Wytak had his feet on the glossy desktop. So did the Comptroller, narrow-faced old Mr. Creedy; the Director of Information, plump Mr. Kling; the Commissioner of Supply, blotched and pimpled Mr. Jackson; and the porcine Mr. Mc-Ardle, Commissioner of War. With chairs tilted back, they stared through a haze of cigar smoke at each others' stolid faces mirrored on the ceiling.

Wytak's voice was as confident as ever, if a trifle muted, and when the others spoke, he listened. These were not the hired nonentities Alvah had seen; these were the men who had made

Wytak, the electorate with whose consent he governed.

"Jack," said Wytak, "I want you to look at it my way and see if you don't think I'm right. It isn't a question of how long we can hold out—when you get right down and look at it, it's a question of can we do anything."

"In time," said Jackson expressionlessly.

"In time. But if we can do anything, there'll be time enough. You say we've got troubles now and you're right, but I tell you we can pull through a situation a thousand times worse than this —if we've got an answer. And have we got an answer? We have."

Creedy grunted. "Like to see some results, Boley."

"You'll see them. You can't skim a yeast tank the first day, Will."

"You can see the bubbles, though," said Jackson sourly. "Any report from this Gustad today, while we're talking about it?"

"Not yet. He was getting some response yesterday. He's following it up. I trust that boy—the analyzers picked his card out of five million. Wait and see. He'll deliver."

"If you say so, Boley."

"I say so."

Jackson nodded. "That's good enough. Gentlemen?"

In another soundproof, spyproof office in Over Manhattan, Kling and McArdle met again twenty mintues later.

"What do you think?" asked Kling with his meaningless smile.

"Moderately good. I was hoping he would lie about Gustad's report, but of course there was very little chance of that. Wytak is an old hand."

"You admire him?" Kling suggested.

"As a specimen of his type. Wytak pulled us out of a very bad spot in '39."

"Agreed."

"And he has had his uses since then. There are times when brilliant improvisation is better than sound principles—and times when it is not. Wytak is an incurable romantic."

"And you?"

"We," said McArdle grimly, "are realists."

"Oh, yes. But perhaps we are not anything just yet. Creedy is interested, but not convinced—and until he moves, Jackson will do nothing."

"Wytak's project is a failure. You can't do business with the Muckfeet. But the fool was so confident that he didn't even interfere with Gustad's briefing."

Kling leaned forward with interest. "You didn't . . . ?"

"No. It wasn't necessary. But it means that Gustad has no instructions to fake successful reports—and that means Wytak can't stall until he gets back. There was no report today. Suppose there's none tomorrow, or the next day, or the next."

"In that case, of course . . . However, it's always as well to offer something positive. You said you might have something to show me today."

"Yes. Follow me."

In a sealed room at the end of a guarded corridor, five young men were sitting. They leaped to attention when Kling and Mc-Ardle entered.

"At ease," said McArdle. "This gentleman is going to ask you some questions. You may answer freely." He turned to Kling. "Go ahead—ask them anything."

Kling's eyebrows went up delicately, but he looked the young men over, selected one and said, "Your name?"

"Walter B. Limler, sir."

Kling looked mildly pained. "Please don't call me sir. Where do you live?"

"CFF Barracks, Tier Three, McCormick."

"CFF?" said Kling with a frown. "McCormick? I don't place the district. Where is it?"

The young man, who was blond and very earnest, allowed himself to show a slight surprise. "In the Loop," he said.

"And where is the Loop?"

The young man looked definitely startled. He glanced at McArdle, moistened his lips and said, "Well, right here, sir. In Chicago."

Kling's eyebrows went up and then down. He smiled. "I begin to see," he murmured to McArdle. "Very clever."

It cost Alvah two hours' labor, using tools that had never been designed to be operated manually, to get the inspection plate off the motor housing in the floater. He compared the intricate mechanism with the diagrams and photographs in the maintenance handbook. He looked for dust and grime; he checked the moving parts for play; he probed for dislodged wiring plates and corrosion. He did everything the handbook suggested, even spun the flywheel and was positive he felt the floater lift a fraction of an inch beneath him. As far as he could tell, there was absolutely nothing wrong, unless the trouble was in the core of the motor itself—the force-field that rotated the axle that made everything go.

The core casing had an "easily removable" segment, meaning to say that Alvah was able to get it off in three hours more.

Inside, there was no resistance to his cautious finger. The spool-shaped hollow space was empty.

Under Motor Force-field Inoperative the manual said simply: Remove and replace rhodopalladium nodules.

Alvah looked. He found the tiny sockets where the nodules ought to be, one in the flanged axle-head, the other facing it at the opposite end of the chamber. The nodules were not there at all.

Alvah went into the storage chamber. Ignoring the increasingly forceful protests of his empty stomach, he spent a furious twenty minutes locating the spare nodules. He stripped the seal off the box and lifted the lid with great care.

There were the nodules. And there, appearing out of nowhere, was a whirling cloud of brightness that settled briefly in the box and then went back where it came from. And there the nodules were gone.

Alvah stared at the empty box. He poked his forefinger into the cushioned niches, one after the other. Then he set the box down with care, about-faced, walked outside to the platform and sat down on the top step with his chin on his fists.

"You look peaked," said B. J.'s firm voice. Alvah looked up at her briefly. "Go away." "Had anything to eat today?" the girl asked.

Alvah did not reply.

"Don't sulk," she said. "You've got a problem. We feel re-

sponsible. Maybe there's something we can do to help."

Alvah stood up slowly. He looked her over carefully, from top to bottom and back again. "There is one thing you could do for me," he said. "Smile."

"Why?" she asked cagily.

"I wanted to see your fangs." He turned wearily and went into the floater.

He puttered around for a few minutes, then got cold rations out of the storage chamber and sat down in the control chair to eat them. But the place was odious to him with its gleaming, useless array of gadgetry, and he went outside again and sat down with his back to the hull near the doorway. The girl was still there, looking up at him.

"Look," she said, "I'm sorry about this."

The nutloaf went down his gullet in one solid lump and hit his stomach like a stone. "Please don't mention it," he said bitterly. "It was really nothing at all."

"I had to do it. You might have killed somebody."

Alvah tried another bite. Chewing the stuff, at any rate, gave him something to do. "What were those things?" he demanded.

"Metallophage," she said. "They eat metals in the platinum family. Hard to get them that selective—we weren't exactly sure what would happen."

Alvah put down the remnant of nutloaf slowly. "Who's

'we'? You and Bither?"

"Mostly."

"And you-you bred those things to eat rhodopalladium?"

She nodded.

"Then you must have some to feed them," said Alvah logically. He stood up and gripped the railing. "Give it to me."

She hesitated. "There might be some-"

"Might be? There must be!"

"You don't understand. They don't actually eat the metal—not for nourishment, that is."

"Then what do they do with it?"

"They build nests," she told him. "But come on over to the lab and we'll see."

At the laboratory door, they were still arguing. "For the last time," said Alvah, "I will not come in. I've just eaten half a nutcake and I haven't got food to waste. Get the stuff and bring it out."

"For the last time," said B. J., "get it out of your head that what you want is all that counts. If you want me to look for the metal, you'll come in, and that's flat."

They glared at each other. Well, he told himself resignedly, he hadn't wanted that nutloaf much in the first place.

They followed the same route, past the things that chirruped, croaked, rumbled, rustled. The main thing, he recalled, was to keep your mind off it.

"Tell me something," he said to her trim back. "If I hadn't got myself mixed up with that farmer and his market basket, do you still think I wouldn't have sold anything?"

"That's right."

"Well, why not? Why all this resistance to machinery? Is it a taboo of some kind?"

She said nothing for a moment.

"Is it because you're afraid the Cities will get a hold on you?" Alvah insisted. "Because that's foolish. Our interests are really the same as yours. We don't just want to sell you stuff—we want to help you help yourselves. The more prosperous you get, the better for us."

"It's not that," she said.

"Well, what then? It's been bothering me. You've got all these raw materials, all this land. You wouldn't have to wait for us—you could have built your own factories, made your own machines. But you never have. I can't understand why."

"It's not worth the trouble."

He choked. "Anything is worth the trouble, if it helps you do the same work more efficiently, more intel—"

"Wait a minute." She stopped a woman who was passing in the aisle between the cages. "Marge, where's Doc?"

"Down in roundworms, I think."

"Tell him I have to see him, will you? It's urgent. We'll wait in here." She led the way into a windowless room, as small and cluttered as any Alvah had seen.

"Now," she said. "We don't make a fuss about machines because most people simply haven't any need for them."

"That's ridiculous," Alvah argued. "You may think-"

"Be quiet and let me finish. We haven't got centralized industries or power installations. Why do you think the Cities have never beaten us in a war, as often as they've tried? Why do you think we've taken over the whole world, except for twenty-two Cities? You've got to face this sooner or later—in every single respect, our plants and animals are more efficient than any machine you could build."

Alvah inspected her closely. Her eyes were intent and brilliant. Her bosom indicated deep and steady breathing. To all appearance, she was perfectly serious.

"Nuts," he replied with dignity.

B. J. shook her head impatiently. "I know you've got a brain. Use it. What's the most expensive item that goes into a machine?"

"Metal. We're a little short of it, to tell the truth."

"Think again. What are all your gadgets supposed to save?" "Well, labor."

"Human labor. If metal is expensive, it's because it costs a lot of man-hours."

"If you want to look at it that way-"

"It's true, isn't it? Why is a complicated thing more expensive than a simple one? More man-hours to make it. Why is a rare thing more expensive than a common one? More man-hours to find it. Why is a—"

"All right, what's your point?"

"Take your runabout. You saw that was the thing that interested people most, but I'll show you why you never could have sold one. How many man-hours went into manufacturing it?"

Alvah shifted restlessly. "It isn't in production. It's a trade

item."

She sniffed. "Suppose it was in production. Make an honest guess. Figure in everything—amortization on the plant and equipment, materials, labor and so on. You can check your answer against wages and prices in your own money—you'll come pretty close."

Alvah reflected. "Between seven-fifty and a thousand."

"Compare that with Swifty's Morgan Gamma—the thing you raced against. Two man-hours—just two, and I'm being generous."

"Interesting," said Alvah, "if true." He suppressed an uneasy belch.

"Figure it out. An hour for the vet when he was foaled. Call it another hour for amortization on the stable where it happened, but that's too much. It isn't hard to grow a stable and they last a long time."

Alvah, who had been holding his own as long as machines were the topic, wasn't sure he could keep it up—or, more correctly, down. "All right, two hours," he said. "The animals feed themselves and water themselves, no doubt."

"They do, but that comes under upkeep. Our animals forage, most of them—all the big ones. The rest are cheap and easy to feed. Your machines have to be fueled. Our animals repair themselves, like any living organism, only better and faster. Your machines have to be repaired and serviced. More man-hours. Incidentally, if you and Swifty took a ten-hour trip, you in your

runabout, him on his Morgan, you'd spend just ten hours steering. Swifty would spend maybe fifteen minutes all told. And now we come to the payoff—"

"Some other time," said Alvah irritably.

"This is important. When your runabout-"

"I'd rather not talk about it any more," said Alvah, raising

his voice. "Do you mind?"

"When your runabout breaks down and can't be fixed," she said firmly, "you have to buy another. Swifty's mare drops twins every year. There. Think about it."

The door opened and Bither came in, looking more disheveled than ever. "Hello, Beej, Alvah. Beej, I think we should used annelid stock for this job. These F<sub>3</sub> batches no good at—you two arguing?"

Alvah recovered himself with an effort. "Rhodopalladium,"

he said thickly. "I need about a gram. Have you got it?"

"Not a scrap," said Bither cheerfully. "Except in the nests, of course."

"I told him I didn't think so," B. J. said.

Alvah closed his eyes for a second. "Where," he asked care-

fully, "are the nests?"

"Wish I knew," Bither admitted. "It's frustrating as hell. You see, we had to make them awful small and quick, the metallophage. Once you let them out of the sacs, there's no holding them. We did so good a job, we can't check to see how good a job we did." He rubbed his chin thoughtfully. "Of course, that's beside the point. Even if we had the metals, how would you get the alloy you need?"

"Palladium," said the girl, "melts at fifteen fifty-three Centi-

grade. I asked the hand bird."

"Best we can get out of a salamander is about six hundred," Bither added. "Isn't good for them, either—they get esophagitis."

"And necrosis," the girl said, watching Alvah intently.

His eyes were watering. It was hard to see. "Are you telling-"

"We're trying to tell you," she said, "that you can't go back. You've got to start getting used to the idea. There isn't a thing you can do except settle down here and learn to live with us."

Alvah could feel his jaw working, but no words were coming out. The bulge of nausea in his middle was squeezing its way

inexorably upward.

Somebody grabbed his arm. "In there!" said Bither urgently.

A door opened and closed behind him, and he found himself facing a hideous white-porcelain antique with a pool of water in it. There was a roaring in his ears, but before the first spasm took him, he could hear the girl's and Bither's voices faintly from the other room:

"Eight minutes that time."

"Beej, I don't know."

"We can do it!"

"Well, I suppose we can, but can we do it before he starves?"

There was a sink in the room, but Alvah would sooner have drunk poison. He fumbled in his disordered kit until he found the condenser canteen. He rinsed out his mouth, took a tonus capsule and a mint lozenge. He opened the door.

"Feeling better?" asked the girl.

Alvah stared at her, retched feebly and fled back into the washroom.

When he came out again, Bither said, "He's had enough, Beej. Let's take him out in the courtyard till he gets his strength back."

They moved toward him. Alvah said weakly, but with feeling, "Keep your itchy hands off me." He walked unsteadily past them, turned when he reached the doorway. "I hate to urp and run, but I'll never forget your hospitality. If there's ever anything I can do for you—anything at all—please hesitate to call on me."

He heard muttering voices and an odd scraping sound behind him, but he didn't look back. He was halfway down the aisle between the cages when something furry and gray scuttled into view and sat up, grinning at him.

It looked like an ordinary capuchin monkey except for its

head, which was grotesquely large. "Go away," said Alvah. He advanced with threatening gestures. The thing chattered at him and stayed where it was.

The aisle behind him was deserted. Very well, there were other exits. Alvah followed his nose back into the plant section and turned right.

There was the monkey-thing again.

At the next intersection of aisles, there were two of them. Alvah turned left.

And right.

And left.

And emerged into a large empty space enclosed by buildings.

"This is the courtyard," said Bither, coming forward with the girl behind him. "Now be reasonable, Alvah. You want to get back to New York, don't you?"

This did not seem to call for comment. Alvah stared at him in silence.

"Well," said Bither, "there's just one way you can do it. It won't be easy—I don't even say you got more than a fighting chance. One thing, though—it's up to you just how hard you make it for yourself."

"Get to the point," Alvah said.

"You got to let us decondition you so you can eat our food, ride on our animals. Now *think* about it, don't just—"

Alvah swung around, looking for the fastest and most direct exit. Before he had time to find it, a dizzying thought struck him and he turned back.

"Is that what this whole thing has been about?" he challenged. He glared at Bither, then at B. J. "Is that the reason you were so helpful? Did you engineer that fight?"

Bither clucked unhappily. "Would we admit it if we did? Alvah, I'll admit this much—of course we interested in you for our own reasons. This is the first time in thirty years we had a chance to

study a City man. But what I just told you is true. If you want to get back home, this is your only chance."

"Then I'm a dead man," said Alvah.

"You is if you think you is," Bither told him. "Beej, you try." She looked at Alvah levelly. "You think what we suggesting isn't possible. Right?"

"Discounting Doc's grammar," Alvah said sourly, "that's ex-

actly what I'm thinking."

She said, "Doc's grammar is all right—yours is sixty years out of date. But I guess you already realize that your people are backward compared to us."

Half angry, half curious, Alvah demanded, "Just how do

you figure that?"

"Easy. You probably don't know much biology, but you must know this much. What's the one quality that makes human beings the dominant race on this planet?"

Alvah snorted. "Are you trying to tell me I'm not as bright

as a Muckfoot?"

"Not intelligence. Try again. Something more general—intelligence is only a special phase of it."

Alvah's patience was narrowing to a thin and brittle thread.

"You tell me."

"All right. We like to think intelligence is important, but you can't argue that way. It's special pleading—the way a whale might argue that size is the measuring stick, or a microbe might say numbers. But—"

"Control of environment," Alvah said.

"Right. Another name for it is adaptability. No other organism is so independent of environment, so adaptable as Man. And we could live in New York if we had to, just as we can live in the Arctic Circle or the tropics. And, since you don't dare even try to live here . . ."

"All right," Alvah said bitterly. "When do we start?"

He refused to be hypnotized. "You promised to help," B. J. said in annoyance. "We can't break the conditioning till we find out

how it was done, you big oaf!"

"The whole thing is ridiculous anyhow," Alvah pointed out. "I said I'd let you try and I will—you can prod me around to your heart's content—but not that. I've put in a lot of Required Contribution time in restricted laboratories. Military secrets. How do I know you wouldn't ask me about those if you got me under?"

"We're not interested in-" B. J. began furiously, but Bither

cut her off.

"We is, though, Beej. Might be important for us to know what kind of defenses New York has built up, and I going to ask him if I got the chance." He sighed. "Well, there other ways to skin a glovebeast. Lean back and relax, Alvah."

"No tricks?" Alvah asked suspiciously.

"No, we just going to try to improve your conscious recall. Relax now; close your eyes. Now think of a room, one that's familiar to you, and describe it to me. Take your time . . . Now we going further back—further back. You three years old and you

just dropped something on the floor. What is it?"

Bither seemed to know what he was doing, Alvah had to admit. Day after day they dredged up bits and scraps of memory from his childhood, events he had forgotten so completely that he would almost have sworn they had never happened. At first, all of them seemed trivial and irrelevant, but even so, Alvah found, there was an unexpected fascination in this search through the dusty attics of his mind. Once they hit something that made Bither sit up sharply—a dark figure holding something furry, and an accompanying remembered stench.

Whether or not it had been as important as Bither seemed to think, they never got it back again. But they did get other things—an obscene couplet about the Muckfeet that had been popular in P.S. 9073 when Alvah was ten; a scene from a realie

feature called Nix on the Stix; a whispered horror story; a frightening stereo picture in a magazine.

"What we have to do," B. J. told him at one point, "is to make you realize that none of this was your own idea. They made you feel this way. They did it to you."

"Well, I know that," said Alvah.

She stared at him in astonishment. "You knew it all along—and you don't care?"

"No." Alvah felt puzzled and irritated. "Why should I?"
"Don't you think they should have let you make up your
own mind?"

Alvah considered this. "You have to make your children see things the way you do, otherwise there wouldn't be any continuity from one generation to the next. You couldn't keep any kind of civilization going. Where would we be if we let people wander off into the Sticks and become Muckfeet?"

He finished triumphantly, but she didn't react properly. She merely grinned with an exasperating air of satisfaction and said, "Why should they want to—unless we can give them a better life than the Cities can?"

This was absurd, but Alvah couldn't find the one answer that would flatten her, no matter how long and often he mulled it over. Meanwhile, his tolerance of Muckfoot dwellings progressed from ten minutes to thirty, to an hour, to a full day. He didn't like it and nothing, he knew, could ever make him like it, but he could stand it. He was able to ride for short distances on Muckfoot animals, and he was even training himself to wear an animal-hide belt for longer and longer periods each day. But he still couldn't eat Muckfoot food—the bare thought of it still nauseated him—and his own supplies were running short.

Oddly, he didn't feel as anxious about it as he should have. He could sense the resistance within him softening day by day. He was irrationally sure that that last obstacle would go, too, when the time came. Something else was bothering him, some-

thing he couldn't even name-but he dreamed of it at night and

its symbol was the threatening vast arch of the sky.

After the Fair was over, it seemed that B. J. had very little work to do. As far as Alvah could make out, the same was true of everybody. The settlement grew mortuary-still. For an hour or so every morning, lackadaisical trading went on in the central market place. In the evenings, sometimes, there was music of a sort and a species of complicated ungainly folk-dancing. The rest of the time, children raced through the streets and across the pastures, playing incomprehensible games. Their elders, when they were visible, sat—on doorsteps by ones and twos, grouped on porches and lawns—their hands busy, oftener than not, with some trifle of carving or needlework, but their faces as blank and sleepy as a frog's in the Sun.

"What do you do for excitement around here?" he asked

B. J. in a dither of boredom.

She looked at him oddly. "We work. We make things, or watch things grow. But maybe that's not the kind of excitement you mean."

"It isn't, but let it go."

"Our simple pleasures probably wouldn't interest you," she said reflectively. "They're pretty dull. We dance, go riding, swim in the lake . . ."

So they swam.

It wasn't bad. It was unsettling to have no place to swim to—you had to head out from the shore, gauging your distance, and then turn around to go back—but the lake, to Alvah's considerable surprise, was clearer and better-tasting than any pool he'd ever been in.

Lying on the grass afterward was a novel sensation, too. It was comfortable—no, it was nothing of the sort; the grass blades prickled and the ground was lumpy. Not comfortable, but—comforting. It was the weight, he thought lazily, the massive mother-weight of the whole Earth cradling you—the endless slow pendulum-swing you felt when you closed your eyes.

He sat up, feeling cheerfully torpid. B. J. was lying on her back beside him, eyes shut, one arm flung back behind her head. It was a graceful pose. In a detached way, he admired it, first in general and then in particular—the fine texture of her skin, the firmness of her bosom under the halter that half-covered it, the delicate tint of her closed eyelids—the catalogue prolonged itself, and he realized that B. J., when you got a good look at her, was a uniquely lovely girl. He wondered, in passing, how he had missed noticing it before.

She opened her eyes and looked at him. There was a groundswell of some sort and, without particular surprise, Alvah found

himself leaning over and kissing her.

"Beej," he said some time later, "when I go back to New York—I don't suppose you'd want to come with me? I mean—you're different from the others. You're educated, you can read;

even your grammar is good."

"I know you mean it as a compliment and I'm doing my best not to sound ungrateful or hurt your feelings, but . . ." She made a frustrated gesture. "Take the reading—that's a hobby of Doc's and I picked it up from him. It's a primitive skill, Alvah, something like manuscript illuminating. We have better ways now. We don't need it any more. Then the grammar—didn't it ever strike you that I might be using your kind just to make things easier for you?"

She frowned. "I guess that was a mistake. As of now, I quit. No, listen a minute! The only difference between your grammar and ours is that yours is sixty years out of date. You still use 'I am, you are, he is' and all that archaic nonsense of tenses, case and gender. What for? If that's good, suppose we hunted up somebody who said 'I am, thou art, he is,' would his grammar be better than yours?"

nan yours?

"Well-" said Alvah.

"And about New York, I appreciate that. But the Cities are done for, Alvah. In ten years there won't be one left. They're finished."

Alvah stiffened. "That's the most ridiculous-"

"Is it? Then why are you here?"

"Well, we're in a crisis period now, but we've come through them before. You can't—"

"This crisis of yours started a long while ago. If I remember, it was around 1927 that Muller first changed the genes in fruit flies with X-ray bombardment. That was the first step—over a hundred years before you were even born. Then came colchicine and the electron microscope and microsurgery, all in the next thirty years. But the day biological engineering really grew up—1962, Jenkins' and Scripture's gene charts and techniques—the Cities began to go. Little by little, people drifted out to the land again, raising the new crops, growing the new animals.

"The big Cities cannibalized the little ones, like an insect eating its own body when its food supply runs out. Now that's gone as far as it can, and you think it's just another crisis, but it

isn't. It's the end."

Alvah heard a chill echo of Wytak's words: "Rome fell. Babylon fell. The same thing can happen to New York . . ."

He said, "What am I supposed to be, the rat that leaves the sinking ship?"

She sighed. "Alvah, you got a better brain than that.

"You don't have to think in metaphors or slogans, like a moron. I'm not asking you to join the winning side. That doesn't matter. In a few years there won't be but one side, no matter which way you jump."

"What do you want then?" he asked.

She looked dispirited. "Nothing, I guess. Let's go home."

It was a series of little things after that. There was the time he and Beej, out walking in the cool of the morning, stopped to rest at an isolated house that turned out to be occupied by George Allister of the Coffin clan, the shy little man who'd tried to show Alvah how to make his marks the day he landed.

George, Alvah believed—and questioning of Beej afterward confirmed it—was about as low on the social scale as a Muckfoot could get. But he was his own master. He had a wife and three children and neat fields, with his own animals grazing in them. His house was big and cool and clean. He poured them lemonade—which Alvah wistfully had to decline—from a sweating peacock-blue pitcher, while sitting at his ease on the broad front porch.

There were no servants among the Muckfeet. Alvah remembered an ancient fear of his, something that had cropped up in the old days every time he got seriously interested in a girl—that his children, if any, might relapse into the labor-pool category from which he had risen or—it was hard to say which would be worse—into the servants' estate.

He went back from that outing very silent and thoughtful. There was the time, a few days later, when Beej was working, and Alvah, at loose ends, wandered into a room in the laboratory building where two of Bither's assistants, girls he knew by sight, were sitting with two large, leathery-woody, pod-shaped boxes open on the bench between them.

Being hungry for company and preoccupied with himself at the same time, he didn't notice what should have been obvious, that the girls were busy at something private and personal. Even when they closed the boxes between them, he wasn't warned. "What's this?" he said cheerfully. "Can I see?"

They glanced at each other uncertainly. "These is our bride boxes," said the brunette. "We don't usually show them to singletons—"

They exchanged another glance.

"He's spoke for anyhow," said the redhead, with an enigmatic look at Alvah.

They opened the boxes. Inside each was a multitude of tiny compartments, each with a bit of something wrapped in cloth or paper tissue. The brunette chose one of the largest and unwrapped it with exaggerated care—an amorphous reddish-brown lump.

"Houseplant," she said, and wrapped it up again.

The redhead showed him a vial full of minuscule white

spheres. "Weaver eggs. Two hundred of them. That's a lot, but I like more curtains and things than most."

"Wait a minute," said Alvah, perplexed. "What does a house-

plant do?"

"Grow a house, of course," the brunette said. She held up another vial full of eggs. "Scavengers."

The redhead had a translucent sac with dark specks in it. "Utility trees."

"Garbage converter."

"This grows into a bed and these is chairbushes."

And so on, interminably, while the girls' eyes glittered and their cheeks flushed with enthusiasm.

The boxes, Alvah gathered, contained the germs of everything that would be needed to set up a Muckfoot household—beginning with the house itself. A thought struck him: "Does Beej have one of these outfits?"

Wide-eyed stares from both girls. "Well, of course!"

Alvah shifted uncomfortably. "Funny, she never mentioned it."

The girls exchanged another of those enigmatic glances and said nothing. Alvah, for some reason, grew more uncomfortable still. He tried once more. "What about the man—doesn't he have to put up anything?"

Yes, the man was expected to supply all the brutes and the seeds for outbuildings and all the crops except the bride's kitchengarden. Everything in and around the home was her province, everything outside was his.

"Oh," said Alvah.

"But if a young fellow don't have all that through no fault of his own, his clan put up for him and let him pay back when he able."

"Ah," said Alvah and turned to make his escape.

The redhead called after him, "You thought any about what clan you like to get adopted into, Alvah?"

"Uh, no," said Alvah. "I don't think-"

"You talk to Doc Bither. He a elder of the Steins. Mighty good clan!"

Alvah bolted.

Then there was the Shakespeare business. It began in his third week in the Sticks, when he was already carrying a fleshy Muckfoot vegetable around with him—a radnip, B. J. called it. He hadn't had the nerve yet to bite into it, but he knew the time was coming when he would. Beej came to him and said, "Alvah, the Rinaldos' drama group is doing *Hamlet* next Saturday, and they're short a Polonius. Do you think you could study it up by then?"

"What's Hamlet? And who's Polonius?"

She got the bird out of the library for him and he listened to the play, which turned out to be an archaic version of *The Manager of Copenhagen*. The text was nothing like the modernized abridgment he was used to, or the Muckfeet's slovenly speech either. It was full of words like *down-gyved* and *unkennel*. It was three-quarters incomprehensible until he began to get the hang of it, but it had a curious power. For who would bear the whips and scorns of time, the oppressor's wrong, the proud man's contumely, the pangs of despised love, and so on and so on. It rumbled, but it rumbled well.

Polonius, however, was the character Alvah knew as Paul Arnson, an inconsequential old man who only existed in the play to foul up the love affair between the principals and got killed in the third act. Alvah ventured to suggest that he might be of more use as Hamlet, but the director, a dry little man with a surprising boom to his voice, stubbornly insisted that all he needed was a Polonius—and seemed to intimate, without actually saying so, that Alvah was a dim prospect even for that.

Alvah, with blood in his eye, accepted the part.

The rehearsals were a nightmare. The lines themselves gave him no trouble—Alvah was a quick study; in the realies, you had to be—and neither, at first, did the rustic crudity of the stage he was asked to perform on. Letter-perfect when the other actors were still stuttering and blowing their lines, he walked through the part with quiet competence and put the director's sour looks down to a witless hayseed hostility—until, three days before the performance, he suddenly awoke to the realization that everyone else in the cast was acting rings around him.

This wasn't the realies. There were no microphones to amplify his voice, no cameras to record every change in his expression. And the audience, what there was of it, was going to be right—out—there.

Alvah went to pieces. Trying to emulate the others' wide gestures and declamatory delivery only threw him further off his stride. He had never had stagefright in his life, but by curtain time on Saturday night, he was a pale and quivering wreck.

Dead and dragged off the stage at the end of act three, he got listlessly back into his own clothes and headed for an inconspicuous exit, but the director waylaid him. "Gustad," he said abruptly, "you ever thought of yourself as a professional actor?"

"I had some such idea at one time," Alvah said. "Why?"
"Well, I don't see why you shouldn't. If you work at it. I
never see a man pick up so fast."

"What?" cried Alvah, thunderstruck.

"You wasn't bad," said the director. "A few rough edges, but a good performance. Now I happen to know some people in a few repertory companies—the Mondrillo Troupe, the Kalfoglou Repertory, one or two more. If you interested, I'll bird them and see if there's an opening. Don't thank me, don't thank me." He moved off a few steps, then turned. "Oh, and, Gustad—get back into your costume, will you?"

"Uh," said Alvah. "But I'm dead. I mean-"

"For the curtain calls," said the director. "You don't want to miss those." He waved and walked back into the wings.

Alvah absently drew out his radnip and crunched off a bite of it. The taste was faintly unpleasant, like that of old protein paste or the wrong variety of culture-cheese, but he chewed and swallowed it.

That was when he realized that he had to get out. He didn't put on his costume again. Instead, he rummaged through the property boxes until he found an old pair of moleskin trousers and a stained squareweb shirt. He put them on, left by the rear door and headed south.

South for two reasons. First, because, he hoped, no one would look for him in that direction. Second, because he remembered what Beej had said that first day when they passed the display of tools: "The metal comes from Iron Pits, just a few miles south of here."

There might be some slender chance still that he could get the metal he needed, delouse the floater and go home in style without the painful necessity of explaining to Wytak what had happened to the floater and all his goods and equipment. If not, he would simply keep on walking.

He had to do it now. He had almost waited too long as it was.

They had laid out the pattern of a life for him—to marry Beej, settle down in a house that would grow from a seed Beej kept in a pod-shaped box, be a rustic repertory actor, raise little Muckfeet. And the devil of it was, some unreasonable part of him wanted all of that!

A good thing he hadn't stayed for the curtain calls . . .

The Sun declined as he went, until he was walking down a ghost-dim road under the stars, with all the cool cricket-shrill world to himself.

He spent the night uncomfortably huddled under a hedge. Birds woke him with a great clamor in the tree-tops shortly after dawn. He washed himself and drank from a stream that crossed the fields, ate a purplish-red fruit he found growing nearby, then moved on.

Two hours later, he topped a ridge and found his way barred by a miles-long shallow depression in the Earth. Like the rest of the visible landscape, it was filled with an orderly checkerwork of growing plants. There was nothing for it but to go through if he could. But surely he had gone more than "a few miles" by now?

The road slanted down the embankment to a gate in a high thorn hedge. Behind the gate was a kind of miniature domed kiosk and, in the kiosk, a sunburned man was dozing with a green-and-purple bird on his shoulder.

Alvah inspected a signboard that was entangled somehow in the hedge next to the gate. He was familiar enough by now with the Muckfeet's picture-writing to be fairly sure of what it said. The first symbol was a nail with an ax-head attached to it. That was *iron*. The second was a few stylized things that resembled fruit seeds. *Pits?* 

He stared through the gate in mounting perplexity. You might call the place like this "Pits," all right, but imagination boggled at calling it a mine. Still . . .

The kiosk, he noticed now, bore a scrawled symbol in orange pigment. He recognized that one, too; it was one of the common name-signs.

"Jerry!" he called.

"Rrk," remarked the bird on the sleeping man's shoulder. "Kerry brogue; but the degradation of speech that occurs in London, Glasgow—"

"Oh, damn!" said Alvah. "You, there. Jerry!"

"Rrk. Kerry brogue; but the-"

"Jerry!"

"Kerry brogue!" shrieked the bird. The sunburned man sat up with a start and seized it by the beak, choking it off in the middle of "degradation."

"Oh, hello," he said. "Don't know what it is about a Shaw

bird, but they all alike. Can't shut them up."

"I'd like," said Alvah, "to look through the—uh—Pits. Would that be all right?"

"Sure," the man said cheerfully. He opened the gate and led the way down a long avenue between foot-high rows of plants. "I Jerry Finch," he said. "Littleton clan. Don't believe you said your name."

"Harris," Alvah supplied at random. "I visiting from up

"Yukes?" the man inquired.

Alvah nodded, hoping for the best, and pointed at the plants

they were passing. "What these?"

"Hinge blanks. Let them to forage last month. Won't have another crop here till August, and a poor one then. I tell Angus—he's the Pit boss—I tell him this soil's wore out, but he a pincher—squeeze the last ton out and then go after the pounds and ounces. You should seen what come off the ringbushes in the east hundred this April. Pitiful. Had to sell them for eyelets."

A cold feeling was running up Alvah's spine. He cleared his throat. "Got any knife blades?" he inquired with careful

casualness.

"Mean bowies? Well, sure-right over yonder."

Alvah followed him to the end of the field and down three steps into the next. The plants here were much taller and darker, with stems thick and gnarled out of all proportion to their height. Here and there among the glossy leaves were incongruous glints of silvery steel.

Alvah stooped and peered into the foliage.

The silvery glints were perfectly formed six-inch chrome-steel knife blades. Each was attached to—growing from—the plant by way of a hard brown stem, exactly the right size and shape to serve as a handle.

He straightened carefully. "We do things a little different up north. You mind explaining briefly how the Pits works?"

Jerry looked surprised, but began readily enough. "These like any other ferropositors. They extract the metal from the ores and deposit it in the bowie shape, or whatever it might be. Work from the outside in, of course, so you don't have no wood core to weaken it. We get a year's crops, average, before the ore used up.

Then we bring the Earth-movers in, deepen the Pit a few feet, reseed and start over. Ain't much more to it."

Alvah stared at the fantastic growths. Well, why not? Plants that grew into knives or doorknobs or . . .

"What about alloys?" he asked.

"We got iron, lead and zinc. Carbon from the air. Other metals we got to import in granules. Like we get chrome from the Northwest Federation, mostly. They getting too big for their britches, though. Greedy. I think we going to switch over to you Yukes before long. Not that you fellows is any better, if you ask me, but at least—"

"Rhodium," said Alvah. "Palladium. What about them?" "How that?"

"Platinum group."

"Oh, sure, I know what you mean. We never use them. No call to. We could get you some, I guess—I think the Northwests got them. Take a few months, though."

"Suppose you wanted to make something out of a rhodopalladium alloy. How long would it take after you got the metals?"

"Well, you have to make a bush that would take and put them together, right proportions, right size, right shape. Depends. I guess if you was in a hurry—"

"Never mind," said Alvah wearily. "Thanks for the informa-

tion." He turned and started back toward the gate.

When he was halfway there, he heard a hullabaloo break out somewhere behind him.

"Waw!" the voices seemed to be shouting. "Waw! Waw!"

He turned. A dozen paces behind him, Jerry and the bird on his shoulder were in identical neck-straining attitudes. Beyond them, on the near side of a group of low buildings three hundred yards away, three men were waving their arms madly and shouting, "Waw! Waw!"

"Wawnt to know what it is," the bird squawked. "I wawnt be a Mahn. Violet: you come along with me, to your own—"

"Shut up," said Jerry, then cupped his hands and yelled, "Angus, what is it?"

"Chicagos," the answer drifted back. "Just got word! They

dusting Red Pits! Come on!"

Jerry darted a glance over his shoulder. "Come on!" he repeated and broke into a loping run toward the buildings.

Alvah hesitated an instant, then followed. With strenuous effort, he managed to catch up to the other man. "Where are we running to?" he panted. "Red Pits?"

"Don't talk foolish," Jerry gasped. "We running to shelter." He glanced back the way they had come. "Red Pits over that

way."

Alvah risked a look and then another. The first time, he wasn't sure. The second time, the dusting of tiny particles over the horizon had grown to a cluster of visibly swelling black dots.

Other running figures were converging on the buildings as Angus and Jerry approached. The dots were capsule shapes, perceptibly elongated, the size of a fingernail, a thumbnail, a thumb...

And under them on the land was a hurtling streak of goldendun haze, like dust stirred by a huge invisible finger.

Rounding the corner of the nearest building, Jerry popped

through an open doorway. Alvah followed-

And was promptly seized from either side, long enough for something heavy and hard to hit him savagely on the nape of the neck.

## VII

Bither was intent over a shallow vessel half full of a viscous clear liquid, with a great rounded veined-and-patterned glistening lump immersed in it, transparent in the phosphor-light that glowed from the sides of the container—a single living cell in mitosis, so grossly enlarged that every gene of every paired chromosome was visible. B. J. watched from the other side of the table, silent, breathing carefully, as the man's thick fingers

dipped a hair-thin probe with minuscule precision, again and again, into the yeasty mass, exercising a particle, splitting another, delicately shaving a third.

From time to time, she glanced at a sheet of horn intricately inscribed with numbers and genetic symbols. The chart was there for her benefit, not for Bither's—he never paused or faltered.

Finally, he sat back and covered the pan. "Turn on the lights and put that in the reduction fluid, will you, Beej? I bushed."

She whistled a clear note, and the dark globes fixed to the ceiling glowed to blue-white life. "You going to grow it right away?"

"Have to, I guess. Dammit, Beej, I hate making weapons."

"Not our choice. When you think it be?"

He shrugged. "War meeting this afternoon over at Council Flats. They let us know when it be."

She was silent until she had transferred the living lump from one container to another and put it away. Then, "Hear anything more?"

"They dusting every ore-bed from here to the Illinois, look

like. Crystal, Butler's-"

"Butler's! That worked out."

"I know it. We let them land there. They find out." After another pause, Bither said, "No word about Alvah, Beej. I sorry."

She nodded. "Wouldn't be, this early."

He looked at her curiously. "You still think he be back?"

"If the dust ain't got him. Lay you odds."

"Well," said Bither, lifting the cover of another pan to peer into it, "I hope you—"

"Ozark Lake nine-one-two-five," said a reedy voice from the

corner. "Ozark Lake nine-"

"Get that, will you, Beej?"

B. J. picked up the ocher spheroid from its shelf and said into its tympanum, "Bither Laboratories."

"This Angus Littleton at Iron Pits," the thing said. "Let me talk to Bither."

She passed it over, holding a loop of its rubbery cord—the beginning of a miles-long sheathed bundle of cultivated neurons that linked it, via a "switchboard" organism, with thousands like it in this area alone, and with millions more across the continent.

"This Doc Bither. What is it, Angus?"

"Something funny for you, Doc. We got a couple prisoners here, one a floater pilot, other a Chicago spy."

"Well, what you want me to-"

"Wait, can't you? This spy claim he know you, Doc. Say his name Custard. Alvah Custard."

Alvah stared out through the window, puzzled and angry. He had been in the room for about half an hour, while things were going on outside. He had tried to break the window. The pane had bent slightly. It was neither glass nor plastic, and it wasn't breakable.

Outside, the last of the invading floaters was dipping down toward the horizon, pursued by a small darting black shape. Golden-dun haze obscured all the foreground except the first few rows of plants, which were drooping on their stems. The squadron had made one grand circle of the mine area, dusting as they went, before the Muckfeet on their incredibly swift flyers—birds or reptiles, Alvah couldn't tell which—had risen to engage them. Since then, a light breeze from the north had carried the stuff dropped over the Pits: radioactive dust with a gravitostatic charge to make it rebound and spread—and then, with its polarity reversed, cling like grim death where it fell.

He turned and looked at the other man, sitting blank-faced and inattentive, wearing rumpled sky-blue uniform, on the bench against the inner wall. Most of the squadron had flown off to the west after that first pass, and had either escaped or been forced down somewhere beyond the Pits. This fellow had crashlanded in the fields not five hundred yards from Alvah's window. Alvah had seen the Muckfeet walking out to the wreck—strolling fantastically through the deadly haze—and turkey-trotting their

prisoner back again. A little later, someone had opened the door and shoved the man in, and there he had sat ever since.

His skin-color was all right. He was breathing evenly and seemed in no discomfort. As far as Alvah could see, there was not a speck of the death-dust anywhere on his skin, hair or clothing. But mad as it was, this was not the most incongruous thing about him.

His uniform was of a cut and pattern that Alvah had seen only in pictures. There was a C on each gleaming button and, on the bar of the epaulette, CHICAGOLAND. In short, he was evidently a Floater Force officer from Chicago. The only trouble was that Alvah recognized him. He was a grips by day at the Seven Boroughs studios, famous for his dirty jokes, which he acquired at his night job in the Under Queens Power Station. He was a lieutenant j.g. in the N. Y. F. F. Reserve, and his name was Joe "Dimples" Mundry.

Alvah went over and sat down beside him again. Mundry's normally jovial face was set in wooden lines. His eyes focused on Alvah, but without recognition.

"Joe-"

"My name," said Mundry obstinately, "is Bertram Palmer, Float Lieutenant, Windy City Regulars. My serial number is 79016935."

That was the only tune he knew. Alvah hadn't been able to get another word out of him. Name, rank and serial number—that was normal. Members of the armed services were naturally conditioned to say nothing else if captured. But why throw in the name of his outfit?

One, that was the way they did things in Chicago, and there just happened to be a Chicago soldier who looked and talked exactly like Joe Mundry, who had the same scars on his knuckles from brawls with the generator monkeys. Two, Alvah's mind had snapped. Three, this was a ringer foisted on Alvah for some incomprehensible purpose by the Muckfeet. And four—a wild and terrible suspicion . . .

Alvah tried again. "Listen, Joe, I'm your friend. We're on the same side. I'm not a Muckfoot."

"My name is Bertram Palmer, Float Lieutenant-"

"Joe, I'm leveling with you. Listen—remember the Music Hall story, the one about the man who could . . ." Alvah explained in detail what the man could do. It was obscenely improbable and very funny, if you liked that sort of thing, and it was a story Joe had told him two days before he left New York.

A gleam of intelligence came into Joe's eyes. "What's the

punchline?" he demanded.

"'What the hell did you want to change the key on me for?'"
Alvah replied promptly.

Joe looked at him speculatively. "That might be a old joke. Maybe they even know it in the Sticks. And my name isn't Joe."

He really believed he was Bertram Palmer of the Windy City Regulars, that much seemed clear. Also, if it was possible that the Muckfeet knew that story, it was likelier still that the Chicagolanders knew it.

"All right," said Alvah, "ask me a question—something I couldn't know if I were a Muckfoot. Go ahead, anything. A place, or something that happened recently, or whatever you

want."

A visible struggle was going on behind Joe's face. "Can't think of anything," he said at last. "Funny."

Alvah had been watching him closely. "Let's try this. Did you see Manhattan Morons?"

Joe looked blank. "What?"

"The realie. You mean you missed it? Manhattan Morons? Till I saw that, I never really knew what a comical bunch of weak-minded, slobber-mouthed, monkey-faced drooling idiots those New Yorkers—"

Joe's expression had not changed, but a dull red flush had crept up over his collar. He made an inarticulate sound and lunged for Alvah's throat.

When Angus Littleton opened the door, with Jerry and B. J. behind him, the two men were rolling on the floor.

"What made you think he was a spy?" B. J. demanded. They were a tight self-conscious group in the corridor. Alvah was nursing a split lip.

"Said he a Yuke," Jerry offered, "but didn't seem too sure, so I said the Yukes greedy. He never turn a hair. And he act like

he never see a mine before. Things like that."

B. J. nodded. "It was a natural mistake, I guess. Well, thanks for calling us, Angus."

"Easy," said Angus, looking glum. "We ain't out of the

rough yet, Beej."

"What do you mean? He didn't have anything to do with this attack—he's from New York."

"He say he is, but how you know? What make you think he

ain't from Chicago?"

Alvah said, "While you're asking that, you might ask another question about him." He jerked a thumb toward the closed door. "What makes you think he is?"

The other three stared at him thoughtfully. "Alvah," Beej

began, "what are you aiming at? Do you think-"

"I'm not sure," Alvah interrupted. "I mean I'm sure, but I'm not sure I want to tell you. Look," he said, turning to Angus, "let me talk to her alone for a few minutes, will you?"

Angus hesitated, then walked away down the hall, followed

by Jerry.

"You've got to explain some things to me about this raid," said Alvah when they were out of hearing. "I saw those floaters dusting and it was the real thing. I can tell by the way the plants withered. But your people were walking around out there. Him, too—the prisoner. How come?"

"Antirads," said the girl. "Little para-insects, like the metallophage—the metallophage was developed from them. When you've been exposed, the antirads pick the dust particles off you and deposit them in radproof pots. They die in the pots, too, and we bury the whole—"

"All right," Alvah said. "How long have you had those

things? Is there any chance the Cities knew about it?"

"The antirads were developed toward the end of the last City war. That was what ended it. At first we stopped the bombing, and then when they used dust— You never heard of any of this?"

"No," Alvah told her. "Third question, what are you going to do about Chicago now, on account of this raid?"

"Pull it down around their ears," B. J. said gravely. "We never did before partly because it wasn't necessary. We knew for the last thirty years that the Cities could never be more than a nuisance to us again. But this isn't just a raid. They've attacked us all over this district—ruined the crops in every mine. We must put an end to it now—not that it makes much difference, this year or ten years from now. And it isn't as if we couldn't save the people . . ."

"Never mind that," said Alvah abstractedly. Then her last

words penetrated. "No, go ahead-what?"

"I started to say, we think we'll be able to save the people, or most of them—partly thanks to what we learned from you. It's just Chicago we're going to destroy, not the—"

"Learned from me?" Alvah repeated. "What do you mean?"

"We learned that, when it's a question of survival, a City man can overcome his conditioning. You proved that. Did you eat the radnip?"

"Yes."

"There, you see? And you'll eat another and, sooner or later, you'll realize they taste good. A human being can learn to like anything that's needful to him. We're adaptable—you can't condition that out of us without breaking us."

Alvah stared at her. "But you spent over two weeks on me. How are you going to do that with fifteen or twenty million

people all at once?"

"We can do it. You were the pilot model—two weeks for you. But now that we know how, we're pretty sure we can do it in three days—the important part, getting them to eat the food. And it's a good thing the storehouses are full, all over this continent."

They looked at each other silently for a moment. "But the Cities have to go," B. J. said.

"Fourth and last question," he said. "If a City knew about your radiation defenses all along, what would be their reason for attacking you this way?"

"Our first idea was that it was just plain desperation—they had to do something and there wasn't anything they could do that would work, so they just did something that wouldn't. Or maybe they hoped they'd be able to hold the mines long enough to get some metal out, even though they knew it was foolish to hope."

"That was your first idea. What was your second?"

She hesitated. "You remember what I told you, that the Cities cannibalized each other for a while, the big ones draining population away from the little ones and reclaiming their metals—and you remember I said that had gone as far as it could?"

"Yes."

"Well, when the big fish have eaten up all the little fish, they can eat each other till there's just one big fish left."

"And?" asked Alvah tensely.

"And maybe one City might think that, if they got us to make war on another, they could step in when the fighting was over and get all the metals they'd need to keep them going for years. So they might send raiding parties out in the other City's uniforms, and condition them to think they really were from that City. Was that what happened, Alvah?"

Alvah nodded reluctantly. "I don't understand it. They must have started planning this as soon as I stopped communicating. It doesn't make sense. They couldn't be that desperate—or maybe they could. Anyway, it's a dirty stunt. It isn't like New York."

She said nothing—too polite to contradict him, Alvah supposed.

Down at the end of the hall, Angus was beginning to look impatient. Alvah said, "So now you'll pull New York down?"

"Alvah, it may sound funny, but I think you know this, really—you're doing your people a favor."

"If that's so," he said wryly, "then New York was 'really'

trying to do one for Chicago."

"I was hoping you'd see that it doesn't matter. It might have been Chicago that went first, or Denver, or any of the others, but that isn't important—they all have to go. What's important is the people. This may be another thing that's hard for you to accept, but they're going to be happier, most of them."

And maybe she was right, Alvah thought, if you counted in everybody, labor pool, porters and all. Why shouldn't you count them, he asked himself defiantly—they were people, weren't they? Maybe the index of civilization was not only how much you had, but how hard you had to work for it—incessantly, like the New Yorkers, holding down two or three jobs at once, because the City's demands were endless—or, like the Muckfeet, judiciously and with honest pleasure.

"Alvah?" said the girl. She put her question no more ex-

plicitly than that, but he knew what she meant.

"Yes, Beej," replied Alvah Gustad, Muckfoot.

## VIII

On the Jersey flats, hidden by a forest of traveler trees, a sprawling settlement took form—mile after mile of forced-growth dwellings, stables, administration buildings, instruction centers. It was one of five. There was another farther north in Jersey, two in the Poconos and one in the vestigial state of Connecticut.

They lay empty, waiting, their roofs sprouting foliage that perfectly counterfeited the surrounding forests. Roads had been cleared, converging toward the City, ending just short of the half-mile strip of wasteland that girdled New York, and it was there that Alvah stood.

He found it strange to feel himself ready to walk unprotected across that stretch of country, knowing it to be acrawl with tiny organisms that had been developed not to tolerate

NATURAL STATE — 287

Man's artificial buildings, whether of stone, metal, cement or plastics, but crumbled them all to the ground. Stranger still to be able to visualize the crawling organisms without horror or disgust.

But the strangest of all was to be looking at the City from this viewpoint. The towers stared back at him across the surrounding wall, tall and shining and proud, the proudest human creation—a century ago. Pitifully outdated today, the gleaming Cities fought back, unaware that they had lost long ago, that their bright spires and elaborate gadgets were as antiquated as polished armor would have been against a dun-painted motorized army.

"I wish I could go with you," said Beej from the breathing

forest at his back.

"You can't," Alvah said without turning. "They wouldn't let you through the gate alive. They know me, but even so, I'm not sure they'll let me in after all this time. Have to wait and see."

"You know you don't have to go. I mean-"

"I know what you mean," said Alvah unhappily, "and you're right. But all the same, I do have to go. Look, Beej, you've got that map I drew. It's a ten-to-one chance that, if I don't make the grade, they'll put me in the quarantine cells right inside the wall. So you're not to worry. Okay?"

"Okay," she promised, worried.

He kissed her and watched her fade back into the forest where the others were—Bither and Artie Brumbacher and a few others from home, the rest Jerseys and other clansmen from the Seaboard Federation—cheerful, matter-of-fact people who were going to bear most of the burdens of what was coming, and never tired of reminding the inlanders of the fact.

He turned and walked out across the wasteland, crunching the dry weeds under his feet.

There was a flaming moat around the City and beyond the moat, high in the wall, a closed gateway—corroded tight, probably; it was a very long time since the City had had any traffic except by

air. But there was a spy tower above the gate. Alvah walked up directly opposite its bulbous idiot eyes, waved, and then waited.

After a long time, an inconspicuous port in the tower squealed open and a fist-sized dark ovoid darted out across the flames. It came to rest in midair, two yards from Alvah, clicked and said crisply, "State your name and business."

"Alvah Gustad. I just got back from a confidential mission for the City Manager. Floater broke down, communicator,

everything. I had to walk back. Tell him I'm here."

The ovoid hovered exactly where it was, as if pinned against the air. Alvah waited. When he got tired of standing, he dropped his improvised knapsack on the ground and sat on it. Finally the ovoid said harshly, in another voice, "Who are you and what do you want?"

Alvah patiently gave the same answer.

"What do you mean, broke down?"

"Broke down," said Alvah. "Wouldn't run any more."

Silence. He settled himself for another long wait, but it was only five minutes or thereabouts before the ovoid said, "Strip."

When he had done so, the gate opposite broke open with a scream of tortured metal and ground itself back into a recess in the wall. The drawbridge, a long rust-pitted tongue of metal, thrust out and down to span the moat, a wall of flame on either side of it.

Alvah walked across nimbly, the metal already hot against his naked soles, and the drawbridge whipped back into its socket. The gate screamed shut.

The room was the same, the anthems were the same. Alvah, disinfected, shaved all over and clad in an airtight glassine overall with its own air supply, stopped short two paces inside the door. The man behind the Manager's desk was not Wytak. It was jowly, red-faced Ellery McArdle, Commissioner of the Department of War.

One of the guards prodded Alvah and he kept going up to

the desk. "Now I think I get it," he said, staring at McArdle. "When-"

McArdle's cold gaze flickered. Then his heavy head dropped forward a trifle, and he said, "Finish what you were saying, Gustad."

"I was about to remark," Alvah said, "that when Wytak's pet project flopped, he lost enough support to let you impeach

him. Is that right?"

McArdle nodded and seemed to lose interest. "Your feet are not swollen or blistered, Gustad. You didn't walk back from the Plains. How did you get here?"

Alvah took a deep breath. "We flew—on a passenger roc—as far as the Adirondacks. We didn't want to alarm you by too much air traffic so near the City, so we joined a freight caravan there."

McArdle's stony face did not alter, but all the meaning went suddenly out of it. It was as if the man himself had stepped back and shut a door. The porter behind his chair swayed and looked as if he were about to faint. Alvah heard one of the guards draw in his breath sharply.

"Fthuh!" said McArdle abruptly, his face contorting. "Let's get this over. What do you know about the military plans of the Muckfeet? Answer me fully. If I'm not satisfied that you do, I'll

have you worked over till I am satisfied."

Alvah, who had been feeling something like St. George and something like a plucked chicken, discovered that anger could be a very comforting thing. "That's what I came here to do," he said tightly. "The Muckfeets' military plans are about what you might have expected, after that lousy trick of yours. They know it wasn't Chicago that raided them."

McArdle started and made as if to rise. Then he sank back,

staring fixedly at Alvah.

"They've had a gutful. They're going to finish New York."
"When?" said McArdle, biting the word off short.

"That depends on you. If you're willing to be reasonable, they'll wait long enough for you to dicker with them. Otherwise, if I'm not back in about an hour, the fun starts."

McArdle touched a stud, "Green alert," pressed the stud again and laced his fingers together on the desk. "Hurry it up," he said to Alvah. "Let's have the rest."

"I'm going to ask you to do something difficult," said Alvah. "It's this—think about what I'm telling you. You're not thinking now, you're just reacting—"

He heard a slight movement behind him, saw McArdle's

eyes flicker and his hand make a Not now gesture.

"You're in the same room with a man who's turned Muckfoot and it disgusts you. You'll be cured of that eventually—you can be, I'm the proof—but all I want you to do now is put it aside and use your brains. Here are the facts. Your raiding parties got the shorts beat off them. I saw one of the fights—it lasted about twenty minutes. The Muckfeet could have polished off the Cities any time in the last thirty years. They haven't done it till now, because—"

McArdle was beating time with his fingertips on the polished ebonite. He wasn't really listening, Alvah saw, but there was nothing for it except to go ahead.

"—they had the problem of deconditioning and re-educating more than twenty million innocent people, or else letting them starve to death. Now they have the knowledge they need. They can—"

"The terms," said McArdle.

"They're going to close down this—this reservation," Alvah said. "They'll satisfy you in any way you like that they can do it by force. If you help, it can be an orderly process in which nobody gets hurt and everybody gets the best possible break. And they'll keep the City intact as a museum. I talked them into that. Or, if they have to, they'll take the place apart slab by slab."

McArdle's mouth was working violently. "Take him out and kill him, for City's sake! And, Morgan!" he called when

Alvah and his guards were halfway to the door.

"Yes, Mr. Manager."

"When you're through, dump him out the gate he came in."

It was a pity about Wytak, Alvah's brain was telling him frozenly. Wytak was a scoundrel or he could never have got where he was—had been—but he wasn't afraid of a new idea. It might have been possible to deal with Wytak.

"Where we going to do it?" the younger one asked nervously. He had been pale and sweating in the floater all the way across

Middle Jersey.

"In the disinfecting chamber," Morgan said, gesturing with his pistol. "Then we haul him straight out. In there, you."

"Well, let's get it over with," the younger one said. "I'm

sick."

"You think I'm not sick?" said Morgan in a strained voice. He gave Alvah a final shove into the middle of the room and stood back, adjusting his gun.

Alvah found himself saying calmly, "Not that way, Morgan, unless you want to turn black and shrivel up a second after."

"What's he talking about?" the boy whispered shakily.

"Nothing," said Morgan. The hand with the gun moved indecisively.

"To puncture me," Alvah warned, "you've got to puncture the suit. And I've been eating Muckfeet food for the last month and a half. I'm full of microorganisms—swarming with them. They'll bloop out of me straight at you, Morgan."

Both men jerked back, as if they had been stung. "I'm get-

ting outa here!" said the boy, grabbing for the door stud.

Morgan blocked him. "Stay here!"

"What're you going to do?" the younger one asked.

He swore briefly. "We'll tell the O.D. Come on."

The door closed and locked solidly behind them. Alvah looked to see if there was a way to double-lock it from his side, but there wasn't. He tried the opposite door to make sure it was locked, which it was. Then he examined the disinfectant nozzles, wondering if they could be used to squirt corrosive in on him. He decided they probably couldn't and, anyhow, he had no way to spike the nozzles. Then there was nothing to do but sit in the middle of the bare room and wait, which he did.

The next thing that happened was that he heard a faint far-off continuous noise through the almost soundproof door. He stood up and went over and put his ear against the door, and decided it was his imagination.

Then there was a noise, and he jumped back, his skin tingling all over, just before the door slid open. The sudden maniacal clangor of a bell swept Morgan into the room with it, wild-eyed, his cap missing, drooling from a corner of his mouth, his gun high in one white-knuckled fist.

"Glah!" said Morgan and pulled the trigger.

Alvah's heart went bonk hard against his ribs, and the room blurred. Then he realized that there hadn't been any hiss of an ejected pellet. And he was still on his feet. And Morgan, with his mouth stretched open all the way back to the uvula, was standing there a yard away, staring at him and pulling the trigger repeatedly.

Alvah stepped forward half a pace and put a straight left squarely on the point of Morgan's jaw. As the man fell, there were shrieks and running footsteps in the outer room. Somebody in Guard uniform plunged past the doorway, shouting incoherently, caromed off a wall, dwindled down a corridor. Then the room was full of leaping men in motley.

The first of them was Artie Brumbacher, almost unrecognizable because he was grinning from ear to ear. He handed Alvah a four-foot knobkerrie and a bulging skin bag and said, "Le's go!"

The streets were full of grounded floaters and stalled surface cars. The bells had fallen silent, and so had the faint omnipresent vibration that was like silence itself until it was gone. Not a motor was turning in the Borough of Jersey. Occasional chittering sounds floated on the air, and muffled buzzings and other odd sounds, all against the background chorus of faraway shrieks that rose and fell.

At the corner of Middle Orange and Weehawken, opposite the Superior Court Building, they came upon a squad of Regulars who had thrown away their useless guns and picked up an odd lot of assorted bludgeons—lengths of pipe, tripods and the like. "Now you'll see," said Artie.

The Regulars set up a ragged yell and came running forward. The two Muckfeet on either side of Alvah, Artie and the buck-toothed one called Lafe, dipped heaping dark-brown handfuls out of the bags they carried slung from their shoulders. Alvah followed suit, and recognized the stuff at last—bran meal, soaked in some fragrant syrup until it was mucilaginous and heavy.

Artie swung first, then Lafe, and Alvah last—and the soggy lumps smacked the foremost faces. The squad broke, wiping frenziedly. But you couldn't wipe the stuff off. It clung coldly and grainily to the hair on the backs of your hands and your eyelashes and the nap of your clothing. All you could do was move it around.

One berserker with a smeared face didn't stop, and Lafe dropped him with a knobkerrie between the eyes. One more, a white-faced youth, stood miraculously untouched, still hefting his club. He took a stride forward menacingly.

Grinning, Artie raised another glob of the mash and ate it, smacking his lips. The youth spun around, walked drunkenly to the nearest wall and was rackingly sick.

An hour later, Knickerbocker Circle in Over Manhattan was littered with ameba-shaped puddles of clear plastic. Overhead, the stuff was hanging in festoons from the reticulated framework of the Roof and, for the first time in a century, an unfiltered wind was blowing into New York. Halfway up the sheer facade of the Old Movie House, the roc that had brought Alvah from Jersey was flapping along, a wingtip almost brushing the louvers, while its rider sprinkled pale dust from a sack. Farther down the street, a sickly green growth was already visible on cornices and window frames.

The antique neon sign of the Old Movie dipped suddenly, its supports softened visibly. It swung, nodded and crashed to the pavement.

Three hours later, a little group of whey-faced men in official dress was being loaded aboard a freight roc opposite the underpass to the Cauldwell Floatway in Over Bronnix. Alvah thought he saw McArdle among them, but he couldn't be sure.

Twilight—all the streets that radiated from the heart of the City were afloat with long, slowly surging tides of humanity, dim in the weak glow from the lumen globes plastered haphazardly to the flanks of the buildings. At the end of every street, the Wall was crumbled down and the moat filled, its fire long gone out. And down the new railed walkways from all three levels came the men, women and children, stumbling out into the alien lumenlit night and the strange scents and the wide world.

Watching from the hilltop, with his arm around his wife's waist, Alvah saw them being herded into groups and led away, unprotesting—saw them in the wains, rolling off toward the temporary shelters where, likely as not, they would sleep the night through, too numbed to be afraid of the morrow.

In the morning, their teaching would begin.

Babylon, Alvah thought, Thebes, Angkor, Lagash, Agade, Tyre, Luxor, and now New York.

A City grew out and then in—it was always the way, whether or not it had a Barrier around it. Growing, it crippled itself and its people—and died. The weeds overgrew its felled stones.

"Like an egg," B. J. said, although he had not spoken. "Omne ex ovum—but the eggshell has to break."

"I know," said Alvah, discovering that the empty ache in his belly was not sentiment but hunger. "Speaking of eggs—"

B. J. gave his arm a reassuring little pat. "Anything you want, dear. Radnip, orangoe, pearots, fleetmeat—you pick the menu."

Alvah's mouth began to water.

The first from the things of the beautiful of the first o

## GALLEY SLAVE

BY ISAAC ASIMOV

The United States Robot and Mechanical Men, Inc., as defendants in the case, had influence enough to force a closed-doors trial without a jury.

Nor did Northeastern University try hard to prevent it. The trustees knew perfectly well how the public might react to any issue involving misbehavior of a robot, however rarefied that misbehavior might be. They also had a clearly visualized notion of how an antirobot riot might become an antiscience riot without warning.

The government, as represented in this case by Justice Harlow Shane, was equally anxious for a quiet end to this mess. Both U. S. Robots and the academic world were bad people to antagonize.

Justice Shane said, "Since neither press, public nor jury is present, gentlemen, let us stand on as little ceremony as we can and get to the facts."

He smiled stiffly as he said this, perhaps without much hope that his request would be effective, and hitched at his robe so that he might sit more comfortably. His face was pleasantly rubicund, his chin round and soft, his nose broad and his eyes light in color and wide-set. All in all, it was not a face with much

judicial majesty and the judge knew it.

Barnabas H. Goodfellow, Professor of Physics at Northeastern U., was sworn in first, taking the usual vow with an expression that made mincemeat of his name.

After the usual opening-gambit questions, Prosecution shoved his hands deep into his pockets and said, "When was it, Professor, that the matter of the possible employ of Robot EZ-27

was first brought to your attention, and how?"

Professor Goodfellow's small and angular face set itself into an uneasy expression, scarcely more benevolent than the one it replaced. He said, "I have had professional contact and some social acquaintance with Dr. Alfred Lanning, Director of Research at U. S. Robots. I was inclined to listen with some tolerance then when I received a rather strange suggestion from him on the 3rd of March of last year—"

"Of 2033?"
"That's right."

"Excuse me for interrupting. Please proceed."

The professor nodded frostily, scowled to fix the facts in his mind, and began to speak.

Professor Goodfellow looked at the robot with a certain uneasiness. It had been carried into the basement supply room in a crate, in accordance with the regulations governing the shipment of robots from place to place on the Earth's surface.

He knew it was coming; it wasn't that he was unprepared. From the moment of Dr. Lanning's first phone call on March 3, he had felt himself giving way to the other's persuasiveness, and now, as an inevitable result, he found himself face to face with a robot.

It looked uncommonly large as it stood within arm's reach.
Alfred Lanning cast a hard glance of his own at the robot, as though making certain it had not been damaged in transit.
Then he turned his ferocious eyebrows and his mane of white hair in the professor's direction.

298---

"This is Robot EZ-27, first of its model to be available for public use." He turned to the robot. "This is Professor Goodfellow, Easy."

Easy spoke impassively, but with such suddenness that the

professor shied. "Good afternoon, Professor."

Easy stood seven feet tall and had the general proportions of a man—always the prime selling point of U. S. Robots. That and the possession of the basic patents on the positronic brain had given them an actual monopoly on robots and a nearmonopoly on computing machines in general.

The two men who had uncrated the robot had left now and the professor looked from Lanning to the robot and back to Lan-

ning. "It is harmless, I'm sure." He didn't sound sure.

"More harmless than I am," said Lanning. "I could be goaded into striking you. Easy could not be. You know the Three Laws of Robotics, I presume."

"Yes, of course," said Goodfellow.

"They are built into the positronic patterns of the brain and must be observed. The First Law, the prime rule of robotic existence, safeguards the life and well-being of all humans." He paused, rubbed at his cheek, then added, "It's something of which we would like to persuade all Earth if we could."

"It's just that he seems formidable."

"Granted. But whatever he seems, you'll find that he is useful."

"I'm not sure in what way. Our conversations were not very helpful in that respect. Still, I agreed to look at the object and I'm doing it."

"We'll do more than look, Professor. Have you brought a

book?"

"I have."

"May I see it?"

Professor Goodfellow reached down without actually taking his eyes off the metal-in-human-shape that confronted him. From the briefcase at his feet, he withdrew a book.

Lanning held out his hand for it and looked at the backstrip.

"Physical Chemistry of Electrolytes in Solution. Fair enough, sir. You selected this yourself, at random. It was no suggestion of mine, this particular text. Am I right?"

"Yes."

Lanning passed the book to Robot EZ-27.

The professor jumped a little. "No! That's a valuable book!"

Lanning raised his eyebrows and they looked like shaggy coconut icing. He said, "Easy has no intention of tearing the book in two as a feat of strength, I assure you. It can handle a book as carefully as you or I. Go ahead, Easy."

"Thank you, sir," said Easy. Then, turning its metal bulk slightly, it added, "With your permission, Professor Goodfellow."

The professor stared, then said, "Yes-yes, of course."

With a slow and steady manipulation of metal fingers, Easy turned the pages of the book, glancing at the left page, then the right; turning the page, glancing left, then right; turning the page and so on for minute after minute.

The sense of its power seemed to dwarf even the large cement-walled room in which they stood and to reduce the two human watchers to something considerably less than life-size.

Goodfellow muttered, "The light isn't very good."

"It will do."

Then, rather more sharply, "But what is he doing?"

"Patience, sir."

The last page was turned eventually. Lanning asked, "Well, Easy?"

The robot said, "It is a most accurate book and there is little to which I can point. On line 22 of page 27, the word 'positive' is spelled p-o-i-s-t-i-v-e. The comma in line 6 of page 32 is superfluous, whereas one should have been used on line 13 of page 54. The plus sign in equation XIV-2 on page 337 should be a minus sign if it is to be consistent with the previous equations—"

"Wait! Wait!" cried the professor. "What is he doing?"

"Doing?" echoed Lanning in sudden irascibility. "Why, man, he has already done it! He has proofread that book."

"Proofread it?"

"Yes. In the short time it took him to turn those pages, he caught every mistake in spelling, grammar and punctuation. He has noted errors in word order and detected inconsistencies. And he will retain the information, letter-perfect, indefinitely."

The professor's mouth was open. He walked rapidly away from Lanning and Easy and as rapidly back. He folded his arms across his chest and stared at them. Finally he said, "You mean this is a proofreading robot?"

Lanning nodded. "Among other things."

"But why do you show it to me?"

"So that you might help me persuade the university to obtain it for use."

"To read proof?"

"Among other things," Lanning repeated patiently.

The professor drew his pinched face together in a kind of sour disbelief. "But this is ridiculous!"

"Why?"

"The university could never afford to buy this half-ton—it must weigh that at least—this half-ton proofreader."

"Proofreading is not all it will do. It will prepare reports from outlines, fill out forms, serve as an accurate memory-file, grade papers—"

"All picayune!"

Lanning said, "Not at all, as I can show you in a moment. But I think we can discuss this more comfortably in your office, if you have no objection."

"No, of course not," began the professor mechanically and took a half-step as though to turn. Then he snapped out, "But the robot—we can't take the robot. Really, Doctor, you'll have to crate it up again."

"Time enough. We can leave Easy here."

"Unattended?"

"Why not? He knows he is to stay. Professor Goodfellow, it

is necessary to understand that a robot is far more reliable than a human being."

"I would be responsible for any damage-"

"There will be no damage. I guarantee that. Look, it's after hours. You expect no one here, I imagine, before tomorrow morning. The truck and my two men are outside. U. S. Robots will take any responsibility that may arise. None will. Call it a demonstration of the reliability of the robot."

The professor allowed himself to be led out of the storeroom. Nor did he look entirely comfortable in his own office, five stories up.

He dabbed at the line of droplets along the upper half of his forehead with a white handkerchief.

"As you know very well, Dr. Lanning, there are laws against the use of robots on Earth's surface," he pointed out.

"The laws, Professor Goodfellow, are not simple ones. Robots may not be used on public thoroughfares or within public edifices. They may not be used on private grounds or within private structures except under certain restrictions that usually turn out to be prohibitive. The university, however, is a large and privately owned institution that usually receives preferential treatment. If the robot is used only in a specific room for only academic purposes, if certain other restrictions are observed and if the men and women having occasion to enter the room cooperate fully, we may remain within the law."

"But all that trouble just to read proof?"

"The uses would be infinite, Professor. Robotic labor has so far been used only to relieve physical drudgery. Isn't there such a thing as mental drudgery? When a professor capable of the most useful creative thought is forced to spend two weeks painfully checking the spelling of lines of print and I offer you a machine that can do it in thirty minutes, is that picayune?"

"But the price-"

"The price need not bother you. You cannot buy EZ-27. U. S. Robots does not sell its products. But the university can lease EZ-27 for a thousand dollars a year—considerably less than

the cost of a single micro-wave spectograph continuous-recording attachment."

Goodfellow looked stunned. Lanning followed up his advantage by saying, "I only ask that you put it up to whatever group makes the decisions here. I would be glad to speak to them if they want more information."

"Well," Goodfellow said doubtfully, "I can bring it up at next week's Senate meeting. I can't promise that will do any

good, though."

"Naturally," said Lanning.

The Defense Attorney was short and stubby and carried himself rather portentously, a stance that had the effect of accentuating his double chin. He stared at Professor Goodfellow, once that witness had been handed over, and said, "You agreed rather readily, did you not?"

The Professor said briskly, "I suppose I was anxious to be

rid of Dr. Lanning. I would have agreed to anything."

"With the intention of forgetting about it after he left?" "Well-"

"Nevertheless, you did present the matter to a meeting of the Executive Board of the University Senate."

"Yes, I did."

"So that you agreed in good faith with Dr. Lanning's suggestions. You weren't just going along with a gag. You actually agreed enthusiastically, did you not?"

"I merely followed ordinary procedures."

"As a matter of fact, you weren't as upset about the robot as you now claim you were. You know the Three Laws of Robotics and you knew them at the time of your interview with Dr. Lanning."

"Well, yes."

"And you were perfectly willing to leave a robot at large and unattended."

"Dr. Lanning assured me-"

"Surely you would never have accepted his assurance if you

had had the slightest doubt that the robot might be in the least dangerous."

The professor began frigidly, "I had every faith in the

word-

"That is all," said Defense abruptly.

As Professor Goodfellow, more than a bit ruffled, stood down, Justice Shane leaned forward and said, "Since I am not a robotics man myself, I would appreciate knowing precisely what the Three Laws of Robotics are. Would Dr. Lanning quote them for the benefit of the court?"

Dr. Lanning looked startled. He had been virtually bumping heads with the gray-haired woman at his side. He rose to his feet now and the woman looked up, too—expressionlessly.

Dr. Lanning said, "Very well, Your Honor." He paused as though about to launch into an oration and said, with laborious clarity, "First Law: a robot may not injure a human being, or, through inaction, allow a human being to come to harm. Second Law: a robot must obey the orders given it by human beings, except where such orders would conflict with the First Law. Third Law: a robot must protect its own existence as long as such protection does not conflict with the First or Second Laws."

"I see," said the judge, taking rapid notes. "These Laws are

built into every robot, are they?"

"Into every one. That will be borne out by any roboticist."

"And into Robot EZ-27 specifically?"

"Yes, Your Honor."

"You will probably be required to repeat those statements under oath."

"I am ready to do so, Your Honor."

He sat down again.

Dr. Susan Calvin, robopsychologist-in-chief for U. S. Robots, who was the gray-haired woman sitting next to Lanning, looked at her titular superior without favor, but then she showed favor to no human being. She said, "Was Goodfellow's testimony accurate, Alfred?"

"Essentially," muttered Lanning. "He wasn't as nervous as all that about the robot and he was anxious enough to talk business with me when he heard the price. But there doesn't seem to be any drastic distortion."

Dr. Calvin said thoughtfully, "It might have been wise to

put the price higher than a thousand."

"We were anxious to place Easy."

"I know. Too anxious, perhaps. They'll try to make it look as though we had an ulterior motive."

Lanning looked exasperated. "We did. I admitted that at

the University Senate meeting."

"They can make it look as if we had one beyond the one we admitted."

Scott Robertson, son of the founder of U. S. Robots and still owner of a majority of the stock, leaned over from Dr. Calvin's other side and said in a kind of explosive whisper, "Why can't you get Easy to talk so we'll know where we're at?"

"You know he can't talk about it, Mr. Robertson."

"Make him. You're the psychologist, Dr. Calvin. Make him."

"If I'm the psychologist, Mr. Robertson," said Susan Calvin coldly, "let me make the decisions. My robot will not be *made* to do anything at the price of his well-being."

Robertson frowned and might have answered, but Justice Shane was tapping his gavel in a polite sort of way and they

grudgingly fell silent.

Francis J. Hart, head of the Department of English and Dean of Graduate Studies, was on the stand. He was a plump man, meticulously dressed in dark clothing of a conservative cut, and possessing several strands of hair traversing the pink top of his cranium. He sat well back in the witness chair with his hands folded neatly in his lap and displaying, from time to time, a tight-lipped smile.

He said, "My first connection with the matter of the Robot EZ-27 was on the occasion of the session of the University Senate Executive Committee at which the subject was introduced

by Professor Goodfellow. Thereafter, on the 10th of April of last year, we held a special meeting on the subject, during which I was in the chair."

"Were minutes kept of the meeting of the Executive Committee? Of the special meeting, that is?"

"Well, no. It was a rather unusual meeting." The dean smiled briefly. "We thought it might remain confidential."

"What transpired at the meeting?"

Dean Hart was not entirely comfortable as chairman of that meeting. Nor did the other members assembled seem completely calm. Only Dr. Lanning appeared at peace with himself. His tall, gaunt figure and the shock of white hair that crowned him reminded Hart of portraits he had seen of Andrew Jackson.

Samples of the robot's work lay scattered along the central regions of the table and the reproduction of a graph drawn by the robot was now in the hands of Professor Minott of Physical Chemistry. The chemist's lips were pursed in obvious approval.

Hart cleared his throat and said, "There seems no doubt that the robot can perform certain routine tasks with adequate competence. I have gone over these, for instance, just before coming in and there is very little to find fault with."

He picked up a long sheet of printing, some three times as long as the average book page. It was a sheet of galley proof, designed to be corrected by authors before the type was set up in page form. Along both of the wide margins of the galley were proofmarks, neat and superbly legible. Occasionally, a word of print was crossed out and a new word substituted in the margin in characters so fine and regular it might easily have been print itself. Some of the corrections were blue to indicate the original mistake had been the author's, a few in red, where the printer had been wrong.

"Actually," said Lanning, "there is less than very little to find fault with. I should say there is nothing at all to find fault with, Dr. Hart. I'm sure the corrections are perfect, insofar as the original manuscript was. If the manuscript against which this galley was corrected was at fault in a matter of fact rather than of English, the robot is not competent to correct it."

"We accept that. However, the robot corrected word order on occasion and I don't think the rules of English are sufficiently hidebound for us to be sure that in each case the robot's choice was the correct one."

"Easy's positronic brain," said Lanning, showing large teeth as he smiled, "has been molded by the contents of all the standard works on the subject. I'm sure you cannot point to a case where the robot's choice was definitely the incorrect one."

Professor Minott looked up from the graph he still held. "The question in my mind, Dr. Lanning, is why we need a robot at all, with all the difficulties in public relations that would entail. The science of automation has surely reached the point where your company could design a machine, an ordinary computer of a type known and accepted by the public, that would correct galleys."

"I am sure we could," said Lanning stiffly, "but such a machine would require that the galleys be translated into special symbols or, at the least, transcribed on tapes. Any corrections would emerge in symbols. You would need to keep men employed translating words to symbols, symbols to words. Furthermore, such a computer could do no other job. It couldn't prepare the graph you hold in your hand, for instance."

Minott grunted.

Lanning went on. "The hallmark of the positronic robot is its flexibility. It can do a number of jobs. It is designed like a man so that it can use all the tools and machines that have, after all, been designed to be used by a man. It can talk to you and you can talk to it. You can actually reason with it up to a point. Compared to even a simple robot, an ordinary computer with a non-positronic brain is only a heavy adding machine."

Goodfellow looked up and said, "If we all talk and reason with the robot, what are the chances of our confusing it? I sup-

pose it doesn't have the capability of absorbing an infinite amount of data."

"No, it hasn't. But it should last five years with ordinary use. It will know when it will require clearing, and the company will do the job without charge."

"The company will?"

"Yes. The company reserves the right to service the robot outside the ordinary course of its duties. It is one reason we retain control of our positronic robots and lease rather than sell them. In the pursuit of its ordinary functions, any robot can be directed by any man. Outside its ordinary functions, a robot requires expert handling, and that we can give it. For instance, any of you might clear an EZ robot to an extent by telling it to forget this item or that. But you would be almost certain to phrase the order in such a way as to cause it to forget too much or too little. We would detect such tampering, because we have built-in safeguards. However, since there is no need for clearing the robot in its ordinary work, or for doing other useless things, this raises no problem."

Dean Hart touched his head as though to make sure his carefully cultivated strands lay evenly distributed and said, "You are anxious to have us take the machine. Yet surely it is a losing proposition for U. S. Robots. One thousand a year is a ridiculously low price. Is it that you hope through this to rent other such machines to other universities at a more reasonable price?"

"Certainly that's a fair hope," said Lanning.

"But even so, the number of machines you could rent would be limited. I doubt if you could make it a paying proposition."

Lanning put his elbows on the table and earnestly leaned forward. "Let me put it bluntly, gentlemen. Robots cannot be used on Earth, except in certain special cases, because of prejudice against them on the part of the public. U. S. Robots is a highly successful corporation with our extraterrestrial and space-flight markets alone, to say nothing of our computer subsidiaries. However, we are concerned with more than profits alone. It is

308-

our firm belief that the use of robots on Earth itself would mean a better life for all eventually, even if a certain amount of economic dislocation resulted at first.

"The labor unions are naturally against us, but surely we may expect cooperation from the large universities. The robot, Easy, will help you by relieving you of scholastic drudgery—by assuming, if you permit it, the role of galley slave for you. Other universities and research institutions will follow your lead, and if it works out, then perhaps other robots of other types may be placed and the public's objections to them broken down by stages."

Minott murmured, "Today Northeastern University, tomorrow the world."

Angrily, Lanning whispered to Susan Calvin, "I wasn't nearly that eloquent and they weren't nearly that reluctant. At a thousand a year, they were jumping to get Easy. Professor Minott told me he'd never seen as beautiful a job as that graph he was holding and there was no mistake on the galley or anywhere else. Hart admitted it freely."

The severe vertical lines on Dr. Calvin's face did not soften. "You should have demanded more money than they could pay, Alfred, and let them beat you down."

"Maybe," he grumbled.

Prosecution was not quite done with Professor Hart. "After Dr. Lanning left, did you vote on whether to accept Robot EZ-27?"

"Yes, we did."

"With what result?"

"In favor of acceptance, by majority vote."

"What would you say influenced the vote?"

Defense objected immediately.

Prosecution rephrased the question. "What influenced you, personally, in your individual vote? You did vote in favor, I think."

"I voted in favor, yes. I did so largely because I was im-

pressed by Dr. Lanning's feeling that it was our duty as members of the world's intellectual leadership to allow robotics to help Man in the solution of his problems."

"In other words, Dr. Lanning talked you into it."

"That's his job. He did it very well."

"Your witness."

Defense strode up to the witness chair and surveyed Professor Hart for a long moment. He said, "In reality, you were all pretty eager to have Robot EZ-27 in your employ, weren't you?"

"We thought that if it could do the work, it might be useful."

"If it could do the work? I understand you examined the samples of Robot EZ-27's original work with particular care on the day of the meeting which you have just described."

"Yes, I did. Since the machine's work dealt primarily with the handling of the English language, and since that is my field of competence, it seemed logical that I be the one chosen to examine the work."

"Very good. Was there anything on display on the table at the time of the meeting which was less than satisfactory? I have all the material here as exhibits. Can you point to a single unsatisfactory item?"

"Well-"

"It's a simple question. Was there one single solitary unsatisfactory item? You inspected it. Was there?"

The English professor frowned. "There wasn't."

"I also have some samples of work done by Robot EZ-27 during the course of his 14-month employ at Northeastern. Would you examine these and tell me if there is anything wrong with them in even one particular?"

Hart snapped, "When he did make a mistake, it was a

beauty."

"Answer my question," thundered Defense, "and only the question I am putting to you! Is there anything wrong with the material?"

Dean Hart looked cautiously at each item. "Well, nothing."

"Barring the matter concerning which we are here engaged, do you know of any mistake on the part of EZ-27?"

"Barring the matter for which this trial is being held, no."

Defense cleared his throat as though to signal end of paragraph. He said, "Now about the vote concerning whether Robot EZ-27 was to be employed or not. You said there was a majority in favor. What was the actual vote?"

"Thirteen to one, as I remember."

"Thirteen to one! More than just a majority, wouldn't you say?"

"No, sir!" All the pedant in Dean Hart was aroused. "In the English language, the word 'majority' means 'more than half.' Thirteen out of fourteen is a majority, nothing more."

"But an almost unanimous one."

"A majority all the same!"

Defense switched ground. "And who was the lone holdout?"

Dean Hart looked acutely uncomfortable. "Professor Simon
Ninheimer."

Defense pretended astonishment. "Professor Ninheimer? The head of the Department of Sociology?"

"Yes, sir."

"The plaintiff?"

"Yes, sir."

Defense pursed his lips. "In other words, it turns out that the man bringing the action for payment of \$750,000 damages against my client, United States Robot and Mechanical Men, Incorporated, was the one who from the beginning opposed the use of the robot—although everyone else on the Executive Committee of the University Senate was persuaded that it was a good idea."

"He voted against the motion, as was his right."

"You didn't mention in your description of the meeting any remarks made by Professor Ninheimer. Did he make any?"

"I think he spoke."

"You think?"

"Well, he did speak."

"Against using the robot?"

"Yes."

"Was he violent about it?"

Dean Hart paused. "He was vehement."

Defense grew confidential. "How long have you known Professor Ninheimer, Dean Hart?"

"About twelve years."
"Reasonably well?"

"I should say so, yes."

"Knowing him, then, would you say he was the kind of man who might continue to bear resentment against a robot, all the more so because an adverse vote had—"

Prosecution drowned out the remainder of the question with an indignant and vehement objection of his own. Defense motioned the witness down and Justice Shane called luncheon recess.

Robertson mangled his sandwich. The corporation would not founder for loss of three-quarters of a million, but the loss would do it no particular good. He was conscious, moreover, that there would be a much more costly long-term setback in public relations.

He said sourly, "Why all this business about how Easy got into the university? What do they hope to gain?"

The Attorney for Defense said quietly, "A court action is like a chess game, Mr. Robertson. The winner is usually the one who can see more moves ahead, and my friend at the prosecutor's table is no beginner. They can show damage; that's no problem. Their main effort lies in anticipating our defense. They must be counting on us to try to show that Easy couldn't possibly have committed the offense—because of the Laws of Robotics."

"All right," said Robertson, "that is our defense. An abso-

lutely airtight one."

"To a robotics engineer. Not necessarily to a judge. They're setting themselves up a position from which they can demon-

strate that EZ-27 was no ordinary robot. It was the first of its type to be offered to the public. It was an experimental model that needed field-testing and the university was the only decent way to provide such testing. That would look plausible in the light of Dr. Lanning's strong efforts to place the robot and the willingness of U. S. Robots to lease it for so little. The prosecution would then argue that the field-test proved Easy to have been a failure. Now do you see the purpose of what's been going on?"

"But EZ-27 was a perfectly good model," argued Robertson.

"It was the 27th in production."

"Which is really a bad point," said Defense somberly. "What was wrong with the first 26? Obviously something. Why shouldn't there be something wrong with the 27th, too?"

"There was nothing wrong with the first 26 except that they weren't complex enough for the task. These were the first positronic brains of the sort to be constructed and it was rather hit-and-miss to begin with. But the Three Laws held in all of them! No robot is so imperfect that the Three Laws don't hold."

"Dr. Lanning has explained this to me, Mr. Robertson, and I am willing to take his word for it. The judge, however, may not be. We are expecting a decision from an honest and intelligent man who knows no robotics and thus may be led astray. For instance, if you or Dr. Lanning or Dr. Calvin were to say on the stand that any positronic brains were constructed 'hitand-miss,' as you just did, Prosecution would tear you apart in cross-examination. Nothing would salvage our case. So that's something to avoid."

Robertson growled, "If only Easy would talk."

Defense shrugged. "A robot is incompetent as a witness, so that would do us no good."

"At least we'd know some of the facts. We'd know how it came to do such a thing."

Susan Calvin fired up. A dullish red touched her cheeks and her

voice had a trace of warmth in it. "We *know* how Easy came to do it. It was ordered to! I've explained this to counsel and I'll explain it to you now."

"Ordered to by whom?" asked Robertson in honest astonishment. (No one ever told him anything, he thought resentfully. These research people considered *themselves* the owners of U. S. Robots, by God!)

"By the plaintiff," said Dr. Calvin.

"In heaven's name, why?"

"I don't know why yet. Perhaps just that we might be sued, that he might gain some cash." There were blue glints in her eyes as she said that.

"Then why doesn't Easy say so?"

"Isn't that obvious? It's been ordered to keep quiet about the matter."

"Why should that be obvious?" demanded Robertson truculently.

"Well, it's obvious to me. Robot psychology is my profession. If Easy will not answer questions about the matter directly, he will answer questions on the fringe of the matter. By measuring increased hesitation in his answers as the central question is approached, by measuring the area of blankness and the intensity of counterpotentials set up, it is possible to tell with scientific precision that his troubles are the result of an order not to talk, with its strength based on First Law. In other words, he's been told that if he talks, harm will be done a human being. Presumably harm to the unspeakable Professor Ninheimer, the plaintiff, who, to the robot, would seem a human being."

"Well, then," said Robertson, "can't you explain that if he

keeps quiet, harm will be done to U. S. Robots?"

"U. S. Robots is not a human being and the First Law of Robotics does not recognize a corporation as a person the way ordinary laws do. Besides, it would be dangerous to try to lift this particular sort of inhibition. The person who laid it on could lift it off least dangerously, because the robot's motivations in that respect are centered on that person. Any other course—"

She shook her head and grew almost impassioned. "I won't let the robot be damaged!"

Lanning interrupted with the air of bringing sanity to the problem. "It seems to me that we have only to prove a robot incapable of the act of which Easy is accused. We can do that."

"Exactly," said Defense, in annoyance. "You can do that. The only witnesses capable of testifying to Easy's condition and to the nature of Easy's state of mind are employees of U. S. Robots. The judge can't possibly accept their testimony as unprejudiced."

"How can he deny expert testimony?"

"By refusing to be convinced by it. That's his right as the judge. Against the alternative that a man like Professor Ninheimer deliberately set about ruining his own reputation, even for a sizable sum of money, the judge isn't going to accept the technicalities of your engineers. The judge is a man, after all. If he has to choose between a man doing an impossible thing and a robot doing an impossible thing, he's quite likely to decide in favor of the man."

"A man can do an impossible thing," said Lanning, "because we don't know all the complexities of the human mind and we don't know what, in a given human mind, is impossible and what is not. We do know what is really impossible to a robot."

"Well, we'll see if we can't convince the judge of that,"

Defense replied wearily.

"If all you say is so," rumbled Robertson, "I don't see how you can."

"We'll see. It's good to know and be aware of the difficulties involved, but let's not be too downhearted. I've tried to look ahead a few moves in the chess-game, too." With a stately nod in the direction of the robopsychologist, he added, "With the help of the good lady here."

Lanning looked from one to the other and said, "What the

devil is this?"

But the bailiff thrust his head into the room and announced somewhat breathlessly that the trial was about to resume.

They took their seats, examining the man who had started all the trouble.

Simon Ninheimer owned a fluffy head of sandy hair, a face that narrowed past a beaked nose toward a pointed chin, and a habit of sometimes hesitating before key words in his conversation that gave him an air of a seeker after an almost unbearable precision. When he said, "The Sun rises in the—uh—east," one was certain he had given due consideration to the possibility that it might at some time rise in the west.

Prosecution said, "Did you oppose employment of Robot

EZ-27 by the university?"

"I did, sir."

"Why was that?"

"I did not feel that we understood the—uh—motives of U. S. Robots thoroughly. I mistrusted their anxiety to place the robot with us."

"Did you feel that it was capable of doing the work that it was allegedly designed to do?"

"I know for a fact that it was not."

"Would you state your reasons?"

Simon Ninheimer's book, entitled Social Tensions Involved in Space-Flight and Their Resolution, had been eight years in the making. Ninheimer's search for precision was not confined to his habits of speech, and in a subject like sociology, almost inherently imprecise, it left him breathless.

Even with the material in galley proofs, he felt no sense of completion. Rather the reverse, in fact. Staring at the long strips of print, he felt only the itch to tear the lines of type apart and

rearrange them differently.

Jim Baker, Instructor and soon to be Assistant Professor of Sociology, found Ninheimer, three days after the first batch of galleys had arrived from the printer, staring at the handful of paper in abstraction. The galleys came in three copies: one for Ninheimer to proofread, one for Baker to proofread independently, and a third, marked "Original," which was to receive the

316-

final corrections, a combination of those made by Ninheimer and by Baker, after a conference at which possible conflicts and disagreements were ironed out. This had been their policy on the several papers on which they had collaborated in the past three years and it worked well.

Baker, young and ingratiatingly soft-voiced, had his own copies of the galleys in his hand. He said eagerly, "I've done the first chapter and they contain some typographical beauts."

"The first chapter always has them," said Ninheimer dis-

tantly.

"Do you want to go over it now?"

Ninheimer brought his eyes to grave focus on Baker. "I haven't done anything on the galleys, Jim. I don't think I'll bother."

Baker looked confused. "Not bother?"

Ninheimer pursed his lips. "I've asked about the—uh—work-load of the machine. After all, he was originally—uh—promoted as a proofreader. They've set a schedule."

"The machine? You mean Easy?"

"I believe that is the foolish name they gave it."

"But, Dr. Ninheimer, I thought you were staying clear of it!"

"I seem to be the only one doing so. Perhaps I ought to take my share of the—uh—advantage."

"Oh. Well, I seem to have wasted time on this first chapter,

then," said the younger man ruefully.

"Not wasted. We can compare the machine's result with yours as a check."

"If you want to, but-"

"Yes?"

"I doubt that we'll find anything wrong with Easy's work. It's supposed never to have made a mistake."

"I dare say," said Ninheimer dryly.

The first chapter was brought in again by Baker four days later. This time it was Ninheimer's copy, fresh from the special annex that had been built to house Easy and the equipment it used.

Baker was jubilant. "Dr. Ninheimer, it not only caught everything I caught-it found a dozen errors I missed! The whole thing took it twelve minutes!"

Ninheimer looked over the sheaf, with the neatly printed marks and symbols in the margins. He said, "It is not as complete as you and I would have made it. We would have entered an insert on Suzuki's work on the neurological effects of low gravity."

"You mean his paper in Sociological Reviews?"

"Of course."

"Well, you can't expect impossibilities of Easy. It can't read the literature for us."

"I realize that. As a matter of fact, I have prepared the insert. I will see the machine and make certain it knows how to-uhhandle inserts."

"It will know."

"I prefer to make certain."

Ninheimer had to make an appointment to see Easy, and then could get nothing better than fifteen minutes in the late evening.

But the fifteen minutes turned out to be ample. Robot EZ-27 understood the matter of inserts at once.

Ninheimer found himself uncomfortable at close quarters with the robot for the first time. Almost automatically, as though it were human, he found himself asking, "Are you happy with your work?"

"Most happy, Professor Ninheimer," said Easy solemnly, the photo-cells that were its eyes gleaming their normal deep red.

"You know me?"

"From the fact that you present me with additional material to include in the galleys, it follows that you are the author. The author's name, of course, is at the head of each sheet of galley proof."

"I see. You make-uh-deductions, then. Tell me-" he couldn't resist the question-"what do you think of the book so

far?"

Easy said, "I find it very pleasant to work with."

"Pleasant? That is an odd word for a-uh-a mechanism without emotion. I've been told you have no emotion."

"The words of your book go in accordance with my circuits," Easy explained. "They set up little or no counterpotentials. It is in my brain-paths to translate this mechanical fact into a word such as 'pleasant.' The emotional context is fortuitous."

"I see. Why do you find the book pleasant?"

"It deals with human beings, Professor, and not with inorganic materials or mathematical symbols. Your book attempts to understand human beings and to help increase human happiness."

"And this is what you try to do and so my book goes in accordance with your circuits? Is that it?"

"That is it, Professor."

The fifteen minutes were up. Ninheimer left and went to the university library, which was on the point of closing. He kept them open long enough to find an elementary text on robotics. He took it home with him.

Except for occasional insertion of late material, the galleys went to Easy and from him to the publishers with little intervention from Ninheimer at first—and none at all later.

Baker said, a little uneasily, "It almost gives me a feeling of uselessness."

"It should give you a feeling of having time to begin a new project," said Ninheimer, without looking up from the notations he was making in the current issue of Social Science Abstracts.

"I'm just not used to it. I keep worrying about the galleys. It's silly, I know."

"It is."

"The other day I got a couple of sheets before Easy sent them off to-"

"What!" Ninheimer looked up, scowling. The copy of Abstracts slid shut. "Did you disturb the machine at its work?"

"Only for a minute. Everything was all right. Oh, it changed

one word. You referred to something as 'criminal'; it changed the word to 'reckless.' It thought the second adjective fit in better with the context."

Ninheimer grew thoughtful. "What did you think?"

"You know, I agreed with it. I let it stand."

Ninheimer turned in his swivel-chair to face his young associate. "See here, I wish you wouldn't do this again. If I am to use the machine, I wish the—uh—full advantage of it. If I am to use it and lose your—uh—services anyway because you supervise it when the whole point is that it requires no supervision, I gain nothing. Do you see?"

"Yes, Dr. Ninheimer," said Baker, subdued.

The advance copies of *Social Tensions* arrived in Dr. Ninheimer's office on the 8th of May. He looked through it briefly, flipping pages and pausing to read a paragraph here and there.

Then he put his copies away.

As he explained later, he forgot about it. For eight years, he had worked at it, but now, and for months in the past, other interests had engaged him while Easy had taken the load of the book off his shoulders. He did not even think to donate the usual complimentary copy to the university library. Even Baker, who had thrown himself into work and had steered clear of the department head since receiving his rebuke at their last meeting, received no copy.

On the 16th of June that stage ended. Ninheimer received a phone call and stared at the image in the 'plate with surprise.

"Speidell! Are you in town?"

"No, sir. I'm in Cleveland." Speidell's voice trembled with emotion.

"Then why the call?"

"Because I've just been looking through your new book! Ninheimer, are you mad? Have you gone insane?"

Ninheimer stiffened. "Is something—uh—wrong?" he asked in alarm.

"Wrong? I refer you to page 562. What in blazes do you

mean by interpreting my work as you do? Where in the paper cited do I make the claim that the criminal personality is non-existent and that it is the *law*-enforcement agencies that are the *true* criminals? Here, let me quote—"

"Wait! Wait!" cried Ninheimer, trying to find the page. "Let

me see. Let me see . . . Good God!"

"Well?"

"Speidell, I don't see how this could have happened. I never wrote this."

"But that's what's printed! And that distortion isn't the worst. You look at page 690 and imagine what Ipatiev is going to do to you when he sees the hash you've made of his findings! Look, Ninheimer, the book is *riddled* with this sort of thing. I don't know what you were thinking of—but there's nothing to do but get the book off the market. And you'd better be prepared for extensive apologies at the next Association meeting!"

"Speidell, listen to me-"

But Speidell had flashed off with a force that had the 'plate glowing with after-images for fifteen seconds.

It was then that Ninheimer went through the book and

began marking off passages with red ink.

He kept his temper remarkably well when he faced Easy again, but his lips were pale. He passed the book to Easy and said, "Will you read the marked passages on pages 562, 631, 664 and 690?"

Easy did so in four glances. "Yes, Professor Ninheimer."

"This is not as I had it in the original galleys."

"No, sir. It is not."

"Did you change it to read as it now does?"

"Yes, sir."

"Why?"

"Sir, the passages as they read in your version were most uncomplimentary to certain groups of human beings. I felt it advisable to change the wording to avoid doing them harm."

"How dared you do such a thing?"

"The First Law, Professor, does not let me, through any in-

action, allow harm to come to human beings. Certainly, considering your reputation in the world of sociology and the wide circulation your book would receive among scholars, considerable harm would come to a number of the human beings you speak of."

"But do you realize the harm that will come to me now?"
"It was necessary to choose the alternative with less harm."

Professor Ninheimer, shaking with fury, staggered away. It was clear to him that U. S. Robots would have to account to him for this.

There was some excitement at the defendants' table, which increased as Prosecution drove the point home.

"Then Robot EZ-27 informed you that the reason for its action was based on the First Law of Robotics?"

"That is correct, sir."

"That, in effect, it had no choice?"

"Yes, sir."

"It follows then that U. S. Robots designed a robot that would of necessity rewrite books to accord with its own conceptions of what was right. And yet they palmed it off as simple proofreader. Would you say that?"

Defense objected firmly at once, pointing out that the witness was being asked for a decision on a matter in which he had no competence. The judge admonished Prosecution in the usual terms, but there was no doubt that the exchange had sunk home—not least upon the attorney for the Defense.

Defense asked for a short recess before beginning cross-examination, using a legal technicality for the purpose that got him five minutes.

He leaned over toward Susan Calvin. "Is it possible, Dr. Calvin, that Professor Ninheimer is telling the truth and that Easy was motivated by the First Law?"

Calvin pressed her lips together, then said, "No. It isn't possible. The last part of Ninheimer's testimony is deliberate perjury. Easy is not designed to be able to judge matters at the

stage of abstraction represented by an advanced textbook on sociology. It would never be able to tell that certain groups of humans would be harmed by a phrase in such a book. Its mind is simply not built for that."

"I suppose, though, that we can't prove this to a layman,"

said Defense pessimistically.

"No," admitted Calvin. "The proof would be highly complex. Our way out is still what it was. We must prove Ninheimer is lying, and nothing he has said need change our plan of attack."

"Very well, Dr. Calvin," said Defense, "I must accept your

word in this. We'll go on as planned."

In the courtroom, the judge's gavel rose and fell and Dr. Ninheimer took the stand once more. He smiled a little as one who feels his position to be impregnable and rather enjoys the prospect of countering a useless attack.

Defense approached warily and began softly. "Dr. Ninheimer, do you mean to say that you were completely unaware of these alleged changes in your manuscript until such time as

Dr. Speidell called you on the 16th of June?"

"That is correct, sir."

"Did you never look at the galleys after Robot EZ-27 had

proofread them?"

"At first I did, but it seemed to me a useless task. I relied on the claims of U. S. Robots. The absurd—uh—changes were made only in the last quarter of the book after the robot, I presume, had learned enough about sociology—"

"Never mind your presumptions!" said Defense. "I understood your colleague, Dr. Baker, saw the later galleys on at least one occasion. Do you remember testifying to that effect?"

"Yes, sir. As I said, he told me about seeing one page, and

even there, the robot had changed a word."

Again Defense broke in. "Don't you find it strange, sir, that after over a year of implacable hostility to the robot, after having voted against it in the first place and having refused to put it to any use whatever, you suddenly decided to put your book, your magnum opus, into its hands?"

"I don't find that strange. I simply decided that I might as

well use the machine."

"And you were so confident of Robot EZ-27—all of a sudden—that you didn't even bother to check your galleys?"

"I told you I was-uh-persuaded by U. S. Robots' prop-

aganda."

"So persuaded that when your colleague, Dr. Baker, attempted to check on the robot, you berated him soundly?"

"I didn't berate him. I merely did not wish to have him—uh—waste his time. At least, I thought then it was a waste of time. I did not see the significance of that change in a word at the—"

Defense said with heavy sarcasm, "I have no doubt you were instructed to bring up that point in order that the word-change be entered in the record—" He altered his line to forestall objection and said, "The point is that you were extremely angry with Dr. Baker."

"No, sir. Not angry."

"You didn't give him a copy of your book when you received it."

"Simple forgetfulness. I didn't give the library its copy, either." Ninheimer smiled cautiously. "Professors are notoriously absent-minded."

Defense said, "Do you find it strange that, after more than a year of perfect work, Robot EZ-27 should go wrong on your book? On a book, that is, which was written by you, who was, of all people, the most implacably hostile to the robot?"

"My book was the only sizable work dealing with mankind that it had to face. The Three Laws of Robotics took hold then."

"Several times, Dr. Ninheimer," said Defense, "you have tried to sound like an expert on robotics. Apparently you suddenly grew interested in robotics and took out books on the subject from the library. You testified to that effect, did you not?"

"One book, sir. That was the result of what seems to me to

have been-uh-natural curiosity."

"And it enabled you to explain why the robot should, as you allege, have distorted your book?"

"Yes, sir."

"Very convenient. But are you sure your interest in robotics was not intended to enable you to manipulate the robot for your own purposes?"

Ninheimer flushed. "Certainly not, sir!"

Defense's voice rose. "In fact, are you sure the alleged altered passages were not as you had them in the first place?"

The sociologist half-rose. "That's-uh-uh-ridiculous! I

have the galleys-"

He had difficulty speaking and Prosecution rose to insert smoothly, "With your permission, Your Honor, I intend to introduce as evidence the set of galleys given by Dr. Ninheimer to Robot EZ-27 and the set of galleys mailed by Robot EZ-27 to the publishers. I will do so now if my esteemed colleague so desires, and will be willing to allow a recess in order that the two sets of galleys may be compared."

Defense waved his hand impatiently. "That is not necessary. My honored opponent can introduce those galleys whenever he chooses. I'm sure they will show whatever discrepancies are claimed by the plaintiff to exist. What I would like to know of the witness, however, is whether he also has in his possession Dr. Baker's galleys."

"Dr. Baker's galleys?" Ninheimer frowned. He was not yet

quite master of himself.

"Yes, Professor! I mean Dr. Baker's galleys. You testified to the effect that Dr. Baker had received a separate copy of the galleys. I will have the clerk read your testimony if you are suddenly a selective type of amnesiac. Or is it just that professors are, as you say, notoriously absent-minded?"

Ninheimer said, "I remember Dr. Baker's galleys. They weren't necessary once the job was placed in the care of the proofreading machine—"

"So you burned them?"

"No. I put them in the waste basket."

"Burned them, dumped them—what's the difference? The point is you got rid of them."

"There's nothing wrong-" began Ninheimer weakly.

"Nothing wrong?" thundered Defense. "Nothing wrong except that there is now no way we can check to see if, on certain crucial galley sheets, you might not have substituted a harmless blank one from Dr. Baker's copy for a sheet in your own copy which you had deliberately mangled in such a way as to force the robot to—"

Prosecution shouted a furious objection. Justice Shane leaned forward, his round face doing its best to assume an expression of anger equivalent to the intensity of the emotion felt by the man.

The judge said, "Do you have any evidence, Counselor, for

the extraordinary statement you have just made?"

Defense said quietly, "No direct evidence, Your Honor. But I would like to point out that, viewed properly, the sudden conversion of the plaintiff from antiroboticism, his sudden interest in robotics, his refusal to check the galleys or to allow anyone else to check them, his careful neglect to allow anyone to see the book immediately after publication, all very clearly point—"

"Counselor," interrupted the judge impatiently, "this is not the place for esoteric deductions. The plaintiff is not on trial. Neither are you prosecuting him. I forbid this line of attack and I can only point out that the desperation that must have induced you to do this cannot help but weaken your case. If you have legitimate questions to ask, Counselor, you may continue with your cross-examination. But I warn you against another such exhibition in this courtroom."

"I have no further questions, Your Honor."

Robertson whispered heatedly as counsel for the Defense returned to his table, "What good did that do, for God's sake? The judge is dead-set against you now."

Defense replied calmly, "But Ninheimer is good and rattled.

And we've set him up for tomorrow's move. He'll be ripe."

The rest of Prosecution's case was mild in comparison. Dr. Baker was called and bore out most of Ninheimer's testimony. Drs. Speidell and Ipatiev were called, and they expounded most movingly on their shock and dismay at certain quoted passages in Dr. Ninheimer's book. Both gave their professional opinion that Dr. Ninheimer's professional reputation had been seriously impaired.

The galleys were introduced in evidence, as were copies of the finished book.

Defense cross-examined no more that day. Prosecution rested and the trial was recessed till the next morning.

Defense made his first motion at the beginning of the proceedings on the second day. He requested that Robot EZ-27 be admitted as a spectator to the proceedings.

Prosecution objected at once and Justice Shane called both to the bench.

Prosecution said hotly, "This is obviously illegal. A robot may not be in any edifice used by the general public."

"This courtroom," pointed out Defense, "is closed to all but

those having an immediate connection with the case."

"A large machine of *known* erratic behavior would disturb my clients and my witnesses by its very presence! It would make hash out of the proceedings."

The judge seemed inclined to agree. He turned to Defense and said rather unsympathetically, "What are the reasons for

your request?"

Defense said, "It will be our contention that Robot EZ-27 could not possibly, by the nature of its construction, have behaved as it has been described as behaving. It will be necessary to present a few demonstrations."

Prosecution said, "I don't see the point, Your Honor. Demonstrations conducted by men employed at U. S. Robots are worth little as evidence when U. S. Robots is the defendant."

"Your Honor," said Defense, "the validity of any evidence

is for you to decide, not for the Prosecuting Attorney. At least, that is my understanding."

Justice Shane, his prerogatives encroached upon, said, "Your understanding is correct. Nevertheless, the presence of a robot

here does raise important legal questions."

"Surely, Your Honor, nothing that should be allowed to override the requirements of justice. If the robot is not present, we are prevented from presenting our only defense."

The judge considered. "There would be the question of

transporting the robot here."

"That is a problem with which U. S. Robots has frequently been faced. We have a truck parked outside the courtroom, constructed according to the laws governing the transportation of robots. Robot EZ-27 is in a packing case inside with two men guarding it. The doors to the truck are properly secured and all other necessary precautions have been taken."

"You seem certain," said Justice Shane, in renewed illtemper, "that judgment on this point will be in your favor."

"Not at all, Your Honor, If it is not, we simply turn the truck about. I have made no presumptions concerning your decision."

The judge nodded. "The request on the part of the Defense is granted."

The crate was carried in on a large dolly and the two men who handled it opened it. The courtroom was immersed in a dead silence.

Susan Calvin waited as the thick slabs of celluform went down,

then held out one hand. "Come, Easy."

The robot looked in her direction and held out its large metal arm. It towered over her by two feet but followed meekly, like a child in the clasp of its mother. Someone giggled nervously and choked it off at a hard glare from Dr. Calvin.

Easy seated itself carefully in a large chair brought by the

bailiff, which creaked but held.

Defense said, "When it becomes necessary, Your Honor, we

will prove that this is actually Robot EZ-27, the specific robot in the employ of Northeastern University during the period of time with which we are concerned."

"Good," His Honor said. "That will be necessary. I, for one, have no idea how you can tell one robot from another."

"And now," said Defense, "I would like to call my first wit-

ness to the stand. Professor Simon Ninheimer, please."

The clerk hesitated, looked at the judge. Justice Shane asked, with visible surprise, "You are calling the *plaintiff* as your witness?"

"Yes, Your Honor."

"I hope that you're aware that as long as he's your witness, you will be allowed none of the latitude you might exercise if you were cross-examining an opposing witness."

Defense said smoothly, "My only purpose in all this is to arrive at the truth. It will not be necessary to do more than ask a

few polite questions."

"Well," said the judge dubiously, "you're the one handling the case. Call the witness."

Ninheimer took the stand and was informed that he was still under oath. He looked more nervous than he had the day before, almost apprehensive.

But Defense looked at him benignly.

"Now, Professor Ninheimer, you are suing my clients in the amount of \$750,000."

"That is the-uh-sum. Yes."

"That is a great deal of money."

"I have suffered a great deal of harm."

"Surely not that much. The material in question involves only a few passages in a book. Perhaps these were unfortunate passages, but after all, books sometimes appear with curious mistakes in them."

Ninheimer's nostrils flared. "Sir, this book was to have been the climax of my professional career! Instead, it makes me look like an incompetent scholar, a perverter of the views held by my honored friends and associates, and a believer of ridiculous and —uh—outmoded viewpoints. My reputation is irretrievably shattered! I can never hold up my head in any—uh—assemblage of scholars, regardless of the outcome of this trial. I certainly cannot continue in my career, which has been the whole of my life. The very purpose of my life has been—uh—aborted and destroyed."

Defense made no attempt to interrupt the speech, but stared

abstractedly at his fingernails as it went on.

He said very soothingly, "But surely, Professor Ninheimer, at your present age, you could not hope to earn more than—let us be generous—\$150,000 during the remainder of your life. Yet you are asking the court to award you five times as much."

Ninheimer said, with an even greater burst of emotion, "It is not in my lifetime alone that I am ruined. I do not know for how many generations I shall be pointed at by sociologists as a—uh—a fool or maniac. My real achievements will be buried and ignored. I am ruined not only until the day of my death, but for all time to come, because there will always be people who will not believe that a robot made those insertions—"

It was at this point that Robot EZ-27 rose to his feet. Susan Calvin made no move to stop him. She sat motionless, staring

straight ahead. Defense sighed softly.

Easy's melodious voice carried clearly. It said, "I would like to explain to everyone that I did insert certain passages in the galley proofs that seemed directly opposed to what had been there at first—"

Even the Prosecuting Attorney was too startled at the spectacle of a seven-foot robot rising to address the court to be able to demand the stopping of what was obviously a most irregular procedure.

When he could collect his wits, it was too late. For Ninheimer rose in the witness chair, his face working.

He shouted wildly, "Damn you, you were instructed to keep your mouth shut about—"

He ground to a choking halt, and Easy was silent, too.

330-

Prosecution was on his feet now, demanding that a mistrial be declared.

Justice Shane banged his gavel desperately. "Silence! Silence! Certainly there is every reason here to declare a mistrial, except that in the interests of justice I would like to have Professor Ninheimer complete his statement. I distinctly heard him say to the robot that the robot had been instructed to keep its mouth shut about something. There was no mention in your testimony, Professor Ninheimer, as to any instructions to the robot to keep silent about anything!"

Ninheimer stared wordlessly at the judge.

Justice Shane said, "Did you instruct Robot EZ-27 to keep silent about something? And if so, about what?"

"Your Honor—" began Ninheimer hoarsely, and couldn't continue.

The judge's voice grew sharp. "Did you, in fact, order the inserts in question to be made in the galleys and then order the robot to keep quiet about your part in this?"

Prosecution objected vigorously, but Ninheimer shouted, "Oh, what's the use? Yes! Yes!" And he ran from the witness stand. He was stopped at the door by the bailiff and sank hopelessly into one of the last rows of seats, head buried in both hands.

Justice Shane said, "It is evident to me that Robot EZ-27 was brought here as a trick. Except for the fact that the trick served to prevent a serious miscarriage of justice, I would certainly hold attorney for the Defense in contempt. It is clear now, beyond any doubt, that the plaintiff has committed what is to me a completely inexplicable fraud since, apparently, he was knowingly ruining his career in the process—"

Judgment, of course, was for the defendant.

Dr. Susan Calvin had herself announced at Dr. Ninheimer's bachelor quarters in University Hall. The young engineer who had driven the car offered to go up with her, but she looked at him scornfully.

"Do you think he'll assault me? Wait down here."

Ninheimer was in no mood to assault anyone. He was packing, wasting no time, anxious to be away before the adverse conclusion of the trial became general knowledge.

He looked at Calvin with a queerly defiant air and said, "Are you coming to warn me of a countersuit? If so, it will get you nothing. I have no money, no job, no future. I can't even meet the costs of the trial."

"If you're looking for sympathy," said Calvin coldly, "don't look for it here. This was your doing. However, there will be no countersuit, neither of you nor of the university. We will even do what we can to keep you from going to prison for perjury. We aren't vindictive."

"Oh, is that why I'm not already in custody for forswearing myself? I had wondered. But then," he added bitterly, "why should you be vindictive? You have what you want now."

"Some of what we want, yes," said Calvin. "The university will keep Easy in its employ at a considerably higher rental fee. Furthermore, certain underground publicity concerning the trial will make it possible to place a few more of the EZ models in other institutions without danger of a repetition of this trouble."

"Then why have you come to see me?"

"Because I don't have all of what I want yet. I want to know why you hate robots as you do. Even if you had won the case, your reputation would have been ruined. The money you might have obtained could not have compensated for that. Would the satisfaction of your hatred for robots have done so?"

"Are you interested in *human* minds, Dr. Calvin?" asked Ninheimer, with acid mockery.

"Insofar as their reactions concern the welfare of robots, yes. For that reason, I have learned a little of human psychology."

"Enough of it to be able to trick me!"

"That wasn't hard," said Calvin, without pomposity. "The difficult thing was doing it in such a way as not to damage Easy."

"It is like you to be more concerned for a machine than for a man." He looked at her with savage contempt.

It left her unmoved. "It merely seems so, Professor Nin-

heimer. It is only by being concerned for robots that one can truly be concerned for twenty-first-century Man. You would understand this if you were a roboticist."

"I have read enough robotics to know I don't want to be a roboticist!"

"Pardon me, you have read a book on robotics. It has taught you nothing. You learned enough to know that you could order a robot to do many things, even to falsify a book, if you went about it properly. You learned enough to know that you could not order him to forget something entirely without risking detection, but you thought you could order him into simple silence more safely. You were wrong."

"You guessed the truth from his silence?"

"It wasn't guessing. You were an amateur and didn't know enough to cover your tracks completely. My only problem was to prove the matter to the judge and you were kind enough to help us there, in your ignorance of the robotics you claim to despise."

"Is there any purpose in this discussion?" asked Ninheimer wearily.

"For me, yes," said Susan Calvin, "because I want you to understand how completely you have misjudged robots. You silenced Easy by telling him that if he told anyone about your own distortion of the book, you would lose your job. That set up a certain potential within Easy toward silence, one that was strong enough to resist our efforts to break it down. We would have damaged the brain if we had persisted.

"On the witness stand, however, you yourself put up a higher counterpotential. You said that because people would think that you, not a robot, had written the disputed passages in the book, you would lose far more than just your job. You would lose your reputation, your standing, your respect, your reason for living. You would lose the memory of you after death. A new and higher potential was set up by you—and Easy talked."

"Oh, God," said Ninheimer, turning his head away.

Calvin was inexorable. She said, "Do you understand why he talked? It was not to accuse you, but to defend you! It can be mathematically shown that he was about to assume full blame for your crime, to deny that you had anything to do with it. The First Law required that. He was going to lie—to damage himself—to bring monetary harm to a corporation. All that meant less to him than did the saving of you. If you really understood robots and robotics, you would have let him talk. But you did not understand, as I was sure you wouldn't, as I guaranteed to the defense attorney that you wouldn't. You were certain, in your hatred of robots, that Easy would act as a human being would act and defend itself at your expense. So you flared out at him in panic—and destroyed yourself."

Ninheimer said with feeling, "I hope some day your robots

turn on you and kill you!"

"Don't be foolish," said Calvin. "Now I want you to explain

why you've done all this."

Ninheimer grinned a distorted, humorless grin. "I am to dissect my mind, am I, for your intellectual curiosity, in return for immunity from a charge of perjury?"

"Put it that way if you like," said Calvin emotionlessly. "But

explain."

"So that you can counter future antirobot attempts more efficiently? With greater understanding?"

"I accept that."

"You know," said Ninheimer, "I'll tell you—just to watch it do you no good at all. You can't understand human motivation. You can only understand your damned machines because you're a machine yourself, with skin on."

He was breathing hard and there was no hesitation in his speech, no searching for precision. It was as though he had no further use for precision.

He said, "For two hundred and fifty years, the machine has been replacing Man and destroying the handcraftsman. Pottery is spewed out of molds and presses. Works of art have been replaced by identical gimcracks stamped out on a die. Call it progress, if you wish! The artist is restricted to abstractions, confined to the world of ideas. He must design something in mind—and then the machine does the rest.

"Do you suppose the potter is content with mental creation? Do you suppose the idea is enough? That there is nothing in the feel of the clay itself, in watching the thing grow as hand and mind work together? Do you suppose the actual growth doesn't act as a feedback to modify and improve the idea?"

"You are not a potter," said Dr. Calvin.

"I am a creative artist! I design and build articles and books. There is more to it than the mere thinking of words and of putting them in the right order. If that were all, there would be

no pleasure in it, no return.

"A book should take shape in the hands of the writer. One must actually see the chapters grow and develop. One must work and rework and watch the changes take place beyond the original concept even. There is taking the galleys in hand and seeing how the sentences look in print and molding them again. There are a hundred contacts between a man and his work at every stage of the game—and the contact itself is pleasurable and repays a man for the work he puts into his creation more than anything else could. Your robot would take all that away."

"So does a typewriter. So does a printing press. Do you propose to return to the hand-illumination of manuscripts?"

"Typewriters and printing presses take away some, but your robot would deprive us of all. Your robot takes over the galleys. Soon it, or other robots, would take over the original writing, the searching of the sources, the checking and cross-checking of passages, perhaps even the deduction of conclusions. What would that leave the scholar? One thing only—the barren decisions concerning what orders to give the robot next! I want to save the future generations of the world of scholarship from such a final hell. That meant more to me than even my own reputation and so I set out to destroy U. S. Robots by whatever means."

"You were bound to fail," said Susan Calvin.

"I was bound to try," said Simon Ninheimer. Calvin turned and left. She did her best to feel no pang of sympathy for the broken man.

She did not entirely succeed.





PZ-G147ti

'74

## Boston Public Library

## LOWER MILLS BRANCH LIBRARY

1110 Washington Street Dorchester Center 24

The Date Due Card in the pocket indicates the date on or before which this book should be returned to the Library. Please do not remove cards from this pocket.

## TIME WAITS FOR WINTHROP AND FOUR OTHER SHORT NOVELS FROM GALAXY

## EDITED BY FREDERIK POHL

TIME WAITS FOR WINTHROP, by William Tenn. Winthrop's stubbornness almost prevents four other people from returning from the 25th Century to the 20th.

ACCIDENTAL FLIGHT, by F. L. Wallace. The accidentals, outcasts of a society of physically perfect people, find a way to escape from the asteroid on which they were hospitalized.

TO MARRY MEDUSA, by Theodore Sturgeon. An alien Medusa succeeds in unifying the mind of man through a most unlikely channel.

NATURAL STATE, by Damon Knight. Alvah Gustad thought patriotism meant all loyalty to the city and all hatred for the country. In time, though, it came to be the other way around — in order to survive.

GALLEY SLAVE, by Isaac Asimov. Professor Ninheimer's academic reputation is ruined because he misunderstood and misused the three laws of positronic robots.