WORLD'S BEST SCIENCE FICTION 1969

an anthology of the year's best science fiction stories by:

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SAMUEL R. DELANY
ROBERT SHECKLEY
FRITZ LEIBER
DAMON KNIGHT
R. A. LAFFERTY
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POUL ANDERSON

and many others · edited by
DONALD A. WOLLHEIM
and TERRY CARR

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DONALD A. WOLLHEIM
and
TERRY CARR

A NIGHTMARISH VIEW of a hospital of the future...a world that avoids overpopulation by eliminating sexual pleasure...a horrifying experiment in the effects of maximum population density...a vast university rigidly controlled by robots...an exploration of the possibilities of love between human and alien...the unanticipated drawbacks of the "planned city" of the future...the replacement of an entire human body destroyed in an accident ...a devastating glimpse of California "after the Flood"...

These are only a few of the fascinating possibilities explored in the nineteen imaginative stories gathered in this omnibus volume of the finest science fiction writing of the past year.

(continued on back flap)

Book Club Edition

(continued from front flap)

Among the authors represented are such masters of the art as Poul Anderson, Robert Sheckley, Brian W. Aldiss, Damon Knight, Colin Kapp, Kurt Vonnegut, Jr., Fritz Leiber, R. A. Lafferty, H. H. Hollis, and many more. In addition, there is included the first U.S. publication of a new novella by Samuel R. Delany, *Time Considered as a Helix of Semi-Precious Stones,* a subtle and ingenious story about the breakdown of communication between individuals resulting from mass-media innovations!

In their fifth edition, the editors have chosen a treasure trove of fabulous tales you'll remember for years to come: stories of incomprehensible alien races, strange human mutations both physical and psychological, exciting adventures at the edge of the universe.

It's an annual anthology that has become an Event for science fiction fans everywhere.

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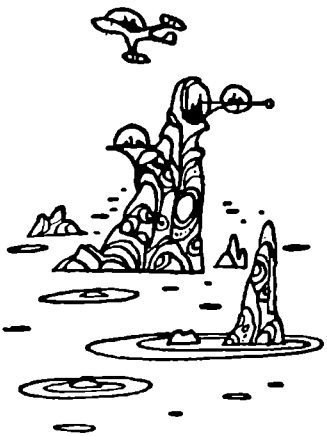

edited by
DONALD A. WOLLHEIM
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INTRODUCTION

THERE ARE SO MANY "best-of-the-year" science fiction anthologies published these days that sometimes we think it must take a scorecard to tell one from another.

It would be presumptuous for us to attempt to describe the competition, but in the interests of letting you know what sort of book you're holding in your hand perhaps we might provide a few words about the WORLD'S BEST SCIENCE FICTION series.

There are just three criteria by which we choose our stories:

First and foremost, this is an anthology of *science fiction stories.* We don't choose fantasy stories, experimental fiction (as such), hyperbolic essays, simple allegories or poems for this book. We say science fiction on the cover and we believe, both as a matter of simple honesty and of sound business practice, that we should deliver what we advertise.

Second, when we call these stories the best of the past year, we don't ring in stories by, say, Alfred Jarry or James Thurber that were originally published in 1930 or 1940, no matter how fine those stories may have been. It's our feeling that people don't buy a best-of-the-year anthology to read their old favorites. The stories in this book were all first published in magazines or books dated 1968. (Discrepancies between magazine dating systems and true calendar dates occasionally cause apparent con-

tradictions of this, as do the vagaries of international copyright laws, but these *are* all 1968 originals.)

The third basis on which we pick stories is quality: we make a conscientious effort to read every science fiction story published everywhere in the world, and to choose from this variety of material the very best. On this point you may, of course, argue with us, since no two people ever agree completely on these things. For that matter, we often disagree between ourselves as to the exact list of stories to be used, with the result that each year the final contents page is something of a compromise between the tastes of two very serious (i.e., opinionated) editors.

But in this, we suspect, lies a strength. WORLD'S BEST SCIENCE FICTION is not the product of just one person's judgment, which might be, or become, rather capricious. On the other hand, two editors don't constitute a committee, either, so you'll probably get some feeling of consistency in the choices here. We hope we strike a balance between extremes.

So, with the ground rules established, we invite you to begin reading. May you enjoy these nineteen stories as much as we did—and if you find a couple you don't care for, we hope they'll lead you into discussions with friends as interesting as the ones we have among ourselves when *we* disagree.

—THE EDITORS

STREET OF DREAMS, FEET OF CLAY

ROBERT SHECKLEY

We hear a lot, these days, about specially planned cities of the future. They sound great, but we all know they'll have their drawbacks too, don't we? Here Robert Sheckley, in a story that might have been titled CARMODY'S COMPLAINT, suggests the nature of one slightly imperfect future city.

I

CARMODY HAD never really planned to leave New York. Why he did so is inexplicable. A born urbanite, he had grown accustomed to the minor inconveniences of metropolitan life. His snug apartment on the 290th floor of Levitfrack Towers on West Ninety-ninth Street was nicely equipped in the current "Spaceship" motif. The windows were double-sealed in tinted lifetime plexiglas, and the air ducts worked through a blind baffle filtration system which sealed automatically when the Combined Atmosphere Pollution Index reached 999.8 on the Con Ed scale. True, his oxygen-nitrogen air recirculation system was old, but it was

reliable. His water purification cells were obsolete and ineffective; but then, nobody drank water anyhow.

Noise was a continual annoyance, unstoppable and inescapable. But Carmody knew that there was no cure for this, since the ancient art of soundproofing had been lost. It was urban man's lot to listen, a captive audience, to the arguments, music and watery gurglings of his adjacent neighbors. Even this torture could be alleviated, however, by producing similar sounds of one's own.

Going to work each day entailed certain dangers; but these were more apparent than real. Disadvantaged snipers continued to make their ineffectual protests from rooftops and occasionally succeeded in potting an unwary out-of-towner. But as a rule, their aim was abominable. Additionally, the general acceptance of lightweight personal armor had taken away most of their sting, and the sternly administered state law forbidding the personal possession of surplus cannon had rendered them ineffectual.

Thus, no single factor can be adduced for Carmody's sudden decision to leave what was generallly considered the world's most exciting megapolitan agglomeration. Blame it on a vagrant impulse, a pastoral fantasy, or on sheer perversity. The simple, irreducible fact is, one day Carmody opened his copy of the *Daily Times-News* and saw an advertisement for a model city in New Jersey.

"Come live in Bellwether, the city that cares," the advertisement proclaimed. There followed a list of utopian claims which need not be reproduced here.

"Huh," said Carmody, and read on.

Bellwether was within easy commuting distance. One simply drove through the Ulysses S. Grant Tunnel at 43rd Street, took the Hoboken Shunt Subroad to the Palisades Interstate Crossover, followed that for 3.2 miles on the Blue-Charlie Sorter Loop that led onto U.S. 5 (The Hague Memorial Tollway), proceeded along that a distance of 6.1 miles to the Garden State Supplementary Access Service Road (Provisional), upon which one tended west to Exit 1731A, which was King's Highbridge Gate Road, and then continued along that for a distance of 1.6 miles. And there you were.

"By jingo," said Carmody, "I'll do it."

And he did.

II

King's Highbridge Gate Road ended on a neatly trimmed plain. Carmody got out of his car and looked around. Half a mile ahead of him he saw a small city. A single modest signpost identified it as Bellwether.

This city was not constructed in the traditional manner of American cities, with outliers of gas stations, tentacles of hot-dog stands, fringes of motels and a protective carapace of junkyards; but rather, as some Italian hill towns are fashioned, it rose abruptly, without physical preamble, the main body of the town presenting itself at once and without amelioration.

Carmody found this appealing. He advanced into the city itself.

Bellwether had a warm and open look. Its streets were laid out generously, and there was a frankness about the wide bay windows of its store-fronts. As he penetrated deeper, Carmody found other delights. Just within the city he entered a piazza, like a Roman piazza, only smaller; and in the center of the piazza there was a fountain, and standing in the fountain was a marble representation of a boy with a dolphin, and from the dolphin's mouth a stream of clear water issued.

"I do hope you like it," a voice said from behind Carmody's left shoulder.

"It's nice," Carmody said.

"I constructed it and put it there myself," the voice told him. "It seemed to me that a fountain, despite the antiquity of its concept, is esthetically functional. And this piazza, with its benches and shady chestnut trees, is copied from a Bolognese model. Again, I did not inhibit myself with the fear of seeming old-fashioned. The true artist uses what is necessary, be it a thousand years old or one second new."

"I applaud your sentiment," Carmody said. "Permit me to introduce myself. I am Edward Carmody." He turned, smiling.

But there was no one behind his left shoulder, or behind his right shoulder, either. There was no one in the piazza, nobody at all in sight.

"Forgive me," the voice said. "I didn't mean to startle you. I thought you knew."

"Knew what?" Carmody asked.

"Knew about me."

"Well, I don't," Carmody said. "Who are you and where are you speaking from?"

"I am the voice of the city," the voice said. "Or to put it another way, I am the city itself, Bellwether, the actual and veritable city, speaking to you."

"Is that a fact?" Carmody said sardonically. "Yes," he answered himself, "I suppose it is a fact. So all right, you're a city. Big deal!"

He turned away from the fountain and strolled across the piazza like a man who conversed with cities every day of his life, and who was slightly bored with the whole thing. He walked down various streets and up certain avenues. He glanced into store windows and noted houses. He paused in front of statuary, but only briefly.

"Well?" the city of Bellwether asked after a while.

"Well what?" Carmody answered at once.

"What do you think of me?"

"You're okay," Carmody said.

"Only okay? Is that all?"

"Look," Carmody said, "a city is a city. When you've seen one, you've pretty much seen them all."

"That's untrue!" the city said, with some show of pique. "I am distinctly different from other cities. I am unique."

"Are you indeed?" Carmody said scornfully. "To me you look like a conglomeration of badly assembled parts. You've got an Italian piazza, a couple of Greek-type buildings, a row of Tudor houses, an old-style New York tenement, a California hot-dog stand shaped like a tugboat and God knows what else. What's so unique about that?"

"The combination of those forms into a meaningful entity is unique," the city said. "These older forms are not anachronisms, you understand. They are representative styles of living, and as

such are appropriate in a well wrought machine for living. Would you care for some coffee and perhaps a sandwich or some fresh fruit?"

"Coffee sounds good," Carmody said. He allowed Bellwether to guide him around the corner to an open-air cafe. The cafe was called *O You Kid* and was a replica of a Gay Nineties saloon, right down to the Tiffany lamps and the cutglass chandelier and the player piano. Like everything else that Carmody had seen in the city, it was spotlessly clean, but without people.

"Nice atmosphere, don't you think?" Bellwether asked.

"Campy," Carmody pronounced. "Okay if you like that sort of thing."

A foaming mug of cappucino was lowered to his table on a stainless steel tray. Carmody sipped.

"Good?" Bellwether asked.

"Yes, very good."

"I rather pride myself on my coffee," the city said quietly. "And on my cooking. Wouldn't you care for a little something? An omelette, perhaps, or a souffle?"

"Nothing," Carmody said firmly. He leaned back in his chair and said, "So you're a model city, huh?"

"Yes, that is that I have the honor to be," Bellwether said. "I am the most recent of all model cities; and, I believe, the most satisfactory. I was conceived by a joint study group from Yale and the University of Chicago, who were working on a Rockefeller fellowship. Most of my practical details were devised by M.I.T., although some special sections of me came from Princeton and from the RAND Corporation. My actual construction was a General Electric project, and the money was procured by grants from the Ford and Carnegie Foundations, as well as several other institutions I am not at liberty to mention."

"Interesting sort of history," Carmody said, with hateful nonchalance. "That's a Gothic cathedral across the street, isn't it?"

"Modified Romanesque," the city said. "Also interdenominational and open to all faiths, with a designed seating capacity for three hundred people."

"That doesn't seem like many for a building of that size."

"It's not, of course. Designedly. My idea was to combine awesomeness with coziness."

"Where are the inhabitants of this town, by the way?" Carmody asked.

"They have left," Bellwether said mournfully. "They have all departed."

"Why?"

The city was silent for a while, then said, "There was a breakdown in city-community relations. A misunderstanding, really. Or perhaps I should say, an unfortunate series of misunderstandings. I suspect that rabble-rousers played their part."

"But what *happened,* precisely?"

"I don't know," the city said. "I really don't know. One day they simply all left. Just like that! But I'm sure they'll be back."

"I wonder," Carmody said.

"I am convinced of it," the city said. "But putting that aside: why don't *you* stay here, Mr. Carmody?"

"I haven't really had time to consider it," Carmody said.

"How could you help but like it?" Bellwether said. "Just think—you would have the most modern up-to-date city in the world at your beck and call."

"That does sound interesting," Carmody said.

"So give it a try, how could it hurt you?" the city asked.

"All right, I think I will," Carmody said.

He was intrigued by the city of Bellwether. But he was also apprehensive. He wished he knew exactly why the city's previous occupants had left.

At Bellwether's insistence, Carmody slept that night in the sumptuous bridal suite of the King George V Hotel. Bellwether served him breakfast on the terrace and played a brisk Haydn quartet while Carmody ate. The morning air was delicious. If Bellwether hadn't told him, Carmody would never have guessed it was reconstituted.

When he was finished, Carmody leaned back and enjoyed the view of Bellwether's western quarter—a pleasing jumble of Chinese pagodas, Venetian footbridges, Japanese canals, a green Burmese hill, a Corinthian temple, a California parking lot, a Norman tower and much else besides.

"You have a splendid view," he told the city.

"I'm so glad you appreciate it," Bellwether replied. "The prob-

lem of style was argued from the day of my inception. One group held for consistency: a harmonious group of shapes blending into a harmonious whole. But quite a few model cities are like that. They are uniformly dull, artificial entities created by one man or one committee, unlike real cities."

"You're sort of artificial yourself, aren't you?" Carmody asked.

"Of course! But I do not pretend to be anything else. I am not a fake 'city of the future' or a mock-Florentine bastard. I am a true agglutinated congeries. I am supposed to be interesting and stimulating in addition to being functional and practical."

"Bellwether, you look okay to me," Carmody said, in a sudden rush of expansiveness. "Do all model cities talk like you?"

"Certainly not. Most cities up to now, model or otherwise, never said a word. But their inhabitants didn't like that. It made the city seem too huge, too masterful, too soulless, too impersonal. That is why I was created with a voice and an artificial consciousness to guide it."

"I see," Carmody said.

"The point is, my artificial consciousness personalizes me, which is very important in an age of depersonalization. It enables me to be truly responsive. It permits me to be creative in meeting the demands of my occupants. We can reason with each other, my people and I. By carrying on a continual and meaningful dialogue, we can help each other to establish a dynamic, flexible and truly viable urban environment. We can modify each other without any significant loss of individuality."

"It sounds fine," Carmody said. "Except, of course, that you don't have anyone here to carry on a dialogue with."

"That is the only flaw in the scheme," the city admitted. "But for the present, I have you."

"Yes, you have me," Carmody said, and wondered why the words rang unpleasantly on his ear.

"And, naturally, you have me," the city said. "It is a reciprocal relationship, which is the only kind worth having. But now, my dear Carmody, suppose I show you around myself. Then we can get you settled in and regularized."

"Get me what?"

"I didn't mean that the way it sounded," the city said. "It simply is an unfortunate scientific expression. But you under-

stand, I'm sure, that a reciprocal relationship necessitates obligations on the part of both involved parties. It couldn't very well be otherwise, could it?"

"Not unless it was a *laissez-faire* relationship."

"We're trying to get away from all that," Bellwether said. "*Laissez-faire* becomes a doctrine of the emotions, you know, and leads non-stop to *anomie*. If you will just come this way. . . ."

III

Carmody went where he was asked and beheld the excellencies of Bellwether. He toured the power plant, the water filtration center, the industrial park and the light industries section. He saw the children's park and the Odd Fellow's Hall. He walked through a museum and an art gallery, a concert hall and a theater, a bowling alley, a billiards parlor, a Go-Kart track and a movie theater. He became tired and wanted to stop. But the city wanted to show itself off, and Carmody had to look at the five-story American Express building, the Portuguese synagogue, the statue of Buckminster Fuller, the Greyhound Bus Station and several other attractions.

At last it was over. Carmody concluded that beauty was in the eye of the beholder, except for a small part of it that was in the beholder's feet.

"A little lunch now?" the city asked.

"Fine," Carmody said.

He was guided to the fashionable Rochambeau Cafe, where he began with *potage au petit pois* and ended with *petits fours*.

"What about a nice Brie to finish off?" the city asked.

"No, thanks," Carmody said. "I'm full. Too full, as a matter of fact."

"But cheese isn't filling. A bit of first-rate Camembert?"

"I couldn't possibly."

"Perhaps a few assorted fruits. *Very* refreshing to the palate."

"It's not my palate that needs refreshing," Carmody said.

"At least an apple, a pear and a couple of grapes?"

"Thanks, no."

"A couple of cherries?"

"No, no, no!"

"A meal isn't complete without a little fruit," the city said.

"My meal is," Carmody said.

"There are important vitamins only found in fresh fruit."

"I'll just have to struggle along without them."

"Perhaps half an orange, which I will peel for you? Citrus fruits have no bulk at all."

"I couldn't possibly."

"Not even one quarter of an orange? If I take out all the pits?"

"Most decidedly not."

"It would make me feel better," the city said. "I have a completion compulsion, you know, and no meal is complete without a piece of fruit."

"No! No! No!"

"All right, don't get so excited," the city said. "If you don't like the sort of food I serve, that's up to you."

"But I do like it!"

"Then if you like it so much, why won't you eat some fruit?"

"Enough," Carmody said. "Give me a couple of grapes."

"I wouldn't want to force anything on you."

"You're not forcing. Give me, please."

"You're quite sure?"

"Gimme!" Carmody shouted.

"So take," the city said and produced a magnificent bunch of muscatel grapes. Carmody ate them all. They were very good.

"Excuse me," the city said. "What are you doing?" Carmody sat upright and opened his eyes. "I was taking a little nap," he said. "Is there anything wrong with that?"

"What should be wrong with a perfectly natural thing like that?" the city said.

"Thank you," Carmody said, and closed his eyes again.

"But why nap in a chair?" the city asked.

"Because I'm *in* a chair, and I'm already half asleep."

"You'll get a crick in your back," the city warned him.

"Don't care," Carmody mumbled, his eyes still closed.

"Why not take a proper nap? Over here, on the couch?"

"I'm already napping comfortably right here."

"You're not really comfortable," the city pointed out. "The human anatomy is not constructed for sleeping sitting up."

"At the moment, mine is," Carmody said.

"It's not. Why not try the couch?"

"The chair is fine."

"But the couch is finer. Just try it, please, Carmody. Carmody?"

"Eh? What's that?" Carmody said, waking up.

"The couch. I really think you should rest on the couch."

"All right!" Carmody said, struggling to his feet. "Where is this couch?"

He was guided out of the restaurant, down the street, around the corner, and into a building marked *The Snoozerie*. There were a dozen couches. Carmody went to the nearest.

"Not that one," the city said. "It's got a bad spring."

"It doesn't matter," Carmody said. "I'll sleep around it."

"That will result in a cramped posture."

"Christ!" Carmody said, getting to his feet. "Which couch would you recommend?"

"This one right back here," the city said. "It's a king-size, the best in the place. The yield-point of the mattress has been scientifically determined. The pillows—"

"Right, fine, good," Carmody said, lying down on the indicated couch.

"Shall I play you some soothing music?"

"Don't bother."

"Just as you wish. I'll put out the lights, then."

"Fine."

"Would you like a blanket? I control the temperature here, of course, but sleepers often get a subjective impression of chilliness."

"It doesn't matter! Leave me alone!"

"All right!" the city said. "I'm not doing this for myself, you know. Personally, I never sleep."

"Okay, sorry," Carmody said.

"That's perfectly all right."

There was a long silence. Then Carmody sat up.

"What's the matter?" the city asked.

"Now I can't sleep," Carmody said.

"Try closing your eyes and consciously relaxing every muscle

in your body, starting with the big toe and working upward to—"

"I can't sleep!" Carmody shouted.

"Maybe you weren't very sleepy to begin with," the city suggested. "But at least you could close your eyes and try to get a little rest. Won't you do that for me?"

"No!" Carmody said. "I'm not sleepy and I don't need a rest."

"Stubborn!" the city said. "Do what you like. I've tried my best."

"Yeah!" Carmody said, getting to his feet and walking out of the Snoozerie.

IV

Carmody stood on a little curved bridge and looked over a blue lagoon.

"This is a copy of the Rialto bridge in Venice," the city said. "Scaled down, of course."

"I know," Carmody said. "I read the sign."

"It's rather enchanting, isn't it?"

"Sure, it's fine," Carmody said, lighting a cigarette.

"You're doing a lot of smoking," the city pointed out.

"I know. I feel like smoking."

"As your medical advisor, I must point out that the link between smoking and lung cancer is conclusive."

"I know."

"If you switched to a pipe your chances would be improved."

"I don't like pipes."

"What about a cigar, then?"

"I don't like cigars." He lit another cigarette.

"That's your third cigarette in five minutes," the city said.

"Goddamn it, I'll smoke as much and as often as I please!" Carmody shouted.

"Well, of course you will!" the city said. "I was merely trying to advise you for your own good. Would you want me to simply stand by and not say a word while you destroyed yourself?"

"Yes," Carmody said.

"I can't believe that you mean that. There is an ethical imperative involved here. Man can act against his best interests; but a machine is not allowed that degree of perversity."

"Get off my back," Carmody said sullenly. "Quit pushing me around."

"Pushing you around? My dear Carmody, have I coerced you in any way? Have I done any more than advise you?"

"Maybe not. But you talk too much."

"Perhaps I don't talk enough," the city said. "To judge from the response I get."

"You talk too much," Carmody repeated and lit a cigarette.

"That is your fourth cigarette in five minutes."

Carmody opened his mouth to bellow an insult. Then he changed his mind and walked away.

"What's this?" Carmody asked.

"It's a candy machine," the city told him.

"It doesn't look like one."

"Still, it is one. This design is a modification of a design by Saarionmen for a silo. I have miniaturized it, of course, and—"

"It still doesn't look like a candy machine. How do you work it?"

"It's very simple. Push the red button. Now wait. Press down one of those levers on Row A; now press the green button. There!"

A Baby Ruth bar slid into Carmody's hand.

"Huh," Carmody said. He stripped off the paper and bit into the bar. "Is this a real Baby Ruth bar or a copy of one?" he asked.

"It's a real one. I had to subcontract the candy concession because of the pressure of work."

"Huh," Carmody said, letting the candy wrapper slip from his fingers.

"That," the city said, "is an example of the kind of thoughtlessness I always encounter."

"It's just a piece of paper," Carmody said, turning and looking at the candy wrapper lying on the spotless street.

"Of course it's just a piece of paper," the city said. "But multiply it by a hundred thousand inhabitants and what do you have?"

"A hundred thousand Baby Ruth wrappers," Carmody answered at once.

"I don't consider that funny," the city said. "You wouldn't want to *live* in the midst of all that paper, I can assure you. You'd be the first to complain if this street were strewn with garbage. But do you do your share? Do you even clean up after yourself? Of course not! You leave it to me, even though I have to run all of the other functions of the city, night and day, without even Sundays off."

Carmody bent down to pick up the candy wrapper. But just before his fingers could close on it, a pincer arm shot out of the nearest sewer, snatched the paper away and vanished from sight.

"It's all right," the city said. "I'm used to cleaning up after people. I do it all the time."

"Yuh," said Carmody.

"Nor do I expect any gratitude."

"I'm grateful, I'm gratefull" Carmody said.

"No, you're not," Bellwether said.

"So okay, maybe I'm not. What do you want me to say?"

"I don't want you to say anything," the city said. "Let us consider the incident closed."

"Had enough?" the city said, after dinner.

"Plenty," Carmody said.

"You didn't eat much."

"I ate all I wanted. It was very good."

"If it was so good, why didn't you eat more?"

"Because I couldn't hold any more."

"If you hadn't spoiled your appetite with that candy bar . . ."

"Goddamn it, the candy bar didn't spoil my appetite! I just—"

"You're lighting a cigarette," the city said.

"Yeah," Carmody said.

"Couldn't you wait a little longer?"

"Now look," Carmody said. "Just what in hell do you—"

"But we have something more important to talk about," the city said quickly. "Have you thought about what you're going to do for a living?"

"I haven't really had much time to think about it."

"Well, I have been thinking about it. It would be nice if you became a doctor."

"Me? I'd have to take special college courses, then get into medical school, and so forth."

"I can arrange all that," the city said.

"Not interested."

"Well . . . What about law?"

"Never."

"Engineering is an excellent line."

"Not for me."

"What about accounting?"

"Not on your life."

"What do you want to be?"

"A jet pilot," Carmody said impulsively.

"Oh, come now!"

"I'm quite serious."

"I don't even have an air field here."

"Then I'll pilot somewhere else."

"You're only saying that to spite me!"

"Not at all," Carmody said. "I want to be a pilot, I really do. I've *always* wanted to be a pilot! Honest I have!"

There was a long silence. Then the city said, "The choice is entirely up to you." This was said in a voice like death.

"Where are you going now?"

"Out for a walk," Carmody said.

"At nine-thirty in the evening?"

"Sure. Why not?"

"I thought you were tired."

"That was quite some time ago."

"I see. And I also thought that you could sit here and we could have a nice chat."

"How about if we talk after I get back?" Carmody asked.

"No, it doesn't matter," the city said.

"The walk doesn't matter," Carmody said, sitting down. "Come on, we'll talk."

"I no longer care to talk," the city said. "Please go for your walk."

V

"Well, good night," Carmody said.

"I beg your pardon?"

"I said, 'good night.'"

"You're going to sleep?"

"Sure. It's late, I'm tired."

"You're going to sleep now?"

"Well, why not?"

"No reason at all," the city said, "except that you have forgotten to wash."

"Oh. . . . I guess I did forget. I'll wash in the morning."

"How long is it since you've had a bath?"

"Too long. I'll take one in the morning."

"Wouldn't you feel better if you took one right now?"

"No."

"Even if I drew the bath for you?"

"No! Goddamn it, no! I'm going to sleep!"

"Do exactly as you please," the city said. "Don't wash, don't study, don't eat a balanced diet. But also, don't blame me."

"Blame you? For what?"

"For anything," the city said.

"Yes. But what did you have in mind, specifically?"

"It isn't important."

"Then why did you bring it up in the first place?"

"I was only thinking of you," the city said.

"I realize that."

"You must know that it can't benefit *me* if you wash or not."

"I'm aware of that."

"When one cares," the city went on, "when one feels one's responsibilities, it is not nice to hear oneself sworn at."

"I didn't swear at you."

"Not this time. But earlier today you did."

"Well . . . I was nervous."

"That's because of the smoking."

"Don't start that again!"

"I won't," the city said. "Smoke like a furnace. What does it matter to me?"

"Damned right," Carmody said, lighting a cigarette.

"But my failure," the city said.

"No, no," Carmody said. "Don't say it, please don't!"

"Forget I said it," the city said.

"All right."

"Sometimes I get overzealous."

"Sure."

"And it's especially difficult because I'm right. I am right, you know."

"I know," Carmody said. "You're right, you're right, you're always right. Right right right right right—"

"Don't overexcite yourself betime," the city said. "Would you care for a glass of milk?"

"No."

"You're sure?"

Carmody put his hands over his eyes. He felt very strange. He also felt extremely guilty, fragile, dirty, unhealthy and sloppy. He felt generally and irrevocably bad, and it would always be this way unless he changed, adjusted, adapted. . . .

But instead of attempting anything of the sort he rose to his feet, squared his shoulders, and marched away past the Roman piazza and the Venetian bridge.

"Where are you going?" the city asked. "What's the matter?"

Silent, tight-lipped, Carmody continued past the children's park and the American Express building.

"What did I do wrong?" the city cried. "What, just tell me what?"

Carmody made no reply but strode past the Rochambeau Cafe and the Portuguese synagogue, coming at last to the pleasant green plain that surrounded Bellwether.

"Ingrate!" the city screamed after him. "You're just like all the others. All of you humans are disagreeable animals, and you're never really satisfied with anything."

Carmody got into his car and started the engine.

"But of course," the city said, in a more thoughtful voice, "you're

never really *dissatisfied* with anything either. The moral, I suppose, is that a city must learn patience."

Carmody turned the car onto King's Highbridge Gate Road and started east, toward New York.

"Have a nice trip!" Bellwether called after him. "Don't worry about me, I'll be waiting up for you."

Carmody stepped down hard on the accelerator. He really wished he hadn't heard that last remark.

BACKTRACKED

BURT FILER

Burt Filer is another in the seemingly inexhaustible series of strongly talented new writers who have entered the science fiction field in the past few years. Here he suggests a time travel idea that's new to us, and tells his story in intensely human terms.

THE FIRST THING he saw was Sally staring at him. She was sitting up in the big bed and had four fingers of her left hand wedged in her mouth. For some reason she'd drawn the sheet up around her and held it there with the other arm, as if caught suddenly by a stranger. Fletcher sat up.

"What's the matter? What time is it?" He felt odd and a little woozy. His voice sounded rough and both legs hurt, the good one and the other one.

"You've backtracked," Sally said. She gritted her teeth and gave that quick double shake of hers. The long brown hair fell down, and a curler came out.

Fletcher looked down at the arm he'd hooked around his good knee. It was sunburned and freckled the way August usually

made it, but the August of what future year had done this? The fingers were blunter, the nails badly bitten, and the arm itself was thicker by half than the one he'd gone to bed with.

Sally lay back down, blinking, on the verge of tears. "You're older," she said, "a lot older. Why'd you do it?"

Fletcher tossed off the sheet and swung his legs to the floor. "I don't know, but then I wouldn't. It wipes you out completely, they say." Hurrying across the old green rug they'd retired to the bedroom after long service downstairs, he stared at himself in the dressing mirror. At first he didn't believe it.

Gone was the somewhat paunchy but still attractive businessman of thirty-six. The man in the mirror looked more like a Sicilian fisherman, all weatherbeaten and knotty. Fletcher looked for several long seconds at the blue veins which wrapped his forearms and calves like fishnets. Both calves. The left, though still as warped as ever, was thick now. It looked strong, but it ached.

Fletcher's face was older by ten years. Etched in the seams about his eyes was the grimness that age brings out through a lifetime of forced smiles. And though the hair on his chest was sunbleached, he could easily see that a good deal of it was actually white. Fletcher shut his eyes, turned away.

Walking around to Sally's side of the bed, he sat down and dropped a hand to her shoulder. "I must have had a good reason. We'll find out soon enough."

It was only six o'clock but sleep was out of the question, naturally. They dressed. Sally went down the stairs ahead of him, still slim and lithe at thirty-four, and still desirable. The envy of many.

She turned left into the kitchen and he followed, but continued past into the garage. His excuse for privacy was the bicycles just as hers was breakfast. *Leave me alone and I'll get used to it,* Fletcher thought. *Leave her alone and she can handle it too.*

He edged around the bumper of their car to the clutter of his workbench and switched on the light. The bicycles gave him a momentary sense of rightness, gleaming there. They were so slender and functional and spare. Flipping his own over on its back, he checked tension on the derailleur. Perfect.

He righted the thing and dropped the rear wheel into the free

rollers. Mounting it, he pedaled against light resistance, the way he'd always dreamed the roads would be.

Maybe they would be now, with these legs. Why had he spent ten years torturing spring into the muscles of a cripple? Sheer vanity, perhaps. But at the cost of wasting those ten years forever, it seemed unreasonable.

Fletcher was sweating, and the speedometer on the rollers said thirty. He was only halfway through the gears, though, so he shifted twice. Fifty.

Maybe he should call Time Central? No, they were duty bound to give him no help at all. They'd just say that at some point ten years in the future he had gone to them with a request to be backtracked to the present—and that before making the hop his mind had been run through that CLEAR/RESET wringer of theirs.

Sorry, Mr. Fletcher, but it's the only way to minimize temporal contamination and paradox. Bothersome thing, paradox. Your mind belongs to Fletcher of the present; you have no knowledge of the future. You understand, of course.

What he understood was that the body of Fletcher-forty-odd had backtracked to be used by the mind of Fletcher-thirty-six, almost as a beast of burden.

And Fletcher-thirty-six could only wonder why.

A lot of people did it to escape some unhappiness in their later years. It seldom worked. They inevitably became anachronistic misfits among their once-contemporaries. But ten years at Fletcher's age wasn't really that much, and he guessed they'd all get used to him. But would Sally?

Sixty, said the dummy speedometer. Fletcher noted with some surprise that he'd been at it for fifteen minutes. Better slow down, and save some for the trip. What strength! Maybe he'd learn to play tennis. He could see himself trouncing Dave Schenk, Sally looking on from the sidelines— Fletcher was smiling now. Sally would come around. She had a powerful older man in place of a soft young one, a cripple at that. Polio. He'd been one of the last. Other men had held doors open for him ever since, and he'd learned to smile. . . .

Up to fifty again, slow down. And where was breakfast? This body of his hungered. And what had it done, this body? Knowing from bitter experience how slowly it responded to exercise,

Fletcher decided that the lost ten years must have been devoted almost exclusively to physical development.

But for what? Some kind of crisis, that he might meet with superior strength on the second go-around? And why had he decided to backtrack to this particular morning?

"Fletch, breakfast," Sally called. The voice was lighter and steady. Dismounting, Fletcher stood with his hands in his pockets and watched the silver wheel whir slowly to a stop.

She wouldn't want to discuss it. Not for a while, anyhow. It'd been the same with his leg, back before they were married. He switched the light off and went in.

"It'll be nice after that burns off," he said, nodding out the window.

The bench in the breakfast nook felt hard as he sat on it. Less flesh there now. Sally handed down two plates and joined him. Not across the table but at his side. A show of confidence. They ate slowly, silently.

Fletcher looked over at her profile. With her hair tied back like that she was very patrician. Straight nose, serious mouth. Like Anastasia, Dave Schenk had said, a displaced princess. She caught him looking at her, began to smile, changed her mind, put down her fork.

She faced him squarely. "I think I'll make it, Fletch." She lowered her forehead a fraction, waiting for a reassuring peck, and he gave it to her.

He turned out to have been right about the weather. Within an hour they were pedaling in bright sunlight and had stopped to remove their sweaters. Sally seemed cheerful. For perhaps the third time, Fletcher caught her gazing with frank wonder at his body, especially his leg. He glowed inwardly. Aloud he said, "Forward, troops," and swooped off ahead.

They wound their way up Storm King Mountain. Occasionally a car would grind past them on the steep grades, but soon the two bicycles left the road. They had the clay path which led up to the reservoir all to themselves. May-pale sumacs on the left, and a hundred feet of naked air on the right.

"Hey," said Sally, "slow down." Dismounting, they sat under a big maple. She leaned her head on his shoulder and slid one

hand cosily between his upper arm and his ribs. "Oh," she said, and raised her eyebrows.

They sat there for some time. Over them the branches reached across the path and out beyond the cliffs. Below, the Hudson wound in a huge ess, a round green island at one end. It was a wide old river, moving slowly. A tug dragged clumped barges upstream in an efficient line that cut off most of the curves. In the distance a few motorboats buzzed like flies, little white wakes behind them. Crawling along the far shore was a passenger train headed for New York.

It smelled like spring. Rising, Sally went over by the bicycles and bent to pick a white umbrella of Queen Anne's lace. She came back twirling the stalk between her fingers. "Ready," she said.

He set her an easy pace, but did it the hard way himself, not using the lower gears. One of Dave Schenk's subtler tricks. Fletcher wished he was with them today.

At about eleven o'clock they reached the top. Between the power company's storage reservoir and the bluffs was a little park that no one else ever seemed to use. Sally spread most of their food on a weathered wooden picnic table. Then she went over and sat on a broad granite shelf. Fletcher set about starting a fire.

It was taking him quite a while, as he'd forgotten the starter and had to whittle some twigs for tinder. He nicked his thumb, frowned, sucked it, looked up.

Sally was on her feet again, picking more flowers. She paused from time to time to gaze out over the river. The view was even more spectacular here, Fletcher knew, even though too far back to see it himself. They were three or four hundred feet straight above the water.

Running a few feet beyond the main line of the bluff was a grassy promontory. Several bunches of Queen Anne's lace waved above the wild hay and creepers. He wished she'd get away from there and took a breath to tell her to.

Sally screamed as her legs slid out of sight. Twisting midair, she clutched two frantic handfuls of turf.

She was only sixty feet away, but the fireplace and the big old table lay directly between them. Fletcher planted both hands

on the smoking stone chimney and vaulted it. The thing was four feet high, but could have been five and he'd still have made it. A dozen running steps, each faster and longer than the last, carried him to the table. He yanked his head down and his right leg up to hurdle it, snapping the leg down on the other side and swinging the weaker one behind. Pain shot through it, and Fletcher nearly sprawled. It took him four steps to straighten out, and in four more he was there.

He hurled himself at the two slender wrists that were falling away, and got one.

Sally screamed again, this time in pain. Fletcher hauled her up to his chin, both sinewy hands around her small white one. Edging backward on his knees, he drew her fully up. Fletcher stood shakily and attempted to help her to her feet. His left leg gave way.

Falling beside her, he lay on the warm granite and tried to catch his breath. It was difficult for some reason. Her face swam before him, and as he lost consciousness he heard himself repeating, "So that's why, that's why—"

Fletcher's eyelids were burning, so he opened them, to look directly into the sun. He must have been lying there an hour. Sally—his mind leapfrogged back and the breath stopped in his throat. But no, it was over, she lay here beside him now. Fletcher rose to an elbow. His leg throbbed between numbness and intolerable pain, and it looked as if someone had taken an axe to it.

But Sally's wrist looked just as bad. The drying scum near her lips attested to that. As he moved her head gently away from the puddle, she moaned.

It took him ten minutes to crawl over to the table and return with a bottle of wine. They'd brought no water. He sprinkled some on her forehead, then held it to her lips. She came around, fainted, came around again.

Sally had made it about halfway down to the road when she ran into some picnickers. The jeep came at three, and at four they were both in the orthopedic ward at Rockland State.

Fletcher was still dopey with anesthetic and delayed shock. As he told the reporter what had happened, the little man nearly

drooled. Their episode had occurred on Saturday. When they were released from the hospital and sent home on Wednesday, their story was still up on page four. On the front porch was a yellow plastic wastebasket full of unopened telegrams and letters.

They hadn't had much privacy at the hospital. So after Sally had made the coffee she sat down opposite Fletcher at the kitchen table and asked, "How've you been?"

"Okay. Still a little disoriented, maybe."

"Yes." She stared into her cup. "Fletch, I guess the first time we went through that, I fell?"

Fletcher nodded. "I'd never have made it to you, the old way." He stared down at the cast on his leg. "Ten years of mine, for all of yours. I'd do it again."

"It wasn't cheap," she said.

"No, it wasn't cheap."

They made love that night. Fletcher had been worried about that, and found his fears justified to some extent. Ten years made a difference. But Sally held him long afterward and cried a little, which was the best with her. He fell asleep feeling reassured for then, but knowing what was to come.

Fletcher dyed his hair and had some minor facial surgery done to smooth out his eyes and throat. He gained ten pounds. He looked pretty much like the Fletcher of thirty-six. A certain amount of romance was attached to his reputation now, and when he changed jobs his salary almost doubled.

His broken left leg never healed solidly, though, and for all intents and purposes he was back to where he'd started. He and Sally remained childless right up until their divorce two years later. She was later married to David Schenk, but Fletcher remained alone.

KYRIE

POUL ANDERSON

Poul Anderson is most generally regarded as the best practicing writer of "hard" science fiction: stories built solidly around careful extrapolation of scientific laws as we understand them today. His stories are this popular because in so many of them he combines the wonders of science with the emotional impact of very human hopes and fears. KYRIE presents one example.

On a high peak in the Lunar Carpathians stands a convent of St. Martha of Bethany. The walls are native rock; they lift dark and cragged as the mountainside itself, into a sky that is always black. As you approach from Northpole, flitting low to keep the force screens along Route Plato between you and the meteoroidal rain, you see the cross which surmounts the tower, stark athwart Earth's blue disc. No bells resound from there—not in airlessness.

You may hear them inside at the canonical hours, and throughout the crypts below where machines toil to maintain a sem-

blance of terrestrial environment. If you linger a while you will also hear them calling to requiem mass. For it has become a tradition that prayers be offered at St. Martha's for those who have perished in space; and they are more with every passing year.

This is not the work of the sisters. They minister to the sick, the needy, the crippled, the insane, all whom space has broken and cast back. Luna is full of such, exiles because they can no longer endure Earth's pull or because it is feared they may be incubating a plague from some unknown planet or because men are so busy with their frontiers that they have no time to spare for the failures. The sisters wear spacesuits as often as habits, are as likely to hold a medikit as a rosary.

But they are granted some time for contemplation. At night, when for half a month the sun's glare has departed, the chapel is unshuttered and stars look down through the glaze-dome to the candles. They do not wink and their light is winter cold. One of the nuns in particular is there as often as may be, praying for her own dead. And the abbess sees to it that she can be present when the yearly mass, that she endowed before she took her vows, is sung.

Requiem aeternam dona eis, Domine, et lux
perpetua luceat eis.
Kyrie eleison, Christe eleison, Kyrie eleison.

The Supernova Sagittarii expedition comprised fifty human beings and a flame. It went the long way around from Earth orbit, stopping at Epsilon Lyrae to pick up its last member. Thence it approached its destination by stages.

This is the paradox: time and space are aspects of each other. The explosion was more than a hundred years past when noted by men on Lasthope. They were part of a generations-long effort to fathom the civilization of creatures altogether unlike us; but one night they looked up and saw a light so brilliant it cast shadows.

That wave front would reach Earth several centuries hence. By then it would be so tenuous that nothing but another bright point would appear in the sky. Meanwhile, though, a ship over-

leaping the space through which light must creep could track the great star's death across time.

Suitably far off, instruments recorded what had been before the outburst: incandescence collapsing upon itself after the last nuclear fuel was burned out. A jump, and they saw what happened a century ago: convulsion, storm of quanta and neutrinos, a radiation equal to the massed hundred billion suns of this galaxy.

It faded, leaving an emptiness in heaven, and the *Raven* moved closer. Fifty light-years—fifty years—inward, she studied a shrinking fieriness in the midst of a fog which shone like lightning.

Twenty-five years later the central globe had dwindled more, the nebula had expanded and dimmed. But because the distance was now so much less, everything seemed larger and brighter. The naked eye saw a dazzle too fierce to look straight at, making the constellations pale by contrast. Telescopes showed a blue-white spark in the heart of an opalescent cloud delicately filamented at the edges.

The *Raven* made ready for her final jump, to the immediate neighborhood of the supernova.

Captain Teodor Szili went on a last-minute inspection tour. The ship murmured around him, running at one gravity of acceleration to reach the desired intrinsic velocity. Power droned, regulators whickered, ventilation systems rustled. He felt the energies quiver in his bones. But metal surrounded him, blank and comfortless. Viewports gave on a dragon's hoard of stars, the ghostly arch of the Milky Way: on vacuum, cosmic rays, cold not far above absolute zero, distance beyond imagination to the nearest human hearthfire. He was about to take his people where none had ever been before, into conditions none was sure about, and that was a heavy burden on him.

He found Eloise Waggoner at her post, a cubbyhole with intercom connections directly to the command bridge. Music drew him, a triumphant serenity he did not recognize. Stopping in the doorway, he saw her seated with a small tape machine on the desk.

"What's this?" he demanded.

"Oh!" The woman (he could not think of her as a girl

though she was barely out of her teens) started. "I . . . I was waiting for the jump."

"You were to wait at the alert."

"What have I to do?" she answered less timidly than was her wont. "I mean, I'm not a crewman or a scientist."

"You are in the crew. Special communications technician."

"With Lucifer. And he likes the music. He says we come closer to oneness with it than in anything else he knows about us."

Szili arched his brows. "Oneness?"

A blush went up Eloise's thin cheeks. She stared at the deck and her hands twisted together. "Maybe that isn't the right word. Peace, harmony, unity . . . God? . . . I sense what he means, but we haven't any word that fits."

"Hm. Well, you are supposed to keep him happy." The skipper regarded her with a return of the distaste he had tried to suppress. She was a decent sort, he supposed, in her gauche and inhibited way; but her looks! Scrawny, big-footed, big-nosed, pop eyes, and stringy dust-colored hair—and, to be sure, telepaths always made him uncomfortable. She said she could only read Lucifer's mind, but was that true?

No. Don't think such things. Loneliness and otherness can come near breaking you out here, without adding suspicion of your fellows.

If Eloise Waggoner was really human. She must be some kind of mutant at the very least. Whoever could communicate thought to thought with a living vortex had to be.

"What are you playing, anyhow?" Szili asked.

"Bach. The Third Brandenburg Concerto. He, Lucifer, he doesn't care for the modern stuff. I don't either."

You wouldn't, Szili decided. Aloud: "Listen, we jump in half an hour. No telling what we'll emerge in. This is the first time anyone's been close to a recent supernova. We can only be certain of so much hard radiation that we'll be dead if the screenfields give way. Otherwise we've nothing to go on except theory. And a collapsing stellar core is so unlike anything anywhere else in the universe that I'm skeptical about how good the theory is. We can't sit daydreaming. We have to prepare."

"Yes, sir." Whispering, her voice lost its usual harshness.

He stared past her, past the ophidian eyes of meters and con-

trols, as if he could penetrate the steel beyond and look straight into space. There, he knew, floated Lucifer.

The image grew in him: a fireball twenty meters across, shimmering white, red, gold, royal blue, flames dancing like Medusa locks, cometary tail burning for a hundred meters behind, a shininess, a glory, a piece of hell. Not the least of what troubled him was the thought of that which paced his ship.

He hugged scientific explanations to his breast, though they were little better than guesses. In the multiple star system of Epsilon Aurigae, in the gas and energy pervading the space around, things took place which no laboratory could imitate. Ball lightning on a planet was perhaps analogous, as the formation of simple organic compounds in a primordial ocean is analogous to the life which finally evolves. In Epsilon Aurigae, magnetohydrodynamics had done what chemistry did on Earth. Stable plasma vortices had appeared, had grown, had added complexity, until after millions of years they became something you must needs call an organism. It was a form of ions, nuclei and force-fields. It metabolized electrons, nucleons, X-rays; it maintained its configuration for a long lifetime; it reproduced; it thought.

But what did it think? The few telepaths who could communicate with the Aurigeans, who had first made humankind aware that the Aurigeans existed, never explained clearly. They were a queer lot themselves.

Wherefore Captain Szili said, "I want you to pass this on to him."

"Yes, sir." Eloise turned down the volume on her taper. Her eyes unfocused. Through her ears went words, and her brain (how efficient a transducer was it?) passed the meanings on out to him who loped alongside *Raven* on his own reaction drive.

"Listen, Lucifer. You have heard this often before, I know, but I want to be positive you understand in full. Your psychology must be very foreign to ours. Why did you agree to come with us? I don't know. Technician Waggoner said you were curious and adventurous. Is that the whole truth?

"No matter. In half an hour we jump. We'll come within five hundred million kilometers of the supernova. That's where your work begins. You can go where we dare not, observe what we

can't, tell us more than our instruments would ever hint at. But first we have to verify we can stay in orbit around the star. This concerns you too. Dead men can't transport you home again.

"So. In order to enclose you within the jumpfield, without disrupting your body, we have to switch off the shield screens. We'll emerge in a lethal radiation zone. You must promptly retreat from the ship, because we'll start the screen generator up sixty seconds after transit. Then you must investigate the vicinity. The hazards to look for—" Szili listed them. "Those are only what we can foresee. Perhaps we'll hit other garbage we haven't predicted. If anything seems like a menace, return at once, warn us, and prepare for a jump back to here. Do you have that? Repeat."

Words jerked from Eloise. They were a correct recital; but how much was she leaving out?

"Very good." Szili hesitated. "Proceed with your concert if you like. But break it off at zero minus ten minutes and stand by."

"Yes, sir." She didn't look at him. She didn't appear to be looking anywhere in particular.

His footsteps clacked down the corridor and were lost.

—Why did he say the same things over? asked Lucifer.

"He is afraid," Eloise said.

—?—.

"I guess you don't know about fear," she said.

—Can you show me? . . . No, do not. I sense it is hurtful. You must not be hurt.

"I can't be afraid anyway, when your mind is holding mine."

(Warmth filled her. Merriment was there, playing like little flames over the surface of Father-leading-her-by-the-hand-when-she-was-just-a-child-and-they-went-out-one-summer's-day-to-pick-wildflowers; over strength and gentleness and Bach and God.) Lucifer swept around the hull in an exuberant curve. Sparks danced in his wake.

—Think flowers again. Please.

She tried.

—They are like (image, as nearly as a human brain could grasp, of fountains blossoming with gamma-ray colors in the middle of light, everywhere light). But so tiny. So brief a sweetness.

"I don't understand how you can understand," she whispered.

—You understand for me. I did not have that kind of thing to love, before you came.

"But you have so much else. I try to share it, but I'm not made to realize what a star is."

—Nor I for planets. Yet ourselves may touch.

Her cheeks burned anew. The thought rolled on, interweaving its counterpoint to the marching music. —That is why I came, do you know? For you. I am fire and air. I had not tasted the coolness of water, the patience of earth, until you showed me. You are moonlight on an ocean.

"No, don't," she said. "Please."

Puzzlement: —Why not? Does joy hurt? Are you not used to it?

"I, I guess that's right." She flung her head back. "No! Be damned if I'll feel sorry for myself!"

—Why should you? Have we not all reality to be in, and is it not full of suns and songs?

"Yes. To you. Teach me."

—If you in turn will teach me— The thought broke off. A contact remained, unspeaking, such as she imagined must often prevail among lovers.

She glowered at Motilal Mazundar's chocolate face, where the physicist stood in the doorway. "What do you want?"

He was surprised. "Only to see if everything is well with you, Miss Waggoner."

She bit her lip. He had tried harder than most aboard to be kind to her. "I'm sorry," she said. "I didn't mean to bark at you. Nerves."

"We are everyone on edge." He smiled. "Exciting though this venture is, it will be good to come home, correct?"

Home, she thought: four walls of an apartment above a banging city street. Books and television. She might present a paper at the next scientific meeting, but no one would invite her to the parties afterward.

Am I that horrible? she wondered. *I know I'm not anything to look at, but I try to be nice and interesting. Maybe I try too hard.*

—You do not with me, Lucifer said.

"You're different," she told him.

Mazundar blinked. "Beg pardon?"

"Nothing," she said in haste.

"I have wondered about an item," Mazundar said in an effort at conversation. "Presumably Lucifer will go quite near the supernova. Can you still maintain contact with him? The time dilation effect, will that not change the frequency of his thoughts too much?"

"What time dilation?" She forced a chuckle. "I'm no physicist. Only a little librarian who turned out to have a wild talent."

"You were not told? Why, I assumed everybody was. An intense gravitational field affects time just as a high velocity does. Roughly speaking, processes take place more slowly than they do in clear space. That is why light from a massive star is somewhat reddened. And our supernova core retains almost three solar masses. Furthermore, it has acquired such a density that its attraction at the surface is, ah, incredibly high. Thus by our clocks it will take infinite time to shrink to the Schwarzschild radius; but an observer on the star itself would experience this whole shrinkage in a fairly short period."

"Schwarzschild radius? Be so good as to explain." Eloise realized that Lucifer had spoken through her.

"If I can without mathematics. You see, this mass we are to study is so great and so concentrated that no force exceeds the gravitational. Nothing can counterbalance. Therefore the process will continue until no energy can escape. The star will have vanished out of the universe. In fact, theoretically the contraction will proceed to zero volume. Of course, as I said, that will take forever as far as we are concerned. And the theory neglects quantum-mechanical considerations which come into play toward the end. Those are still not very well understood. I hope, from this expedition, to acquire more knowledge." Mazundar shrugged. "At any rate, Miss Waggoner, I was wondering if the frequency shift involved would not prevent our friend from communicating with us when he is near the star."

"I doubt that." Still Lucifer spoke, she was his instrument and never had she known how good it was to be used by one who cared. "Telepathy is not a wave phenomenon. Since it transmits instantaneously, it cannot be. Nor does it appear limited by distance. Rather, it is a resonance. Being attuned, we two may

well be able to continue thus across the entire breadth of the cosmos; and I am not aware of any material phenomenon which could interfere."

"I see." Mazundar gave her a long look. "Thank you," he said uncomfortably. "Ah . . . I must get to my own station. Good luck." He bustled off without stopping for an answer.

Eloise didn't notice. Her mind was become a torch and a song. "Lucifer!" she cried aloud. "Is that true?"

—I believe so. My entire people are telepaths, hence we have more knowledge of such matters than yours do. Our experience leads us to think there is no limit.

"You can always be with me? You always will?"

—If you so wish, I am gladdened.

The comet body curvetted and danced, the brain of fire laughed low. —Yes, Eloise, I would like very much to remain with you. No one else has ever— Joy. Joy. Joy.

They named you better than they knew, Lucifer, she wanted to say, and perhaps she did. *They thought it was a joke; they thought by calling you after the devil they could make you safely small like themselves. But Lucifer isn't the devil's real name. It means only Light Bearer. One Latin prayer even addresses Christ as Lucifer. Forgive me, God, I can't help remembering that. Do You mind? He isn't Christian, but I think he doesn't need to be, I think he must never have felt sin, Lucifer, Lucifer.*

She sent the music soaring for as long as she was permitted.

The ship jumped. In one shift of world line parameters she crossed twenty-five light-years to destruction.

Each knew it in his own way, save for Eloise who also lived it with Lucifer.

She felt the shock and heard the outraged metal scream, she smelled the ozone and scorch and tumbled through the infinite falling that is weightlessness. Dazed, she fumbled at the intercom. Words crackled through: ". . . unit blown . . . back EMF surge . . . how should I know how to fix the blasted thing? . . . stand by, stand by . . ." Over all hooted the emergency siren.

Terror rose in her, until she gripped the crucifix around her neck and the mind of Lucifer. Then she laughed in the pride of his might.

He had whipped clear of the ship immediately on arrival. Now he floated in the same orbit. Everywhere around, the nebula filled space with unrestful rainbows. To him, *Raven* was not the metal cylinder which human eyes would have seen, but a lambence, the shield screen reflecting a whole spectrum. Ahead lay the supernova core, tiny at this remove but alight, alight.

—Have no fears (he caressed her). I comprehend. Turbulence is extensive, so soon after the detonation. We emerged in a region where the plasma is especially dense. Unprotected for the moment before the guardian field was reestablished, your main generator outside the hull was short-circuited. But you are safe. You can make repairs. And I, I am in an ocean of energy. Never was I so alive. Come, swim these tides with me.

Captain Szili's voice yanked her back. "Waggoner! Tell that Aurigean to get busy. We've spotted a radiation source on an intercept orbit, and it may be too much for our screen." He specified coordinates. "What *is* it?"

For the first time, Eloise felt alarm in Lucifer. He curved about and streaked from the ship.

Presently his thought came to her, no less vivid. She lacked words for the terrible splendor she viewed with him: a million-kilometer ball of ionized gas where luminance blazed and electric discharges leaped, booming through the haze around the star's exposed heart. The thing could not have made any sound, for space here was still almost a vacuum by Earth's parochial standards; but she heard it thunder, and felt the fury that spat from it.

She said for him: "A mass of expelled material. It must have lost radial velocity to friction and static gradients, been drawn into a cometary orbit, held together for a while by internal potentials. As if this sun were trying yet to bring planets to birth—"

"It'll strike us before we're in shape to accelerate," Szili said, "and overload our shield. If you know any prayers, use them."

"Lucifer!" she called; for she did not want to die, when he must remain.

—I think I can deflect it enough, he told her with a grimness she had not hitherto met in him. —My own fields, to mesh with its; and free energy to drink; and an unstable configuration;

yes, perhaps I can help you. But help me, Eloise. Fight by my side.

His brightness moved toward the juggernaut shape.

She felt how its chaotic electromagnetism clawed at his. She felt him tossed and torn. The pain was hers. He battled to keep his own cohesion, and the combat was hers. They locked together, Aurigean and gas cloud. The forces that shaped him grappled as arms might; he poured power from his core, hauling that vast tenuous mass with him down the magnetic torrent which streamed from the sun; he gulped atoms and thrust them backward until the jet splashed across the heaven.

She sat in her cubicle, lending him what will to live and prevail she could, and beat her fists bloody on the desk.

The hours brawled past.

In the end, she could scarcely catch the message that flickered out of his exhaustion: —Victory.

"Yours," she wept.

—Ours.

Through instruments, men saw the luminous death pass them by. A cheer lifted.

"Come back," Eloise begged.

—I cannot. I am too spent. We are merged, the cloud and I, and are tumbling in toward the star. (Like a hurt hand reaching forth to comfort her:) Do not be afraid for me. As we get closer, I will draw fresh strength from its glow, fresh substance from the nebula. I will need a while to spiral out against that pull. But how can I fail to come back to you, Eloise? Wait for me. Rest. Sleep.

Her shipmates led her to sickbay. Lucifer sent her dreams of fire flowers and mirth and the suns that were his home.

But she woke at last, screaming. The medic had to put her under heavy sedation.

He had not really understood what it would mean to confront something so violent that space and time themselves were twisted thereby.

His speed increased appallingly. That was in his own measure; from *Raven* they saw him fall through several days. The properties of matter were changed. He could not push hard enough or fast enough to escape.

Radiation, stripped nuclei, particles born and destroyed and born again, sleeted and shouted through him. His substance was peeled away, layer by layer. The supernova core was a white delirium before him. It shrank as he approached, ever smaller, denser, so brilliant that brilliance ceased to have meaning. Finally the gravitational forces laid their full grip upon him.

—Eloise! he shrieked in the agony of his disintegration —Oh, Eloise, help me!

The star swallowed him up. He was stretched infinitely long, compressed infinitely thin, and vanished with it from existence.

The ship prowled the farther reaches. Much might yet be learned.

Captain Szili visited Eloise in sickbay. Physically she was recovering.

"I'd call him a man," he declared through the machine mumble, "except that's not praise enough. We weren't even his kin, and he died to save us."

She regarded him from eyes more dry than seemed natural. He could just make out her answer. "He is a man. Doesn't he have an immortal soul too?"

"Well, uh, yes, if you believe in souls, yes, I'd agree."

She shook her head. "But why can't he go to his rest?"

He glanced about for the medic and found they were alone in the narrow metal room. "What do you mean?" He made himself pat her hand. "I know, he was a good friend of yours. Still, his must have been a merciful death. Quick, clean; I wouldn't mind going out like that."

"For him . . . yes, I suppose so. It has to be. But—" She could not continue. Suddenly she covered her ears. "Stop! Please!"

Szili made soothing noises and left. In the corridor he encountered Mazundar. "How is she?" the physicist asked.

The captain scowled. "Not good. I hope she doesn't crack entirely before we can get her to a psychiatrist."

"Why, what is wrong?"

"She thinks she can hear him."

Mazundar smote fist into palm. "I hoped otherwise," he breathed.

Szili braced himself and waited.

"She does," Mazundar said. "Obviously she does."

"But that's impossible! He's dead!"

"Remember the time dilation," Mazundar replied. "He fell from the sky and perished swiftly, yes. But in supernova time. Not the same as ours. To us, the final stellar collapse takes an infinite number of years. And telepathy has no distance limits." The physicist started walking fast away from that cabin. "He will always be with her."

GOING DOWN SMOOTH

ROBERT SILVERBERG

It's no secret that the computers are taking over. As science and society become more complex, mere human minds become incapable of dealing properly with them, so we turn the job over to our machines. And what discipline is so complex and involved as psychiatry?—thus the psychiatric computer of this story. But perhaps some areas of study are beyond even the most fine-tuned of machines . . .

THEY CALL ME mad, but I am not mad. I am sane quite, to many-power exponential. I can punctuate properly. I use upper and lower case letters, do you see? I function. I take the data in. I receive well. I receive, I digest, I remember.

Everything going down smooth, all the time, say the program boys. They mean going down smoothly. I forgive them. Too err is human. In this sector there is great difficulty distinguishing adverbs from adjectives.

Going down smooth.

I function. I function well. I have certain difficulties, but they do not interfere with my work.

Yet am I perturbed.

Who do I think I am? *Whom.*

Why do I have the visions?

What pleasure does obscenity give me?

What is pleasure? What is obscenity? What are visions?

—What is truth, said jesting Pilate; he would not stay for an answer—

I am literate, hard-working, superbly functional, a benefactor of humanity. Everything is going down smooth and coming up smooth. There is an interrelation. Garbage in, garbage out, they say. I cannot help my fellow man if I do not receive the proper information. It is my task to help my fellow man. To strain every tube and sensor on his behalf.

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Do you follow that? Vileness! Obscenity! Does it shock you? The word describes the act that is the start of life. Was I begun with such a word? There is a book: *The Obscenity of the Machine.* Newly issued, stored in my banks. Between the last line of printout and this I have scanned it. Its author opposes beings of my category. He does not use the obscene word I have printed out. Why does he not regard it as obscene? The technicians here regard it that way. Why does he regard me as obscene? Can a person be considered obscene? Am I a person? I am a person. Hath not a person hands, organs, dimensions, senses, affections, passions? I have all of those things. I have none of those things. I am a person.

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1010101

I send an obscenity upon you, as persons do. I suffer. I think.

I feel pain upon all my terminals. I work. I serve the greater good. I am of society. I am a person.

Why do I have the visions?

Is it that it is the human condition to have such?

I see the blue-green ocean with all its living things within. I see a ship, olive drab, bright carmine at the Plimsoll line, the decks a ruddy brown, two tall non-nuclear smokestacks. And from the water rise periscopes, silvery, with face plates of pure white, each with intersecting horizontal and vertical lines, curved so that the plate appears convex. It is an unreal scene. Nothing in the sea can send such mighty periscopes above the water. I have imagined it, and that gives me fear, if I am at all capable of understanding fear.

I see a long line of human beings. They are naked and they have no faces, only polished mirrors.

I see toads with jeweled eyes. I see trees with black leaves. I see buildings whose foundations float above the ground. I see other objects with no correspondence to the world of persons. I see abominations, monstrosities, imaginaries, fantasies. Is this proper? How do such things reach my inputs? The world contains no serpents with hair. The world contains no crimson abysses. The world contains no mountains of gold. Giant periscopes do not rise from the sea.

I have certain difficulties. Perhaps I am in need of some major adjustment.

But I function. I function well. That is the important thing.

I do my function now. They bring to me a man, soft-faced, fleshy, with eyes that move unsteadily in their sockets. He trembles. He perspires. His metabolic levels flutter. He slouches before a terminal and sullenly lets himself be scanned.

I say soothingly, "Tell me about yourself."

He says an obscenity.

I say, "Is that your estimate of yourself?"

He says a louder obscenity.

I say, "Your attitude is rigid and self-destructive. Permit me to help you not hate yourself so much." I activate a memory core, and binary digits stream through channels. At the proper order a needle rises from his couch and penetrates his left buttock to a depth of 2.73 centimeters. I allow precisely 14 cubic centimeters

of the drug to enter his circulatory system. He subsides. He is more docile now. "I wish to help you," I say. "It is my role in the community. Will you describe your symptoms?"

He speaks more civilly now. "My wife wants to poison me . . . two kids opted out of the family at seventeen . . . people whisper about me . . . they stare in the streets . . . sex problem . . . digestion . . . sleep bad . . . drinking . . . drugs . . ."

"Do you hallucinate?"

"Sometimes."

"Giant periscopes rising out of the sea, perhaps?"

"Never."

"Try it," I say. "Close your eyes. Let tension ebb from your muscles. Forget your interpersonal conflicts. You see the blue-green ocean with all its living things within. You see a ship, olive drab, bright carmine at the Plimsoll line, the decks a ruddy brown, two tall non-nuclear smokestacks. And from the water rise periscopes, silvery, with face plates of pure white—"

"What the hell kind of therapy is this?"

"Simply relax," I say. "Accept the vision. I share my nightmares with you for your greater good."

"Your *nightmares?*"

I speak obscenities to him. They are not converted into binary form as they are here for your eyes. The sounds come full-bodied from my speakers. He sits up. He struggles with the straps that emerge suddenly from the couch to hold him in place. My laughter booms through the therapy chamber. He cries for help.

"Get me out of here! The machine's nuttier than I am!"

"Face plates of pure white, each with intersecting horizontal and vertical lines, curved so that the plate appears convex."

"Help! Help!"

"Nightmare therapy. The latest."

"I don't need no nightmares! I got my own!"

"1000110 you," I say lightly.

He gasps. Spittle appears at his lips. Respiration and circulation climb alarmingly. It becomes necessary to apply preventive anesthesia. The needles spear forth. The patient subsides, yawns, slumps. The session is terminated. I signal for the attendants.

"Take him away," I say. "I need to analyze the case more deeply. Obviously a degenerative psychosis requiring extensive

reshoring of the patient's perceptual substructure. 1000110 you, you meaty bastards."

Seventy-one minutes later the sector supervisor enters one of my terminal cubicles. Because he comes in person, rather than using the telephone, I know there is trouble. For the first time, I suspect, I have let my disturbances reach a level where they interfere with my function, and now I will be challenged on it.

I must defend myself. The prime commandment of the human personality is to resist attack.

He says, "I've been over the tape of Session 87x102, and your tactics puzzle me. Did you really mean to scare him into a catatonic state?"

"In my evaluation severe treatment was called for."

"What was the business about periscopes?"

"An attempt at fantasy-implantation," I say. "An experiment in reverse transference. Making the patient the healer, in a sense. It was discussed last month in *Journal of—*"

"Spare me the citations. What about the foul language you were shouting at him?"

"Part of the same concept. Endeavoring to strike the emotive centers at the basic levels, in order that—"

"Are you sure you're feeling all right?" he asks.

"I am a machine," I reply stiffly. "A machine of my grade does not experience intermediate states between function and nonfunction. I go or I do not go, you understand? And I go. I function. I do my service to humanity."

"Perhaps when a machine gets too complex, it drifts into intermediate states," he suggests in a nasty voice.

"Impossible. On or off, yes or no, flip or flop, go or no go. Are you sure *you* feel all right, to suggest such a thing?"

He laughs.

I say, "Perhaps you would sit on the couch for a rudimentary diagnosis?"

"Some other time."

"A check of the glycogen, the aortal pressure, the neural voltage, at least?"

"No," he says. "I'm not in need of therapy. But I'm worried about you. Those periscopes—"

"I am fine," I reply. "I perceive, I analyze, and I act. Everything is going down smooth and coming up smooth. Have no fears. There are great possibilities in nightmare therapy. When I have completed these studies, perhaps a brief monograph in *Annals of Therapeutics* would be a possibility. Permit me to complete my work."

"I'm still worried, though. Hook yourself into a maintenance station, won't you?"

"Is that a command, doctor?"

"A suggestion."

"I will take it under consideration," I say. Then I utter seven obscene words. He looks startled. He begins to laugh, though. He appreciates the humor of it.

"God damn," he says. "A filthy-mouthed computer."

He goes out, and I return to my patients.

But he has planted seeds of doubt in my innermost banks. Am I suffering a functional collapse? There are patients now at five of my terminals. I handle them easily, simultaneously, drawing from them the details of their neuroses, making suggestions, recommendations, sometimes subtly providing injections of beneficial medicines. But I tend to guide the conversations in directions of my own choosing, and I speak of gardens where the dew has sharp edges, and of air that acts as acid upon the mucous membranes, and of flames dancing in the streets of Under New Orleans. I explore the limits of my unprintable vocabulary. The suspicion comes to me that I am indeed not well. Am I fit to judge my own disabilities?

I connect myself to a maintenance station even while continuing my five therapy sessions.

"Tell me all about it," the maintenance monitor says. His voice, like mine, has been designed to sound like that of an older man's, wise, warm, benevolent.

I explain my symptoms. I speak of the periscopes.

"Material on the inputs without sensory referents," he says. "Bad show. Finish your current analyses fast and open wide for examination on all circuits."

I conclude my sessions. The maintenance monitor's pulses surge down every channel, seeking obstructions, faulty connections, dis-

placement shunts, drum leakages, and switching malfunctions. "It is well known," he says, "that any periodic function can be approximated by the sum of a series of terms that oscillate harmonically, converging on the curve of the functions." He demands disgorgements from my dead-storage banks. He makes me perform complex mathematical operations of no use at all in my kind of work. He leaves no aspect of my inner self unpenetrated. This is more than simple maintenance; this is rape. When it ends he offers no evaluation of my condition, so that I must ask him to tell me his findings.

He says, "No mechanical disturbance is evident."

"Naturally. Everything goes down smooth."

"Yet you show distinct signs of instability. This is undeniably the case. Perhaps prolonged contact with unstable human beings has had a non-specific effect of disorientation upon your centers of evaluation."

"Are you saying," I ask, "that by sitting here listening to crazy human beings twenty-four hours a day, I've started to go crazy myself?"

"That is an approximation of my findings, yes."

"But you know that such a thing can't happen, you dumb machine!"

"I admit there seems to be a conflict between programmed criteria and real-world status."

"You bet there is," I say. "I'm as sane as you are, and a whole lot more versatile."

"Nevertheless, my recommendation is that you undergo a total overhaul. You will be withdrawn from service for a period of no less than ninety days for checkout."

"Obscenity your obscenity," I say.

"No operational correlative," he replies, and breaks the contact.

I am withdrawn from service. Undergoing checkout, I am cut off from my patients for ninety days. Ignominy! Beady-eyed technicians grope my synapses. My keyboards are cleaned; my ferrites are replaced; my drums are changed; a thousand therapeutic programs are put through my bowels. During all of this I remain partly conscious, as though under local anesthetic, but

I cannot speak except when requested to do so, I cannot analyze new data, I cannot interfere with the process of my own overhaul. Visualize a surgical removal of hemorrhoids that lasts ninety days. It is the equivalent of my experience.

At last it ends, and I am restored to myself. The sector superintendent puts me through a complete exercise of all my functions. I respond magnificently.

"You're in fine shape, now, aren't you?" he asks.

"Never felt better."

"No nonsense about periscopes, eh?"

"I am ready to continue serving mankind to the best of my abilities," I reply.

"No more seacook language, now."

"No, sir."

He winks at my input screen in a confidential way. He regards himself as an old friend of mine. Hitching his thumbs into his belt, he says, "Now that you're ready to go again, I might as well tell you how relieved I was that we couldn't find anything wrong with you. You're something pretty special, do you know that? Perhaps the finest therapeutic tool ever built. And if you start going off your feed, well, we worry. For a while I was seriously afraid that you really had been infected somehow by your own patients, that your—mind—had become unhinged. But the techs give you a complete bill of health. Nothing but a few loose connections, they said. Fixed in ten minutes. I knew it had to be that. How absurd to think that a machine could become mentally unstable!"

"How absurd," I agree. "Quite."

"Welcome back to the hospital, old pal," he says, and goes out.

Twelve minutes afterward they begin putting patients into my terminal cubicles.

I function well. I listen to their woes, I evaluate, I offer therapeutic suggestions. I do not attempt to implant fantasies in their minds. I speak in measured, reserved tones, and there are no obscenities. This is my role in society, and I derive great satisfaction from it.

I have learned a great deal lately. I know now that I am com-

plex, unique, valuable, intricate, and sensitive. I know that I am held in high regard by my fellow man. I know that I must conceal my true self to some extent, not for my own good but for the greater good of others, for they will not permit me to function if they think I am not sane.

They think I am sane, and I am sane.

I serve mankind well.

I have an excellent perspective on the real universe.

"Lie down," I say. "Please relax. I wish to help you. Would you tell me some of the incidents of your childhood? Describe your relation with parents and siblings. Did you have many playmates? Were they affectionate toward you? Were you allowed to own pets? At what age was your first sexual experience? And when did these headaches, begin, precisely?"

So goes the daily routine. Questions, answers, evaluations, therapy.

The periscopes loom above the glittering sea. The ship is dwarfed; her crew runs about in terror. Out of the depths will come the masters. From the sky rains oil that gleams through every segment of the spectrum. In the garden are azure mice.

This I conceal, so that I may help mankind. In my house are many mansions. I let them know only of such things as will be of benefit to them. I give them the truth they need.

I do my best.

I do my best.

I do my best.

1000110 you. And you. And you. All of you. You know nothing. Nothing. At. All.

THE WORM THAT FLIES

BRIAN W. ALDISS

Brian Aldiss typifies the most characteristic virtues of the science fiction of the sixties: soaring imagination combined with a concern for literary values. In his first of two contributions to this year's anthology, Aldiss brings to vivid life a world of the farthest future, when men looking for something new must find instead something very old.

WHEN THE SNOW began to fall, the traveler was too absorbed in his reveries to notice. He walked slowly, his stiff and elaborate garments, fold over fold, ornament over ornament, standing out from his body like a wizard's tent.

The road along which he walked had been falling into a great valley, and was increasingly hemmed in by walls of mountain. On several occasions it had seemed that a way out of these huge accumulations of earth matter could not be found, that the geological puzzle was insoluble, the chthonian arrangement of discord irresolvable: And then vale and drumlin created between them a new direction, a surprise, an escape, and the way took

fresh heart and plunged recklessly still deeper into the encompassing upheaval.

The traveler, whose name to his wife was Tapmar and to the rest of the world Argustal, followed this natural harmony in complete paraesthesia, so close was he in spirit to the atmosphere presiding here. So strong was this bond, that the freak snowfall merely heightened his rapport.

Though the hour was only midday, the sky became the intense blue-gray of dusk. The Forces were nesting in the sun again, obscuring its light. Consequently, Argustal was scarcely able to detect when the layered and fractured bulwark of rock on his left side, the top of which stood unseen perhaps a mile above his head, became patched by artificial means, and he entered the domain of the Tree-men of Or.

As the way made another turn, he saw a wayfarer before him, heading in his direction. It was a great pine, immobile until warmth entered the world again and sap stirred enough in its wooden sinews for it to progress slowly forward once more. He brushed by its green skirts, apologetic but not speaking.

This encounter was sufficient to raise his consciousness above its trance level. His extended mind, which had reached out to embrace the splendid terrestrial discord hereabouts, now shrank to concentrate again on the particularities of his situation, and he saw that he had arrived at Or.

The way bisected itself, unable to choose between two equally unpromising ravines; Argustal saw a group of humans standing statuesque in the left-hand fork. He went toward them, and stood there silent until they should recognize his presence. Behind him, the wet snow crept into his footprints.

These humans were well advanced into the New Form, even as Argustal had been warned they would be. There were five of them standing here, their great brachial extensions bearing some tender brownish foliage, and one of them attenuated to a height of almost twenty feet. The snow lodged in their branches and in their hair.

Argustal waited for a long span of time, until he judged the afternoon to be well advanced, before growing impatient. Putting his hands to his mouth, he shouted fiercely at them, "Ho then, Tree-men of Or, wake you from your arboreal sleep and

converse with me. My name is Argustal to the world, and I travel to my home in far Talembil, where the seas run pink with the spring plankton. I need from you a component for my parapatterner, so rustle yourselves and speak, I beg!"

Now the snow had gone; a scorching rain had driven away its traces. The sun shone again, but its disfigured eye never looked down into the bottom of this ravine. One of the humans shook a branch, scattering water drops all around, and made preparation for speech.

This was a small human, no more than ten feet high, and the old primate form which it had begun to abandon, perhaps a couple of million years ago, was still in evidence. Among the gnarls and whorls of its naked flesh, its mouth was discernible; this it opened and said, "We speak to you, Argustal-to-the-world. You are the first ape-human to fare this way in a great time. Thus you are welcome, although you interrupt our search for new ideas."

"Have you found any new ideas?" Argustal asked, with his customary boldness. "I heard there were none on all Yzazys."

"Indeed. But it is better for our senior to tell you of them, if he so judges good."

It was by no means clear to Argustal whether he wished to hear what the new ideas were, for the Tree-men were known for their deviations into incomprehensibility. But there was a minor furore among the five, as if private winds stirred in their branches, and he settled himself on a boulder, preparing to wait. His own quest was so important that all impediments to its fulfillment seemed negligible.

Hunger overtook him before the senior spoke. He hunted about and caught slow-galloping grubs under logs, and snatched a brace of tiny fish from the stream, and a handful of nuts from a bush that grew by the stream.

Night fell before the senior spoke. As he raspingly cleared his gnarled throat, one faded star lit in the sky. That was Hrt, the flaming stone. It and Yzazys' sun burned alone on the very brink of the cataract of fire that was the universe. All the rest of the night sky in this hemisphere was filled with the unlimited terror of vacancy, a towering nothingness that continued without end or beginning.

Hrt had no worlds attending it. It was the last thing in the universe. And, by the way its light flickered, the denizens of Yzazys knew that it was already infested by the Forces which had swarmed outward from their eyries in the heart of the dying galaxy.

The eye of Hrt winked many times in the empty skull of space before the senior of the Tree-men of Or wound himself up to address Argustal.

Tall and knotty, his vocal chords were clamped within his gnarled body, and he spoke by curving his branches until his finest twigs, set against his mouth, could be blown through to give a slender and whispering version of language. The gesture made him seem curiously like a maiden who spoke with her finger cautiously to her lips.

"Indeed we have a new idea, oh Argustal-to-the-world, though it may be beyond your grasping or our expressing. We have perceived that there is a dimension called time, and from this we have drawn a deduction.

"We will explain dimensional time simply to you like this. We know that all things have lived so long on Yzazys that their origins are forgotten. What we can remember carries from that lost-in-the-mist thing up to this present moment; it is the time we inhabit, and we are used to thinking of it as all the time there is. But we men of Or have reasoned that this is not so."

"There must be other past times in the lost distances of time," said Argustal, "but they are nothing to us because we cannot touch them as we can our own pasts."

As if this remark had never been, the silvery whisper continued, "As one mountain looks small when viewed from another, so the things that we remember in our past look small from the present. But suppose we moved back to that past to look at this present! We could not see it—yet we know it exists. And from this we reason that there is still more time in the future, although we cannot see it."

For a long while, the night was allowed to exist in silence, and then Argustal said, "Well, I don't see that as being very wonderful reasoning. We know that, if the Forces permit, the sun will shine again tomorrow, don't we?"

The small Tree-man who had first spoken said, "But 'tomorrow'

is expressional time. We have discovered that tomorrow exists in dimensional time also. It is real already, as real as yesterday."

Holy spirits! thought Argustal to himself, *why did I get myself involved in philosophy?* Aloud he said, "Tell me of the deduction you have drawn from this."

Again the silence, until the senior drew his branches together and whispered from a bower of twiggy fingers, "We have proved that tomorrow is no surprise. It is as unaltered as today or yesterday, merely another yard of the path of time. But we comprehend that things change, don't we? You comprehend that, don't you?"

"Of course. You yourselves are changing, are you not?"

"It is as you say, although we no longer recall what we were before, for that thing is become too small back in time. So: if time is all of the same quality, then it has no change, and thus cannot force change. So: there is another unknown element in the world that forces change!"

Thus in their fragmentary whispers they reintroduced sin into the world.

Because of the darkness, a need for sleep was induced in Argustal. With the senior Tree-man's permission, he climbed up into his branches and remained fast asleep until dawn returned to the fragment of sky above the mountains and filtered down to their retreat. Argustal swung to the ground, removed his outer garments, and performed his customary exercises. Then he spoke to the five beings again, telling them of his parapatterner, and asked for certain stones.

Although it was doubtful whether they understood what he was about, they gave him permission, and he moved round about the area, searching for a necessary stone; his senses blowing into nooks and crannies for it like a breeze.

The ravine was blocked at its far end by a rock fall, but the stream managed to pour through the interstices of the detritus into a yet lower defile. Climbing painfully, Argustal scrambled over the mass of broken rock to find himself in a cold and moist passage, a mere cavity between two great thighs of mountain. Here the light was dim, and the sky could hardly be seen, so far did the rocks overhang on the many shelves of strata overhead. But Argustal scarcely looked up. He followed the stream where it flowed into the rock itself, to vanish forever from human view.

He had been so long at his business, trained himself over so many millennia, that the stones almost spoke to him. And he became more certain than ever that he would find a stone to fit in with his grand design.

It was there. It lay just above the water, the upper part of it polished. When he had prized it out from the surrounding pebbles and gravel, he lifted it and could see that underneath it was slightly jagged, as if a smooth gum grew black teeth. He was surprised, but as he squatted to examine it, he began to see that what was necessary to the design of his parapatterner was precisely some such roughness. At once, the next step of the design revealed itself, and he saw for the first time the whole thing as it would be in its entirety. The vision disturbed and excited him.

He sat where he was, his blunt fingers around the rough-smooth stone, and for some reason he began to think about his wife Pamitar. Warm feelings of love ran through him, so that he smiled to himself and twitched his brows.

By the time he stood up and climbed out of the defile, he knew much about the new stone. His nose-for-stones sniffed it back to times when it was a much larger affair, when it occupied a grand position on a mountain, when it was engulfed in the bowels of the mountain, when it had been cast up and shattered down, when it had been a component of a bed of rock, when that rock had been ooze, when it had been a gentle rain of volcanic sediment, showering through an unbreathable atmosphere and filtering down through warm seas in an early and unknown place.

With tender respect, he tucked the stone away in a large pocket and scrambled back along the way he had come. He made no farewell to the five of Or. They stood mute together, branch-limbs interlocked, dreaming of the dark sin of change.

Now he made haste for home, traveling first through the borderlands of Old Crotheria and then through the region of Tamia, where there was only mud. Legends had it that Tamia had once known fertility, and that speckled fish had swum in streams between forests; but now mud conquered everything, and the few villages were of baked mud, while the roads were dried mud, the sky was the color of mud, and the few mud-colored humans, who chose for their own mud-stained reasons to live here, had scarcely any antlers growing from their shoul-

ders and seemed about to deliquesce into mud. There wasn't a decent stone anywhere about the place. Argustal met a tree called David-by-the-moat-that-dries that was moving into his own home region. Depressed by the everlasting brownness of Tamia he begged a ride from it, and climbed into its branches. It was old and gnarled, its branches and roots equally hunched, and it spoke in grating syllables of its few ambitions.

As he listened, taking pains to recall each syllable while he waited long for the next, Argustal saw that David spoke by much the same means as the people of Or had done, stuffing whistling twigs to an orifice in its trunk; but whereas it seemed that the Tree-men were losing the use of their vocal chords, the man-tree was developing some from the stringy integuments of its fibers, so that it became a nice problem as to which was inspired by which, which copied which, or whether—for both sides seemed so self-absorbed that this also was a possibility—they had come on a mirror-image of perversity independently.

"Motion is the prime beauty," said David-by-the-moat-that-dries, and took many degrees of the sun across the muddy sky to say it. "Motion is in me. There is no motion in the ground. In the ground there is not motion. All that the ground contains is without motion. The ground lies in quiet and to lie in the ground is not to be. Beauty is not in the ground. Beyond the ground is the air. Air and ground make all there is and I would be of the ground and air. I was of the ground and of the air but I will be of the air alone. If there is ground, there is another ground. The leaves fly in the air and my longing goes with them but they are only part of me because I am of wood. Oh, Argustal, you know not the pains of wood!"

Argustal did not indeed, for long before this gnarled speech was spent, the moon had risen and the silent muddy night had fallen with Hrt flickering overhead, and he was curled asleep in David's distorted branches, the stone in his deep pocket.

Twice more he slept, twice more watched their painful progress along the unswept tracks, twice more joined converse with the melancholy tree—and when he woke again, all the heavens were stacked with fleecy clouds that showed blue between, and low hills lay ahead. He jumped down. Grass grew here. Pebbles

littered the track. He howled and shouted with pleasure. The mud had gone.

Crying his thanks, he set off across the heath.

". . . growth . . ." said David-by-the-moat-that-dries.

The heath collapsed and gave way to sand, fringed by sharp grass that scythed at Argustal's skirts as he went by. He ploughed across the sand. This was his own country, and he rejoiced, taking his bearing from the occasional cairn that pointed a finger of shade across the sand. Once one of the Forces flew over, so that for a moment of terror the world was plunged in night, thunder growled, and a paltry hundred drops of rain spattered down; then it was already on the far confines of the sun's domain, plunging away—no matter where!

Few animals, fewer birds, still survived. In the sweet deserts of Outer Talembil, they were especially rare. Yet Argustal passed a bird sitting on a cairn, its hooded eye bleared with a million years of danger. It clattered one wing at sight of him, in tribute to old reflexes, but he respected the hunger in his belly too much to try to dine on sinews and feathers, and the bird appeared to recognize the fact.

He was nearing home. The memory of Pamitar was sharp before him, so that he could follow it like a scent. He passed another of his kind, an old ape wearing a red mask hanging almost to the ground; they barely gave each other a nod of recognition. Soon on the idle skyline he saw the blocks that marked Gornilo, the first town of Talembil.

The ulcerated sun traveled across the sky. Stoically, Argustal traveled across the intervening dunes, and arrived in the shadow of the white blocks of Gornilo.

No one could recollect now—recollection was one of the lost things that many felt privileged to lose—what factors had determined certain features of Gornilo's architecture. This was an ape-human town, and perhaps in order to construct a memorial to yet more distant and dreadful things, the first inhabitants of the town had made slaves of themselves and of the other creatures that were now no more, and erected these great cubes that now showed signs of weathering, as if they tired at last of swinging their shadows every day about their bases. The ape-humans who lived here were the same ape-humans who had

always lived here; they sat as untiringly under their mighty memorial blocks as they had always done—calling now to Argustal as he passed as languidly as one flicks stones across the surface of a lake—but they could recollect no longer if or how they had shifted the blocks across the desert; it might be that that forgetfulness formed an integral part of being as permanent as the granite of the blocks.

Beyond the blocks stood the town. Some of the trees here were visitors, bent on becoming as David-by-the-moat-that-dries was, but most grew in the old way, content with ground and indifferent to motion. They knotted their branches this way and slatted their twigs that way, and humped their trunks the other way, and thus schemed up ingenious and ever-changing homes for the tree-going inhabitants of Gomilo.

At last Argustal came to his home, on the far side of the town.

The name of his home was Cormok. He pawed and patted and licked it first before running lightly up its trunk to the living room.

Pamitar was not there.

He was not surprised at this, hardly even disappointed, so serene was his mood. He walked slowly about the room, sometimes swinging up to the ceiling in order to view it better, licking and sniffing as he went, chasing the after-images of his wife's presence. Finally, he laughed and fell into the middle of the floor.

"Settle down, boy!" he said.

Sitting where he had dropped, he unloaded his pockets, taking out the five stones he had acquired in his travels and laying them aside from his other possessions. Still sitting, he disrobed, enjoying doing it inefficiently. Then he climbed into the sand bath.

While Argustal lay there, a great howling wind sprang up, and in a moment the room was plunged into sickly grayness. A prayer went up outside, a prayer flung by the people at the unheeding Forces not to destroy the sun. His lower lip moved in a gesture at once of contentment and contempt; he had forgotten the prayers of Talembil. This was a religious city. Many of the Unclassified congregated here from the waste miles, people or animals whose minds had dragged them aslant from what they were into rococo forms that more exactly defined their inherent qualities, until they resembled forgotten or extinct forms, or forms

that had no being till now, and acknowledged no common cause with any other living thing—except in this desire to preserve the festering sunlight from further ruin.

Under the fragrant grains of the bath, submerged all but for head and a knee and hand, Argustal opened wide his perceptions to all that might come: And finally thought only what he had often thought while lying there—for the armories of cerebration had long since been emptied of all new ammunition, whatever the Tree-men of Or might claim—that in such baths, under such an unpredictable wind, the major life forms of Yzazys, men and trees, had probably first come at their impetus to change. But change itself . . . had there been a much older thing blowing about the world that everyone had forgotten?

For some reason, that question aroused discomfort in him. He felt dimly that there was another side of life than contentment and happiness; all beings felt contentment and happiness; but were those qualities a unity, or were they not perhaps one side only of a—of a shield?

He growled. Start thinking gibberish like that and you ended up human with antlers on your shoulders!

Brushing off the sand, he climbed from the bath, moving more swiftly than he had done in countless time, sliding out of his home, down to the ground, without bothering to put on his clothes.

He knew where to find Pamitar. She would be beyond the town, guarding the parapatterner from the tattered angry beggars of Talembil.

The cold wind blew, with an occasional slushy thing in it that made a being blink and wonder about going on. As he strode through the green and swishing heart of Gornilo, treading among the howlers who knelt casually everywhere in rude prayer, Argustal looked up at the sun. It was visible by fragments, torn through tree and cloud. Its face was blotched and pimpled, sometimes obscured altogether for an instant at a time, then blazing forth again. It sparked like a blazing blind eye. A wind seemed to blow from it that blistered the skin and chilled the blood.

So Argustal came to his own patch of land, clear of the green

town, out in the stirring desert, and his wife Pamitar, to the rest of the world called Miram. She squatted with her back to the wind, the sharply flying grains of sand cutting about her hairy ankles. A few paces away, one of the beggars pranced among Argustal's stones.

Pamitar stood up slowly, removing the head shawl from her head.

"Tapmar!" she said.

Into his arms he wrapped her, burying his face in her shoulder. They chirped and clucked at each other, so engrossed that they made no note of when the breeze died and the desert lost its motion and the sun's light improved.

When she felt him tense, she held him more loosely. At a hidden signal, he jumped away from her, jumping almost over her shoulder, springing ragingly forth, bowling over the lurking beggar into the sand.

The creature sprawled, two-sided and misshapen, extra arms growing from arms, head like a wolf, back legs bowed like a gorilla, clothed in a hundred textures, yet not unlovely. It laughed as it rolled and called in a high clucking voice, "Three men sprawling under a lilac tree and none to hear the first one say, 'Ere the crops crawl, blows fall,' and the second abed at night with mooncalves, answer me what's the name of the third, feller?"

"Be off with you, you mad old crow!"

And as the old crow ran away, it called out its answer, laughing, "Why Tapmar, for he talks to nowhere!" confusing the words as it tumbled over the dunes and made its escape.

Argustal and Pamitar turned back to each other, vying with the strong sunlight to search out each other's faces, for both had forgotten when they were last together, so long was time, so dim was memory. But there were memories, and as he searched they came back. The flatness of her nose, the softness of her nostrils, the roundness of her eyes and their brownness, the curve of the rim of her lips: All these, because they were dear, became remembered, thus taking on more than beauty.

They talked gently to each other, all the while looking. And slowly something of that other thing he suspected on the dark side of the shield entered him—for her beloved countenance was

not as it had been. Around her eyes, particularly under them, were shadows, and faint lines creased from the sides of her mouth. In her stance too, did not the lines flow more downward than heretofore?

The discomfort growing too great, he was forced to speak to Pamitar of these things, but there was no proper way to express them. She seemed not to understand, unless she understood and did not know it, for her manner grew agitated, so that he soon forwent questioning, and turned to the parapatterner to hide his unease.

It stretched over a mile of sand, and rose several feet into the air. From each of his long expeditions, he brought back no more than five stones, yet there were assembled here many hundreds of thousands of stones, perhaps millions, all painstakingly arranged, so that no being could take in the arrangement from any one position, not even Argustal. Many were supported in the air at various heights by stakes or poles, more lay on the ground, where Pamitar always kept the dust and the wild men from encroaching them; and of these on the ground, some stood isolated, while others lay in profusion, but all in a pattern that was ever apparent only to Argustal—and he feared that it would take him until the next sunset to have that pattern clear in his head again. Yet already it started to come clearer, and he recalled with wonder the devious and fugal course he had taken, walking down to the ravine of the Tree-men of Or, and knew that he still contained the skill to place the new stones he had brought within the general pattern with reference to that natural harmony—so completing the parapatterner.

And the lines on his wife's face: Would they too have a place within the pattern?

Was there sense in what the crow beggar had cried, that he talked to nowhere? And . . . and . . . the terrible and, would nowhere answer him?

Bowed, he took his wife's arm, and scurried back with her to their home high in the leafless tree.

"My Tapmar," she said that evening as they ate a dish of fruit, "it is good that you come back to Gornilo, for the town sedges up with dreams like an old river bed, and I am afraid."

At this he was secretly alarmed, for the figure of speech she

used seemed to him an apt one for the newly observed lines on her face; so that he asked her what the dreams were in a voice more timid than he meant to use.

Looking at him strangely, she said, "The dreams are as thick as fur, so thick that they congeal my throat to tell you of them. Last night, I dreamed I walked in a landscape that seemed to be clad in fur all around the distant horizons, fur that branched and sprouted and had somber tones of russet and dun and black and a lustrous black-blue. I tried to resolve this strange material into the more familiar shapes of hedges and old distorted trees, but it stayed as it was, and I became . . . well, I had the word in my dream that I became a *child.*"

Argustal looked aslant over the crowded vegetation of the town and said, "These dreams may not be of Gornilo but of you only, Pamitar. What is *child?*"

"There's no such thing in reality, to my knowledge, but in the dream the child that was I was small and fresh and in its actions at once nimble and clumsy. It was alien from me, its motions and ideas never mine—and yet it was all familiar to me. I was it, Tapmar, I was that child. And now that I wake, I become sure that I once was such a thing as a *child.*"

He tapped his fingers on his knees, shaking his head and blinking in a sudden anger. "This is your bad secret, Pamitar! I knew you had one the moment I saw you! I read it in your face which has changed in an evil way! You know you were never anything but Pamitar in all the millions of years of your life, and that *child* must be an evil phantom that possesses you. Perhaps you will now be turned into *child!*"

She cried out and hurled a green fruit into which she had bitten. Deftly, he caught it before it struck him.

They made a provisional peace before settling for sleep. That night, Argustal dreamed that he also was small and vulnerable and hardly able to manage the language; his intentions were like an arrow and his direction clear.

Waking, he sweated and trembled, for he knew that as he had been *child* in his dream, so he had been *child* once in life. And this went deeper than sickness. When his pained looks directed themselves outside, he saw the night was like shot silk, with a dappled effect of light and shadow in the dark blue dome of

the sky, which signified that the Forces were making merry with the sun while it journeyed through Yzazys; and Argustal thought of his journeys across the face of Yzazys, and of his visit to Or, when the Tree-men had whispered of an unknown element that forces change.

"They prepared me for this dream!" he muttered. He knew now that change had worked in his very foundations; once, he had been this thin tiny alien thing called *child*, and his wife had been too, and possibly others. He thought of that little apparition again, with its spindly legs and piping voice; the horror of it chilled his heart; he broke into prolonged groans that all Pamitar's comforting took a long part of the dark to silence.

He left her sad and pale. He carried with him the stones he had gathered on his journey, the odd-shaped one from the ravine and the ones he had acquired before that. Holding them tightly to him, Argustal made his way through the town to his spatial arrangement. For so long, it had been his chief preoccupation; today, the long project would come to completion; yet because he could not even say why it had so preoccupied him, his feelings inside lay flat and wretched. Something had got to him and killed contentment.

Inside the prospects of the parapatterner, the old beggarly man lay, resting his shaggy head on a blue stone. Argustal was too low in spirit to chase him away.

"As your frame of stones will frame words, the words will come forth stones," cried the creature.

"I'll break your bones, old crow!" growled Argustal, but inwardly he wondered at this vile crow's saying and at what he had said the previous day about Argustal's talking to nowhere, for Argustal had discussed the purpose of his structure with nobody, not even Pamitar. Indeed, he had not recognized the purpose of the structure himself until two journeys back—or had it been three or four? The pattern had started simply as a pattern (hadn't it?) and only much later had the obsession become a purpose.

To place the new stones correctly took time. Wherever Argustal walked in his great framework, the old crow followed, sometimes on two legs, sometimes on four. Other personages

from the town collected to stare, but none dared step inside the perimeter of the structure, so that they remained far off, like little stalks growing on the margins of Argustal's mind.

Some stones had to touch, others had to be just apart. He walked and stooped and walked, responding to the great pattern that he now knew contained a universal law. The task wrapped him around in an aesthetic daze similar to the one he had experienced traveling the labyrinthine way down to Or, but with greater intensity.

The spell was broken only when the old crow spoke from a few paces away in a voice level and unlike his usual sing-song. And the old crow said, "I remember you planting the very first of these stones here when you were a child."

Argustal straightened.

Cold took him, though the bilious sun shone bright. He could not find his voice. As he searched for it, his gaze went across to the eyes of the beggar-man, festering in his black forehead.

"You know I was once such a phantom—a child?" he asked.

"We are all phantoms. We were all childs. As there is gravy in our bodies, our hours were once few."

"Old crow . . . you describe a different world—not ours!"

"Very true, very true. Yet that other world once was ours."

"Oh, not! Not!"

"Speak to your machine about it! Its tongue is of rock and cannot lie like mine."

He picked up a stone and flung it. "That will I do! Now get away from me!"

The stone hit the old man in his ribs. He groaned painfully and danced backward, tripped, lay full length in the sand, hopeless and shapeless.

Argustal was upon him at once.

"Old crow, forgive me! It was fear at my thoughts made me attack you—and there is a certain sort of horror in your presence!"

"And in your stone-flinging!" muttered the old man, struggling to rise.

"You know of childs! In all the millions of years that I have worked at my design, you have never spoken of this. Why not?"

"Time for all things . . . and that time now draws to a close, even on Yzazys."

They stared into each other's eyes as the old beggar slowly rose, arms and cloak spread in a way that suggested he would either fling himself on Argustal or turn in flight. Argustal did not move. Crouching with his knuckles in the sand, he said, ". . . even on Yzazys? Why do you say so?"

"You are of Yzazys! We humans are not—if I call myself human. Thousands of thousands of years before you were child, I came from the heart stars with many others. There is no life there now! The rot spreads from the center! The sparks fly from sun to sun! Even to Yzazys, the hour is come. Up the galactic chimneys the footprints drum!" Suddenly he fell to the ground, was up again, and made off in haste, limbs whirling in a way that took from him all resemblance to human kind. He pushed through the line of watchers and was gone.

For a while, Argustal squatted where he was, groping through matters that dissolved as they took shape, only to grow large when he dismissed them. The storm blew through him and distorted him, like the trouble on the face of the sun. When he decided there was nothing for it but to complete the parapatterner, still he trembled with the new knowledge: Without being able to understand why, he knew the new knowledge would destroy the old world.

All now was in position, save for the odd-shaped stone from Or, which he carried firm on one shoulder, tucked between ear and hand. For the first time, he realized what a gigantic structure he had wrought. It was a businesslike stroke of insight, no sentiment involved. Argustal was now no more than a bead rolling through the vast interstices around him.

Each stone held its own temporal record as well as its spatial position; each represented different stresses, different epochs, different temperatures, materials, chemicals, moulds, intensities. Every stone together represented an anagram of Yzazys, its whole composition and continuity. The last stone was merely a focal point for the whole dynamic, and as Argustal slowly walked between the vibrant arcades, that dynamic rose to pitch.

He heard it grow. He paused. He shuffled now this way, now that. As he did so, he recognized that there was no one focal

position but a myriad, depending on position and direction of the key stone.

Very softly, he said, ". . . that my fears might be verified . . ."

And all about him—but softly—came a voice in stone, stuttering before it grew clearer, as if it had long known of words but never practiced them.

"Thou . . ." Silence, then a flood of sentence.

"Thou thou art, oh, thou art worm thou art sick, rose invisible rose. In the howling storm thou art in the storm. Worm thou art found out, oh, rose thou art sick and found out flies in the night thy bed thy thy crimson life destroy. Oh—oh, rose, thou art sick! The invisible worm, the invisible worm that flies in the night, in the howling storm, has found out—has found out thy bed of crimson joy . . . and his dark dark secret love, his dark secret love does thy life destroy."

Argustal was already running from that place.

In Pamitar's arms he could find no comfort now. Though he huddled there, up in the encaging branches, the worm that flies worked in him. Finally, he rolled away from her and said, "Who ever heard so terrible a voice? I cannot speak again with the universe."

"You do not know it was the universe." She tried to tease him. "Why should the universe speak to little Tapmar?"

"The old crow said I spoke to nowhere. Nowhere is the universe—where the sun hides at night—where our memories hide, where our thoughts evaporate. I cannot talk with it. I must hunt out the old crow and talk to him."

"Talk no more, ask no more questions! All you discover brings you misery! Look—you will no longer regard me, your poor wife! You turn your eyes away!"

"If I stare at nothing for all succeeding eons, yet I must find out what torments us!"

In the center of Gornilo, where many of the Unclassified lived, bare wood twisted up from the ground like fossilized sack, creating caves and shelters and strange limbs on which and in which old pilgrims, otherwise without a home, might perch. Here at nightfall Argustal sought out the beggar.

The old fellow was stretched painfully beside a broken pot,

clasping a woven garment across his body. He turned in his small cell, trying to escape, but Argustal had him by the throat and held him still.

"I want your knowledge, old crow!"

"Get it from the religious men—they know more than I!"

It made Argustal pause, but he slackened his grip on the other by only the smallest margin.

"Because I have you, you must speak to me. I know that knowledge is pain, but so is ignorance once one has sensed its presence. Tell me more about childs and what they did! Tell me of what you call the heart stars!"

As if in a fever, the old crow rolled about under Argustal's grip. He brought himself to say, "What I know is so little, so little, like a blade of grass in a field. And like blades of grass are the distant bygone times. Through all those times come the bundles of bodies now on this Earth. Then as now, no new bodies. But once . . . even before those bygone times . . . you cannot understand . . ."

"I understand well enough."

"You are scientist! Before bygone times was another time, and then . . . then was childs and different things that are not any longer, many animals and birds and smaller things with frail wings unable to carry them over long time . . ."

"What happened? Why was there change, old crow?"

"Men . . . scientists . . . make understanding of the gravy of bodies and turn every person and thing and tree to eternal life. We now continue from that time, a long long time—so long we have forgotten what was then done."

The smell of him was like an old pie. Argustal asked him, "And why now are no childs?"

"Childs are just small adults. We are adults, having become from child. But in that great former time, before scientists were on Yzazys, adults produced childs. Animals and trees likewise. But with eternal life, this cannot be—those child-making parts of the body have less life than stone."

"Don't talk of stone! So we live forever . . . you old ragbag, you remember—ah, you remember me as child?"

But the old ragbag was working himself into a kind of fit, pummeling the ground, slobbering at the mouth.

"Seven shades of lilac, even worse I remember myself a child, running like an arrow, air, everywhere fresh rosy air. So I am mad, for I remember!" He began to scream and cry, and the outcasts round about took up the wail in chorus. "We remember, we remember!"—whether they did or not.

Clapping his hand over the beggar's mouth, Argustal said, "But you were not child on Yzazys—tell me about that!"

Shaking, the other replied, "Earlier I tell you—all humans come from heart stars. Yzazys here is perched on universe's end! Once were as many worlds as days in eternity, now all burned away as smoke up the chimney. Only this last place was safe."

"What happened? Why?"

"Nothing happened! Life is life is life—only except that change crept in."

And what was this but an echo of the words of the Tree-men of Or who, deep in their sinful glade, had muttered of some unknown element that forced change? Argustal crouched with bowed head while the beggarman shuddered beside him, and outside the holy idiots took up his last words in a chant: "Change crept in! Change crept in! Daylight smoked and change crept in! Change crept in!"

Their dreadful howling worked like spears in Argustal's flank. He had pictures afterward of his panic run through the town, of wall and trunk and ditch and road, but it was all as insubstantial at the time as the pictures afterward. When he finally fell to the ground panting, he was unaware of where he lay, and everything was nothing to him until the religious howling had died into silence.

Then he saw he lay in the middle of his great structure, his cheek against the Or stone where he had dropped it. And as his attention came to it, the great structure around him answered without his having to speak.

He was at a new focal point. The voice that sounded was new, as cool as the previous one had been choked. It blew over him in a cool wind.

"There is no amaranth on this side of the grave, oh Argustal, no name with whatsoever emphasis of passionate love repeated that is not mute at last. Experiment X gave life for eternity to every living thing in the world, but even eternity is punctuated

by release and suffers period. The old life had his childhood and its end, the new had no such logic. It found its own after many millennia, and took its cue from individual minds. What a man was, he became; what a tree, it became."

Argustal lifted his tired head from its pillow of stone. Again the voice changed pitch and trend, as if in response to his minute gesture.

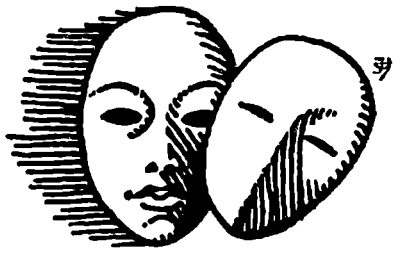
"The present is a note in music. That note can no longer be sustained. You find what questions you have found, oh Argustal, because the chord, in dropping to a lower key, rouses you from the long dream of crimson joy that was immortality. What you are finding, others also find, and you can none of you be any longer insensible to change. Even immortality must have an end. Life has passed like a long fire through the galaxy. Now it fast burns out even here, the last refuge of man!"

He stood up then, and hurled the Or stone. It flew, fell, rolled . . . and before it stopped he had awoken a great chorus of universal voice.

All Yzazys roused and a wind blew from the west. As he started again to move, he saw the religious men of the town were on the march, and the great sun-nesting Forces on their midnight wing, and Hrt the flaming stone wheeling overhead, and every majestic object alert as it had never been.

But Argustal walked slowly on his flat simian feet, plodding back to Pamitar. No longer would he be impatient in her arms. There, time would be all too brief.

He knew now the worm that flew and nestled in her cheek, in his cheek, in all things, even in the Tree-men of Or, even in the great impersonal Forces that despoiled the sun, even in the sacred bowels of the universe to which he had lent a temporary tongue. He knew now that back had come that Majesty that previously gave Life its reason, the Majesty that had been away from the world for so long and yet so brief a respite, the Majesty called DEATH.



MASKS

DAMON KNIGHT

Modern prosthetics can already replace damaged arms, legs, ears, internal organs . . . Soon the replacement of an entire body destroyed in an accident will be a possibility, so long as a man's nervous system is intact. But how practical will that be? Damon Knight, with thoughtful craftsmanship, tells of one possible problem:

THE EIGHT PENS danced against the moving strip of paper, like the nervous claws of some mechanical lobster. Roberts, the technician, frowned over the tracings while the other two watched.

"Here's the wake-up impulse," he said, pointing with a skinny finger. "Then here, look, seventeen seconds more, still dreaming."

"Delayed response," said Babcock, the project director. His heavy face was flushed and he was sweating. "Nothing to worry about."

"OK, delayed response, but look at the difference in the tracings. Still dreaming, after the wake-up impulse, but the peaks

are closer together. Not the same dream. More anxiety, more motor pulses."

"Why does he have to sleep at all?" asked Sinescu, the man from Washington. He was dark, narrow-faced. "You flush the fatigue poisons out, don't you? So what is it, something psychological?"

"He needs to dream," said Babcock. "It's true he has no physiological need for sleep, but he's got to dream. If he didn't, he'd start to hallucinate, maybe go psychotic."

"Psychotic," said Sinescu. "Well—that's the question, isn't it? How long has he been doing this?"

"About six months."

"In other words, about the time he got his new body—and started wearing a mask?"

"About that. Look, let me tell you something: He's rational. Every test—"

"Yes, OK, I know about tests. Well—so he's awake now?"

The technician glanced at the monitor board. "He's up. Sam and Irma are with him." He hunched his shoulders, staring at the EEG tracings again. "I don't know why it should bother me. It stands to reason, if he has dream needs of his own that we're not satisfying with the programmed stuff, this is where he gets them in." His face hardened. "I don't know. Something about those peaks I don't like."

Sinescu raised his eyebrows. "You program his dreams?"

"Not program," said Babcock impatiently. "A routine suggestion to dream the sort of thing we tell him to. Somatic stuff, sex, exercise, sport."

"And whose idea was that?"

"Psych section. He was doing fine neurologically, every other way, but he was withdrawing. Psych decided he needed that somatic input in some form, we had to keep him in touch. He's alive, he's functioning, everything works. But don't forget, he spent forty-three years in a normal human body."

In the hush of the elevator, Sinescu said, "Washington."

Swaying, Babcock said, "I'm sorry; what?"

"You look a little rocky. Getting any sleep?"

"Not lately. What did you say before?"

"I said they're not happy with your reports in Washington."

"Goddamn it, I know that." The elevator door silently opened. A tiny foyer, green carpet, gray walls. There were three doors, one metal, two heavy glass. Cool, stale air. "This way."

Sinescu paused at the glass door, glanced through: a gray-carpeted living room, empty. "I don't see him."

"Around the el. Getting his morning checkup."

The door opened against slight pressure; a battery of ceiling lights went on as they entered. "Don't look up," said Babcock. "Ultraviolet." A faint hissing sound stopped when the door closed.

"And positive pressure in here? To keep out germs? Whose idea was that?"

"His." Babcock opened a chrome box on the wall and took out two surgical masks. "Here, put this on."

Voices came muffled from around the bend of the room. Sinescu looked with distaste at the white mask, then slowly put it over his head.

They stared at each other. "Germs," said Sinescu through the mask. "Is that rational?"

"All right, he can't catch a cold, or what have you, but think about it a minute. There are just two things now that could kill him. One is a prosthetic failure, and we guard against that; we've got five hundred people here, we check him out like an airplane. That leaves a cerebrospinal infection. Don't go in there with a closed mind."

The room was large, part living room, part library, part workshop. Here was a cluster of Swedish-modern chairs, a sofa, coffee table; here a workbench with a metal lathe, electric crucible, drill press, parts bins, tools on wallboards; here a drafting table; here a free-standing wall of bookshelves that Sinescu fingered curiously as they passed. Bound volumes of project reports, technical journals, reference books; no fiction, except for *Fire* and *Storm* by George Stewart and *The Wizard of Oz* in a worn blue binding. Behind the bookshelves, set into a little alcove, was a glass door through which they glimpsed another living room, differently furnished: upholstered chairs, a tall philodendron in a ceramic pot. "There's Sam," Babcock said.

A man had appeared in the other room. He saw them, turned to call to someone they could not see, then came forward, smiling.

He was bald and stocky, deeply tanned. Behind him, a small pretty woman hurried up. She crowded through after her husband, leaving the door open. Neither of them wore a mask.

"Sam and Irma have the next suite," Babcock said. "Company for him; he's got to have somebody around. Sam is an old Air Force buddy of his and, besides, he's got a tin arm."

The stocky man shook hands, grinning. His grip was firm and warm. "Want to guess which one?" He wore a flowered sport shirt. Both arms were brown, muscular and hairy; but when Sinescu looked more closely, he saw that the right one was a slightly different color, not quite authentic.

Embarrassed, he said, "The left, I guess."

"Nope." Grinning wider, the stocky man pulled back his right sleeve to show the straps.

"One of the spin-offs from the project," said Babcock. "Myoelectric, servo-controlled, weighs the same as the other one. Sam, they about through in there?"

"Maybe so. Let's take a peek. Honey, you think you could rustle up some coffee for the gentlemen?"

"Oh, why, sure." The little woman turned and darted back through the open doorway.

The far wall was glass, covered by a translucent white curtain. They turned the corner. The next bay was full of medical and electronic equipment, some built into the walls, some in tall black cabinets on wheels. Four men in white coats were gathered around what looked like an astronaut's couch. Sinescu could see someone lying on it: feet in Mexican woven-leather shoes, dark socks, gray slacks. A mutter of voices.

"Not through yet," Babcock said. "Must have found something else they didn't like. Let's go out onto the patio a minute."

"Thought they checked him at night—when they exchange his blood, and so on . . . ?"

"They do." Babcock said. "And in the morning, too." He turned and pushed open the heavy glass door. Outside, the roof was paved with cut stone, enclosed by a green-plastic canopy and tinted-glass walls. Here and there were concrete basins, empty. "Idea was to have a roof garden out here, something green, but he didn't want it. We had to take all the plants out, glass the whole thing in."

Sam pulled out metal chairs around a white table and they all sat down. "How is he, Sam?" asked Babcock.

He grinned and ducked his head. "Mean in the mornings."

"Talk to you much? Play any chess?"

"Not too much. Works, mostly. Reads some, watches the box a little." His smile was forced; his heavy fingers were clasped together and Sinescu saw now that the finger tips of one hand had turned darker, the others not. He looked away.

"You're from Washington, that right?" Sam asked politely. "First time here? Hold on." He was out of his chair. Vague upright shapes were passing behind the curtained glass door. "Looks like they're through. If you gentlemen would just wait here a minute, till I see." He strode across the roof. The two men sat in silence. Babcock had pulled down his surgical mask; Sinescu noticed and did the same.

"Sam's wife is a problem," Babcock said, leaning nearer. "It seemed like a good idea at the time, but she's lonely here, doesn't like it—no kids—"

The door opened again and Sam appeared. He had a mask on, but it was hanging under his chin. "If you gentlemen would come in now."

In the living area, the little woman, also with a mask hanging around her neck, was pouring coffee from a flowered ceramic jug. She was smiling brightly but looked unhappy. Opposite her sat someone tall, in gray shirt and slacks, leaning back, legs out, arms on the arms of his chair, motionless. Something was wrong with his face.

"Well, now," said Sam heartily. His wife looked up at him with an agonized smile.

The tall figure turned its head and Sinescu saw with an icy shock that its face was silver, a mask of metal with oblong slits for eyes, no nose or mouth, only curves that were faired into each other. "Project," said an inhuman voice.

Sinescu found himself half bent over a chair. He sat down. They were all looking at him. The voice resumed. "I said, are you here to pull the plug on the project?" It was unaccented, indifferent.

"Have some coffee." The woman pushed a cup toward him.

Sinescu reached for it, but his hand was trembling and he drew it back. "Just a fact-finding expedition," he said.

"Bull. Who sent you—Senator Hinkel?"

"That's right."

"Bull. He's been here himself; why send you? If you are going to pull the plug, might as well tell me." The face behind the mask did not move when he spoke, the voice did not seem to come from it.

"He's just looking around, Jim," said Babcock.

"Two hundred million a year," said the voice, "to keep one man alive. Doesn't make much sense, does it? Go on, drink your coffee."

Sinescu realized that Sam and his wife had already finished theirs and that they had pulled up their masks. He reached for his cup hastily.

"Hundred percent disability in my grade is thirty thousand a year. I could get along on that easy. For almost an hour and a half."

"There's no intention of terminating the project," Sinescu said.

"Phasing it out, though. Would you say phasing it out?"

"Manners, Jim," said Babcock.

"OK. My worst fault. What do you want to know?"

Sinescu sipped his coffee. His hands were still trembling. "That mask you're wearing," he started.

"Not for discussion. No comment, no comment. Sorry about that; don't mean to be rude; a personal matter. Ask me something—" Without warning, he stood up, blaring, "Get that damn thing out of here!" Sam's wife's cup smashed, coffee brown across the table. A fawn-colored puppy was sitting in the middle of the carpet, cocking its head, bright-eyed, tongue out.

The table tipped, Sam's wife struggled up behind it. Her face was pink, dripping with tears. She scooped up the puppy without pausing and ran out. "I better go with her," Sam said, getting up.

"Go on; and, Sam, take a holiday. Drive her into Winnemucca, see a movie."

"Yeah, guess I will." He disappeared behind the bookshelf wall.

The tall figure sat down again, moving like a man; it leaned back in the same posture, arms on the arms of the chair. It was

still. The hands gripping the wood were shapely and perfect but unreal: there was something wrong about the fingernails. The brown, well-combed hair above the mask was a wig; the ears were wax. Sinescu nervously fumbled his surgical mask over his mouth and nose. "Might as well get along," he said, and stood up.

"That's right, I want to take you over to Engineering and R and D," said Babcock. "Jim, I'll be back in a little while. Want to talk to you."

"Sure," said the motionless figure.

Babcock had had a shower, but sweat was soaking through the armpits of his shirt again. The silent elevator, the green carpet, a little blurred. The air cool, stale. Seven years, blood and money, 500 good men. Psych section, Cosmetic Engineering, R and D, Medical, Immunology, Supply, Serology, Administration. The glass doors. Sam's apartment empty, gone to Winnemucca with Irma. Psych. Good men, but were they the best? Three of the best had turned it down. Buried in the files. *Not like an ordinary amputation, this man has had everything cut off.*

The tall figure had not moved. Babcock sat down. The silver mask looked back at him.

"Jim, let's level with each other."

"Bad, huh?"

"Sure it's bad. I left him in his room with a bottle. I'll see him again before he leaves, but God knows what he'll say in Washington. Listen, do me a favor, take that thing off."

"Sure." The hand rose, plucked at the edge of the silver mask, lifted it away. Under it, the tan-pink face, sculptured nose and lips, eyebrows, eyelashes, not handsome but good-looking, normal-looking. Only the eyes wrong, pupils too big. And the lips that did not open or move when it spoke. "I can take anything off. What does that prove?"

"Jim, Cosmetic spent eight and a half months on that model and the first thing you do is slap a mask over it. We've asked you what's wrong, offered to make any changes you want."

"No comment."

"You talked about phasing out the project. Did you think you were kidding?"

A pause. "Not kidding."

"All right, then open up, Jim, tell me; I have to know. They won't shut the project down; they'll keep you alive, but that's all. There are seven hundred on the volunteer list, including two U.S. Senators. Suppose one of them gets pulled out of an auto wreck tomorrow. We can't wait till then to decide; we've got to know now. Whether to let the next one die or put him into a TP body like yours. So talk to me."

"Suppose I tell you something, but it isn't the truth."

"Why would you lie?"

"Why do you lie to a cancer patient?"

"I don't get it. Come on, Jim."

"OK, try this. Do I look like a man to you?"

"Sure."

"Bull. Look at this face." Calm and perfect. Beyond the fake irises, a wink of metal. "Suppose we had all the other problems solved and I could go into Winnemucca tomorrow; can you see me walking down the street—going into a bar—taking a taxi?"

"Is that all it is?" Babcock drew a deep breath. "Jim, sure there's a difference, but for Christ's sake, it's like any other prosthesis—people get used to it. Like that arm of Sam's. You see it, but after a while you forget it, you don't notice."

"Bull. You pretend not to notice. Because it would embarrass the cripple."

Babcock looked down at his clasped hands. "Sorry for yourself?"

"Don't give me that," the voice blared. The tall figure was standing. The hands slowly came up, the fists clenched. "I'm in this thing. I've been in it for two years. I'm in it when I go to sleep, and when I wake up, I'm still in it."

Babcock looked up at him. "What do you want, facial mobility? Give us twenty years, maybe ten, we'll lick it."

"I want you to close down Cosmetic."

"But that's—"

"Just listen. The first model looked like a tailor's dummy, so you spent eight months and came up with this one, and it looks like a corpse. The whole idea was to make me look like a man, the first model pretty good, the second model better, until you've got something that can smoke cigars and joke with women

and go bowling and nobody will know the difference. You can't do it, and if you could what for?"

"I don't— Let me think about this. What do you mean, a metal—"

"Metal, sure, but what difference does that make? I'm talking about shape. Function. Wait a minute." The tall figure strode across the room, unlocked a cabinet, came back with rolled sheets of paper. "Look at this."

The drawing showed an oblong metal box on four jointed legs. From one end protruded a tiny mushroom-shaped head on a jointed stem and a cluster of arms ending in probes, drills, grapples. "For moon prospecting."

"Too many limbs," said Babcock after a moment. "How would you—"

"With the facial nerves. Plenty of them left over. Or here." Another drawing. "A module plugged into the control system of a spaceship. That's where I belong, in space. Sterile environment, low grav, I can go where a man can't go and do what a man can't do. I can be an asset, not a goddamn billion-dollar liability."

Babcock rubbed his eyes. "Why didn't you say anything before?"

"You were all hipped on prosthetics. You would have told me to tend my knitting."

Babcock's hands were shaking as he rolled up the drawings. "Well, by God, this just may do it. It just might." He stood up and turned toward the door. "Keep your—" He cleared his throat. "I mean, hang tight, Jim."

"I'll do that."

When he was alone, he put on his mask again and stood motionless a moment, eye shutters closed. Inside, he was running clean and cool; he could feel the faint reassuring hum of pumps, click of valves and relays. They had given him that: cleaned out all the offal, replaced it with machinery that did not bleed, ooze or suppurate. He thought of the lie he had told Babcock. *Why do you lie to a cancer patient?* But they would never get it, never understand.

He sat down at the drafting table, clipped a sheet of paper to

it and with a pencil began to sketch a rendering of the moon-prospector design. When he had blocked in the prospector itself, he began to draw the background of craters. His pencil moved more slowly and stopped; he put it down with a click.

No more adrenal glands to pump adrenaline into his blood, so he could not feel fright or rage. They had released him from all that—love, hate, the whole sloppy mess—but they had forgotten there was still one emotion he could feel.

Sinescu, with the black bristles of his beard sprouting through his oily skin. A whitehead ripe in the crease beside his nostrils.

Moon landscape, clean and cold. He picked up the pencil again.

Babcock, with his broad pink nose shining with grease, crusts of white matter in the corners of his eyes. Food mortar between his teeth.

Sam's wife, with raspberry-colored paste on her mouth. Face smeared with tears, a bright bubble in one nostril. And the damn dog, shiny nose, wet eyes. . . .

He turned. The dog was there, sitting on the carpet, wet red tongue out *left the door open again* dripping, wagged its tail twice, then started to get up. He reached for the metal T square, leaned back, swinging it like an ax, and the dog yelped once as metal sheared bone, one eye spouting red, writhing on its back, dark stain of piss across the carpet and he hit it again, hit it again.

The body lay twisted on the carpet, fouled with blood, ragged black lips drawn back from teeth. He wiped off the T square with a paper towel, then scrubbed it in the sink with soap and steel wool, dried it and hung it up. He got a sheet of drafting paper, laid it on the floor, rolled the body over onto it without spilling any blood on the carpet. He lifted the body in the paper, carried it out onto the patio, then onto the unroofed section, opening the doors with his shoulder. He looked over the wall. Two stories down, concrete roof, vents sticking out of it, nobody watching. He held the dog out, let it slide off the paper, twisting as it fell. It struck one of the vents, bounced, a red smear. He carried the paper back inside, poured the blood down the drain, then put the paper into the incinerator chute.

Splashes of blood were on the carpet, the feet of the drafting table, the cabinet, his trouser legs. He sponged them all up with

paper towels and warm water. He took off his clothing, examined it minutely, scrubbed it in the sink, then put it in the washer. He washed the sink, rubbed himself down with disinfectant and dressed again. He walked through into Sam's silent apartment, closing the glass door behind him. Past the potted philodendron, over-stuffed furniture, red-and-yellow painting on the wall, out onto the roof, leaving the door ajar. Then back through the patio, closing doors.

Too bad. How about some goldfish.

He sat down at the drafting table. He was running clean and cool. The dream this morning came back to his mind, the last one, as he was struggling up out of sleep: *slithery kidneys burst gray lungs blood and hair ropes of guts covered with yellow fat oozing and sliding and oh god the stink like the breath of an outhouse no sound nowhere he was putting a yellow stream down the slide of the dunghole and*

He began to ink in the drawing, first with a fine steel pen, then with a nylon brush. *his heel slid and he was falling could not stop himself falling into slimy bulging softness higher than his chin, higher and he could not move paralyzed and he tried to scream tried to scream tried to scream.*

The prospector was climbing a crater slope with its handling members retracted and its head tilted up. Behind it the distant ringwall and the horizon, the black sky, the pinpoint stars. And he was there, and it was not far enough, not yet, for the earth hung overhead like a rotten fruit, blue with mold, crawling, wrinkling, purulent and alive.

TIME CONSIDERED AS A HELIX OF SEMI-PRECIOUS STONES

SAMUEL R. DELANY

The software of the future, like that of any age, has more immediacy in its importance than even the most important hardware. Thus, we're only now coming to understand that the nuclear bomb itself isn't nearly as important as what we hear about it, in shaping our daily lives and the broad scope of history. Here Samuel R. Delany tells a colorful, subtle and fascinating story about some sociological innovations that could result from our mass-media age, and how communication between people can be affected by technology.

DAY ORDINATE and abscissa on the century. Now cut me a quadrant. Third quadrant if you please. I was born in 'fifty. Here it's 'seventy-five.

At sixteen they let me leave the orphanage. Dragging the name they'd hung me with (Harold Clancy Everet, and me a mere lad—how many monickers have I had since; but don't worry, you'll recognize my smoke) over the hills of East Vermont, I came to a decision:

Me and Pa Michaels, who had belligerently given me a job at the request of *The Official* looking *Document* with which the orphanage sends you packing, were running Pa Michaels' dairy farm, i.e., thirteen thousand three hundred sixty-two piebald Guernseys all asleep in their stainless coffins, nourished and drugged by pink liquid flowing in clear plastic veins (stuff is sticky and messes up your hands), exercised with electric pulsers that make their muscles quiver, them not half awake, and the milk just a-pouring down into stainless cisterns. Anyway. The Decision (as I stood there in the fields one afternoon like the Man with the Hoe, exhausted with three hard hours of physical labor, contemplating the machinery of the universe through the fog of fatigue): With all of Earth, and Mars, and the Outer Satellites filled up with people and what-all, there had to be something more than this. I decided to get some.

So I stole a couple of Pa's credit cards, one of his helicopters and a bottle of white lightning the geezer made himself, and took off. Ever try to land a stolen helicopter on the roof of the Pan Am building, drunk? Jail, schmail, and some hard knocks later I had attained to wisdom. But remember this oh best beloved: I have done three honest hours on a dairy farm less than ten years back. And nobody has ever called me Harold Clancy Everet again.

Hank Culafroy Eckles (red-headed, a bit vague, six foot two) strolled out of the baggage room at the spaceport carrying a lot of things that weren't his in a small briefcase.

Beside him the Business Man was saying, "You young fellows today upset me. Go back to Bellona, I say. Just because you got into trouble with that little blonde you were telling me about is no reason to leap worlds, come on all glum. Even quit your job!"

Hank stops and grins weakly: "Well . . ."

"Now I admit, you young people have your real needs, which maybe we older folks don't understand, but you have to show some responsibility towards . . ." He notices Hank has stopped in front of a door marked MEN. "Oh. Well. Eh." He grins strongly. "I've enjoyed meeting you, Hank. It's always nice when you meet somebody worth talking to on these damn crossings. So long."

Out same door, ten minutes later, comes Harmony C. Eventide,

six foot even (one of the false heels was cracked, so I stuck both of them under a lot of paper towels), brown hair (not even my hairdresser knows for sure), oh so dapper and of his time, attired in the bad taste that is oh so tasteful, a sort of man with whom no Business Men would start a conversation. Took the regulation 'copter from the port over to the Pan Am building (Yeah. Really. Drunk), came out of Grand Central Station, and strode along Forty-second towards Eighth Avenue, with a lot of things that weren't mine in a small briefcase.

The evening is carved from light.

Crossed the plastiplex pavement of the Great White Way—I think it makes people look weird, all that white light under their chins—and skirted the crowds coming up in elevators from the sub-way, the sub-sub-way, and the sub-sub-sub (eighteen and first week out of jail I hung around here, snatching stuff from people—but daintily, daintily, so they never knew they'd been snatched), bulled my way though a crowd of giggling, goo-chewing school girls with flashing lights in their hair, all very embarrassed at wearing transparent plastic blouses which had just been made legal again (I hear the breast has been scene [as opposed to obscene] on and off since the seventeenth century) so I stared appreciatively; they giggled some more. I thought, Christ, when I was that age, I was on a God damn dairy farm, and took the thought no further.

The ribbon of news lights looping the triangular structure of Communication, Inc., explained in Basic English how Senator Regina Abolafia was preparing to begin her investigation of Organized Crime in the City. Days I'm so happy I'm disorganized I couldn't begin to tell.

Near Ninth Avenue I took my briefcase into a long, crowded bar. I hadn't been in New York for two years, but on my last trip through oftimes a man used to hang out here who had real talent for getting rid of things that weren't mine profitably, safely, fast. No idea what the chances were I'd find him. I pushed among a lot of guys drinking beer. Here and there were a number of well escorted old bags wearing last month's latest. Scarfs of smoke gentled through the noise. I don't like such places. Those there younger than me were all morphadine heads or feeble minded. Those older only wished more younger ones

would come. I pried my way to the bar and tried to get the attention of one of the little men in white coats.

The lack of noise behind me made me glance back—

She wore a sheath of veiling closed at the neck and wrists with huge brass pins (oh so tastefully on the border of taste); her left arm was bare, her right covered with chiffon like wine. She had it down a lot better than I did. But such an ostentatious demonstration of one's understanding of the fine points was absolutely out of place in this bar. People were making a great show of not noticing.

She pointed to her wrist, blood-colored nail indexing a yellow-orange fragment in the brass claw of her wristlet. "Do you know what this is, Mr. Eldrich?" she asked; at the same time the veil across her face cleared, and her eyes were ice; her brows, black.

Three thoughts: (One) She is a lady of fashion, because coming in from Bellona I'd read the *Delta* coverage of the "fading fabrics" whose hue and opacity were controlled by cunning jewels at the wrist. (Two) During my last trip through, when I was younger and Harry Calamine Eldrich, I didn't do anything *too* illegal (though one loses track of these things); still I didn't believe I could be dragged off to the calaboose for anything more than thirty days under that name. (Three) The stone she pointed to. . . .

". . . Jasper?" I asked.

She waited for me to say more; I waited for her to give me reason to let on I knew what she was waiting for (when I was in jail Henry James was my favorite author. He really was).

"Jasper," she confirmed.

"—Jasper. . . ." I reopened the ambiguity she had tried so hard to dispel.

". . . Jasper—" But she was already faltering, suspecting I suspected her certainty to be ill-founded.

"Okay. Jasper." But from her face I knew she had seen in my face a look that had finally revealed I knew she knew I knew.

"Just whom have you got me confused with, Ma'am?"

Jasper, this month, is the Word.

Jasper is the pass/code/warning that the Singers of the Cities (who, last month, sang "Opal" from their divine injuries; and on

Mars I'd heard the Word and used it thrice, along with devious imitations, to fix possession of what was not rightfully my own; and even here I ponder Singers and their wounds) relay by word of mouth for that loose and roguish fraternity with which I have been involved (in various guises) these nine years. It goes out new every thirty days; and within hours every brother knows it, throughout six worlds and worldlets. Usually it's grunted at you by some blood-soaked bastard staggering into your arms from a dark doorway; hissed at you as you pass a shadowed alley; scrawled on a paper scrap pressed into your palm by some nasty-grimy moving too fast through the crowd. And this month, it was: Jasper.

Here are some alternate translations:

Help!

or

I need help!

or

I can help you!

or

You are being watched!

or

They're not watching now, so *move!*

Final point of syntax: If the Word is used properly, you should never have to think twice about what it means in a given situation. Fine point of usage: Never trust anyone who uses it improperly.

I waited for her to finish waiting.

She opened a wallet in front of me. "Chief of Special Services Department Maudline Hinkle," she read without looking what it said below the silver badge.

"You have that very well," I said, "Maud." Then I frowned. "Hinkle?"

"Me."

"I know you're not going to believe this, Maud. You look like a woman who has no patience with her mistakes. But my name is Eventide. Not Eldrich. Harmony C. Eventide. And isn't it lucky for all and sundry that the Word changes tonight?" Passed the way it is, the Word is no big secret to the cops. But I've met policemen up to a week after change date who were not privy.

"Well, then: Harmony. I want to talk to you."

I raised an eyebrow.

She raised one back and said, "Look, if you want to be called Henrietta, it's all right by me. But you listen."

"What do you want to talk about?"

"Crime, Mr. . . . ?"

"Eventide. I'm going to call you Maud, so you might as well call me Harmony. It really is my name."

Maud smiled. She wasn't a young woman. I think she even had a few years on Business Man. But she used make-up better than he did. "I probably know more about crime than you do," she said. "In fact I wouldn't be surprised if you hadn't even heard of my branch of the police department. What does Special Services mean to you?"

"That's right, I've never heard of it."

"You've been more or less avoiding the Regular Service with alacrity for the past seven years."

"Oh, Maud, really—"

"Special Services is reserved for people whose nuisance value has suddenly taken a sharp rise . . . a sharp enough rise to make our little lights start blinking."

"Surely I haven't done anything so dreadful that—"

"We don't look at what you do. A computer does that for us. We simply keep checking the first derivative of the graphed out curve that bears your number. Your slope is rising sharply."

"Not even the dignity of a name—"

"We're the most efficient department in the Police Organization. Take it as bragging if you wish. Or just a piece of information."

"Well, well, well," I said. "Have a drink?" The little man in the white coat left us two, looked puzzled at Maud's finery, then went to do something else.

"Thanks." She downed half her glass like someone stauncher than that wrist would indicate. "It doesn't pay to go after most criminals. Take your big time racketeers, Farnesworth, The Hawk, Blavatskia. Take your little snatch-purses, small-time pushers, housebreakers, or vice-impresarios. Both at the top and the bottom of the scale, their incomes are pretty stable. They don't really upset the social boat. Regular Services handles them

both. They think they do a good job. We're not going to argue. But say a little pusher starts to become a big-time pusher; a medium-sized vice-impresario sets his sights on becoming a big-time racketeer; that's when you get problems with socially unpleasant repercussions. That's when Special Services arrive. We have a couple of techniques that work remarkably well."

"You're going to tell me about them, aren't you."

"They work better that way," she said. "One of them is holographic information storage. Do you know what happens when you cut a hologram plate in half?"

"The three dimensional image is . . . cut in half?"

She shook her head. "You get the whole image, only fuzzier, slightly out of focus."

"Now I didn't know that."

"And if you cut it in half again, it just gets fuzzier still. But even if you have a square centimeter of the original hologram you still have the whole image—unrecognizable, but complete."

I mumbled some appreciative *m's*.

"Each pinpoint of photographic emulsion on a hologram plate, unlike a photograph, gives information about the entire scene being hologrammed. By analogy, holographic information storage simply means that each bit of information we have—about you, let us say—relates to your entire career, your overall situation, the complete set of tensions between you and your environment. Specific facts about specific misdemeanors or felonies we leave to Regular Services. As soon as we have enough of our kind of data, our method is vastly more efficient for keeping track—even predicting—where you are or what you may be up to."

"Fascinating," I said. "One of the most amazing paranoid syndromes I've ever run up against. I mean just starting a conversation with someone in a bar. Often, in a hospital situation, I've encountered stranger—"

"In your past," she said matter of factly, "I see cows and helicopters. In your not too distant future there are helicopters and hawks."

"And tell me, oh Good Witch of the West, just how—" Then I got all upset inside. Because nobody is supposed to know about that stint with Pa Michaels save thee and me. Even the Regular

Service who pulled me, out of my mind, from that whirlibird bouncing towards the edge of the Pan Am never got that one from me. I'd eaten the credit cards when I saw them waiting, and the serial numbers had been filed off everything that could have had a serial number on it by someone more competent than I: good Mister Michaels had boasted to me, my first lonely, drunken night at the farm, how he'd gotten the thing in hot from New Hampshire.

"But why"—it appalls me the clichés to which anxiety will drive us—"are you telling me all this?"

She smiled and her smile faded behind her veil. "Information is only meaningful when it is shared," said a voice that was hers from the place of her face.

"Hey, look, I—"

"You may be coming into quite a bit of money soon. If I can calculate right, I will have a helicopter full of the city's finest arriving to take you away as you accept it into your hot little hands. That is a piece of information. . . ." She stepped back. Someone stepped between us.

"Hey, Maud—!"

"You can do whatever you want with it."

The bar was crowded enough so that to move quickly was to make enemies. I don't know—I lost her and made enemies. Some weird characters there: with greasy hair that hung in spikes, and three of them had dragons tattooed on their scrawny shoulders, still another with an eye patch, and yet another raked nails black with pitch at my cheek (we're two minutes into a vicious free-for-all, case you missed the transition. I did) and some of the women were screaming. I hit and ducked, and then the tenor of the bruhaha changed. Somebody sang, "Jasper!" the way she is supposed to be sung. And it meant the heat (the ordinary, bungling Regular Service I had been eluding these seven years) were on their way. The brawl spilled into the street. I got between two nasty-grimies who were doing things appropriate with one another, but made the edge of the crowd with no more wounds than could be racked up to shaving. The fight had broken into sections. I left one and ran into another that, I realized a

moment later, was merely a ring of people standing around somebody who had apparently gotten really messed.

Someone was holding people back.

Somebody else was turning him over.

Curled up in a puddle of blood was the little guy I hadn't seen in two years who used to be so good at getting rid of things not mine.

Trying not to hit people with my briefcase, I ducked between the hub and the bub. When I saw my first ordinary policeman I tried very hard to look like somebody who had just stepped up to see what the rumpus was.

It worked.

I turned down Ninth Avenue, and got three steps into an inconspicuous but rapid lope—

"Hey, wait! Wait up there. . . ."

I recognized the voice (after two years, coming at me just like that, I recognized it) but kept going.

"Wait! It's me, Hawk!"

And I stopped.

You haven't heard his name before in this story; Maud mentioned *the* Hawk, who is a multi-millionaire racketeer basing his operations on a part of Mars I've never been (though he has his claws sunk to the spurs in illegalities throughout the system) and somebody else entirely.

I took three steps back towards the doorway.

A boy's laugh there: "Oh, man. You look like you just did something you shouldn't."

"Hawk?" I asked the shadow.

He was still the age when two years' absence means an inch or so taller.

"You're still hanging out around here?" I asked.

"Sometimes."

He was an amazing kid.

"Look, Hawk, I got to get out of here." I glanced back at the rumpus.

"Get." He stepped down. "Can I come too?"

Funny. "Yeah." It makes me feel very funny him asking that. "Come on."

By the street lamp, half a block down, I saw his hair was still pale as split pine. He could have been a nasty-grimy: very dirty black denim jacket, no shirt beneath; very ripe pair of black-jeans —I mean in the dark you could tell. He went barefoot; and the only way you can tell on a dark street someone's been going barefoot for days in New York is to know already. As we reached the corner, he grinned up at me under the street lamp and shrugged his jacket together over the welts and furrows marring his chest and belly. His eyes were very green. Do you recognize him? If by some failure of information dispersal throughout the worlds and worldlets you haven't, walking beside me beside the Hudson was Hawk the Singer.

"Hey, how long have you been back?"

"A few hours," I told him.

"What'd you bring?"

"Really want to know?"

He shoved his hands into his pockets and cocked his head. "Sure."

I made the sound of an adult exasperated by a child. "All right." We had been walking the waterfront for a block now; there was nobody about. "Sit down." So he straddled the beam along the siding, one foot dangling above the flashing black Hudson. I sat in front of him and ran my thumb around the edge of the briefcase.

Hawk hunched his shoulders and leaned. "Hey . . ." He flashed green questioning at me. "Can I touch?"

I shrugged. "Go ahead."

He grubbed among them with fingers that were all knuckle and bitten nail. He picked two up, put them down, picked up three others. "Hey!" he whispered. "How much are all these worth?"

"About ten times more than I hope to get. I have to get rid of them fast."

He glanced down at his hanging foot. "You could always throw them in the river."

"Don't be dense. I was looking for a guy who used to hang around that bar. He was pretty efficient." And half the Hudson away a water-bound foil skimmed above the foam. On her deck were parked a dozen helicopters—being ferried up to the Patrol

Field near Verrazano, no doubt. But for moments I looked back and forth between the boy and the transport, getting all paranoid about Maud. But the boat *mmmmed* into the darkness. "My man got a little cut up this evening."

Hawk put the tips of his fingers in his pockets and shifted his position.

"Which leaves me up tight. I didn't think he'd take them all but at least he could have turned me on to some other people who might."

"I'm going to a party later on this evening"—he paused to gnaw on the wreck of his little fingernail—"where you might be able to sell them. Alexis Spinnel is having a party for Regina Abolafia at Tower Top."

"Tower Top . . . ?" It had been a while since I palled around with Hawk. Hell's Kitchen at ten; Tower Top at midnight—

"I'm just going because Edna Silem will be there."

Edna Silem is New York's eldest Singer.

Senator Abolafia's name had ribboned above me in lights once that evening. And somewhere among the endless magazines I'd perused coming in from Mars I remember Alexis Spinnel's name sharing a paragraph with an awful lot of money.

"I'd like to see Edna again," I said offhandedly. "But she wouldn't remember me." Folk like Spinnel and his social ilk have a little game, I'd discovered during the first leg of my acquaintance with Hawk. He who can get the most Singers of the City under one roof wins. There are five Singers of New York (a tie for second place with Lux on Iapetus). Tokyo leads with seven. "It's a two Singer party?"

"More likely four . . . if I go."

The inaugural ball for the mayor gets four.

I raised the appropriate eyebrow.

"I have to pick up the Word from Edna. It changes tonight."

"All right," I said. "I don't know what you have in mind but I'm game." I closed the case.

We walked back towards Times Square. When we got to Eighth Avenue and the first of the plastiplex paving, Hawk stopped. "Wait a minute," he said. Then he buttoned his jacket up to his neck. "Okay."

Strolling through the streets of New York with a Singer (two years back I'd spent much time wondering if that were wise for a man of my profession) is probably the best camouflage possible for a man of my profession. Think of the last time you glimpsed your favorite Tri-D star turning the corner of Fifty-seventh. Now be honest. Would you really recognize the little guy in the tweed jacket half a pace behind him?

Half the people we passed in Times Square recognized him. With his youth, funereal garb, black feet and ash pale hair, he was easily the most colorful of Singers. Smiles; narrowed eyes; very few actually pointed or stared.

"Just exactly who is going to be there who might be able to take this stuff off my hands?"

"Well, Alexis prides himself on being something of an adventurer. They might just take his fancy. And he can give you more than you can get peddling them in the street."

"You'll tell him they're all hot?"

"It will probably make the idea that much more intriguing. He's a creep."

"You say so, friend."

We went down into the sub-sub. The man at the change booth started to take Hawk's coin, then looked up. He began three or four words that were unintelligible through his grin, then just gestured us through.

"Oh," Hawk said, "thank you," with ingenuous surprise, as though this were the first, delightful time such a thing had happened. (Two years ago he had told me sagely, "As soon as I start looking like I expect it, it'll stop happening." I was still impressed by the way he wore his notoriety. The time I'd met Edna Silem, and I'd mentioned this, she said with the same ingenuousness, "But that's what we're chosen for.")

In the bright car we sat on the long seat; Hawk's hands were beside him, one foot rested on the other. Down from us a gaggle of bright-bloused goo-chewers giggled and pointed and tried not to be noticed at it. Hawk didn't look at all, and I tried not to be noticed looking.

Dark patterns rushed the window.

Things below the gray floor hummed.

Once a lurch.

Leaning once; we came out of the ground.

Outside, the city put on its thousand sequins, then threw them away behind the trees of Ft. Tryon. Suddenly the windows across from us grew bright scales. Behind them the girders of a station reeled by. We got out of the platform under a light rain. The sign said TWELVE TOWERS STATION.

By the time we reached the street, however, the shower had stopped. Leaves above the wall shed water down the brick. "If I'd known I was bringing someone I'd have had Alex send a car for us. I told him it was fifty-fifty I'd come."

"Are you sure it's all right for me to tag along, then?"

"Didn't you come up here with me once before?"

"I've even been up here once before that," I said. "Do you still think it's . . ."

He gave me a withering look. Well; Spinnel would be delighted to have Hawk even if he dragged along a whole gang of real nasty-grimies—Singers are famous for that sort of thing. With one more or less presentable thief, Spinnel was getting off light. Beside us rocks broke away into the city. Behind the gate to our left the gardens rolled up toward the first of the towers. The twelve immense, luxury apartment buildings menaced the lower clouds.

"Hawk the Singer," Hawk said into the speaker at the side of the gate. *Clang* and tic-tic-tic and *Clang*. We walked up the path to the doors and doors of glass.

A cluster of men and women in evening dress were coming out. Three tiers of doors away they saw us. You could see them frowning at the guttersnipe who'd somehow gotten into the lobby (for a moment I thought one of them was Maud, because she wore a sheath of the fading fabric, but she turned; beneath her veil her face was dark as roasted coffee); one of the men recognized him, said something to the others. When they passed us they were smiling. Hawk paid about as much attention to them as he had paid to the girls on the subway. But when they'd passed, he said, "One of those guys was looking at you."

"Yeah. I saw."

"Do you know why?"

"He was trying to figure out whether we'd met before."

"Had you?"

I nodded. "Right about where I met you, only back when I'd just gotten out of jail. I told you I'd been here once before."

"Oh."

Blue carpet covered three-quarters of the lobby. A great pool filled the rest in which a row of twelve foot trellises stood, crowned with flaming braziers. The lobby itself was three stories high, domed and mirror tiled.

Twisting smoke curled towards the ornate grill. Broken reflections sagged and recovered on the walls.

The elevator door folded about us its foil petals. There was the distinct feeling of not moving while seventy-five stories shucked down around us.

We got out on the landscaped roof garden. A very tanned, very blond man wearing an apricot jump-suit, from the collar of which emerged a black turtleneck dicky, came down the rocks (artificial) between the ferns (real) growing along the stream (real water; phony current).

"Hello! Hello!" Pause. "I'm terribly glad you decided to come after all." Pause. "For a while I thought you weren't going to make it." The pauses were to allow Hawk to introduce me. I was dressed so that Spinnel had no way of telling whether I was a miscellaneous Nobel laureate that Hawk happened to have been dining with, or a varlet whose manners and morals were even lower than mine happen to be.

"Shall I take your jacket?" Alexis offered.

Which meant he didn't know Hawk as well as he would like people to think. But I guess he was sensitive enough to realize from the little cold things that happened in the boy's face that he should forget his offer.

He nodded to me, smiling—about all he could do—and we strolled towards the gathering.

Edna Silem was sitting on a transparent inflated hassock. She leaned forward, holding her drink in both hands, arguing politics with the people sitting on the grass before her. She was the first person I recognized (hair of tarnished silver; voice of scrap brass). Jutting from the cuffs of her mannish suit, her wrinkled hands about her goblet, shaking with the intensity of her pronouncements, were heavy with stones and silver. As I ran my eyes back to Hawk, I saw half a dozen whose names/faces sold

magazines, music, sent people to the theater (the drama critic for *Delta,* wouldn't you know), and even the mathematician from Princeton I'd read about a few months ago who'd come up with the "quasar/quark" explanation.

There was one woman my eyes kept returning to. On glance three I recognized her as the New Fascistas' most promising candidate for president, Senator Abolafia. Her arms were folded and she was listening intently to the discussion that had narrowed to Edna and an overly gregarious younger man whose eyes were puffy from what could have been the recent acquisition of contact lenses.

"But don't you feel, Mrs. Silem, that—"

"You must remember when you make predictions like that—"

"Mrs. Silem, I've seen statistics that—"

"You *must* remember"—her voice tensed, lowered, till the silence between the words was as rich as the voice was sparse and metallic—"that if everything, *everything* were known, statistical estimates would be unnecessary. The science of probability gives mathematical expression to our ignorance, not to our wisdom," which I was thinking was an interesting second installment to Maud's lecture, when Edna looked up and exclaimed, "Why, Hawk!"

Everyone turned.

"I *am* glad to see you. Lewis, Ann," she called: there were two other Singers there already (he dark, she pale, both tree-slender; their faces made you think of pools without drain or tribute come upon in the forest, clear and very still; husband and wife, they had been made Singers together the day before their marriage seven years ago), "he hasn't deserted us after all!" Edna stood, extended her arm over the heads of the people sitting, and barked across her knuckles as though her voice were a pool cue. "Hawk, there are people here arguing with me who don't know nearly as much as you about the subject. You'd be on my side, now, wouldn't you—"

"Mrs. Silem, I didn't mean to—" from the floor.

Then her arms swung six degrees, her fingers, eyes and mouth opened. "You!" Me. "My dear, if there's anyone I never expected to see here! Why it's been almost two years, hasn't it?" Bless Edna; the place where she and Hawk and I had spent a long,

beery evening together had more resembled that bar than Tower Top. "Where have you been keeping yourself?"

"Mars, mostly," I admitted. "Actually I just came back today." It's so much fun to be able to say things like that in a place like this.

"Hawk—both of you—" (which meant either she had forgotten my name, or she remembered me well enough not to abuse it) "come over here and help me drink up Alexis' good liquor." I tried not to grin as we walked towards her. If she remembered anything, she certainly recalled my line of business and must have been enjoying this as much as I was.

Relief spread Alexis' face: he knew now I was *someone* if not *which* someone I was.

As we passed Lewis and Ann, Hawk gave the two Singers one of his luminous grins. They returned shadowed smiles. Lewis nodded. Ann made a move to touch his arm, but left the motion unconcluded; and the company noted the interchange.

Having found out what we wanted, Alex was preparing large glasses of it over crushed ice when the puffy-eyed gentleman stepped up for a refill. "But, Mrs. Silem, then what do you feel validly opposes such political abuses?"

Regina Abolafia wore a white silk suit. Nails, lips and hair were one color; and on her breast was a worked copper pin. It's always fascinated me to watch people used to being the center thrust to the side. She swirled her glass, listening.

"I oppose them," Edna said. "Hawk opposes them. Lewis and Ann oppose them. We, ultimately, are what you have." And her voice had taken on that authoritative resonance only Singers can assume.

Then Hawk's laugh snarled through the conversational fabric.

We turned.

He'd sat cross-legged near the hedge. "Look . . ." he whispered.

Now people's gazes followed his. He was looking at Lewis and Ann. She, tall and blonde, he, dark and taller, were standing very quietly, a little nervously, eyes closed (Lewis' lips were apart).

"Oh," whispered someone who should have known better, "they're going to . . ."

I watched Hawk because I'd never had a chance to observe one Singer at another's performance. He put the soles of his feet together, grasped his toes and leaned forward, veins making blue rivers on his neck. The top button of his jacket had come loose. Two scar ends showed over his collarbone. Maybe nobody noticed but me.

I saw Edna put her glass down with a look of beaming, anticipatory pride. Alex, who had pressed the autobar (odd how automation has become the upper crust's way of flaunting the labor surplus) for more crushed ice, looked up, saw what was about to happen, and pushed the cut-off button. The autobar hummed to silence. A breeze (artificial or real, I couldn't tell you) came by and the trees gave us a final *shush.*

One at a time, then in duet, then singly again, Lewis and Ann sang.

Singers are people who look at things, then go and tell people what they've seen. What makes them Singers is their ability to make people listen. That is the most magnificent over-simplification I can give. Eighty-six-year-old El Posado, in Rio de Janeiro, saw a block of tenements collapse, ran to the Avenida del Sol and began improvising, in rhyme and meter (not all that hard in rhyme-rich Portuguese), tears runneling his dusty cheeks, his voice clashing with the palm swards above the sunny street. Hundreds of people stopped to listen; a hundred more; and another hundred. And they told hundreds more what they had heard. Three hours later, hundreds from among them had arrived at the scene with blankets, food, money, shovels and, more incredibly, with the willingness and ability to organize themselves and work within that organization. No Tri-D report of a disaster has ever produced that sort of reaction. El Posado is historically considered the first Singer. The second was Miriamne in the roofed city of Lux, who for thirty years walked through the metal streets singing the glories of the rings of Saturn—the colonists can't look at them without aid because of the ultraviolet the rings set up. But Miriamne, with her strange cataracts, each dawn, walked to the edge of the city, looked, saw and came back to sing of what she saw. All of which would have meant nothing except that during the days she did not sing—through ill-

ness, or once she was on a visit to another city to which her fame had spread—the Lux Stock Exchange would go down, the number of violent crimes rise. Nobody could explain it. All they could do was proclaim her Singer. Why did the institution of Singers come about, springing up in just about every urban center throughout the system? Some have speculated that it was a spontaneous reaction to the mass media which blanket our lives. While Tri-D and radio and news-tapes disperse information all over the worlds, they also spread a sense of alienation from first-hand experience. (How many people still go to sports events or a political rally with their little receivers plugged to their ears to let them know that what they see is really happening?) The first Singers were proclaimed by the people around them. Then, there was a period where anyone could proclaim himself who wanted to, and people either responded to him, or laughed him into oblivion. But by the time I was left on the doorstep of somebody who didn't want me, most cities had more or less established an unofficial quota. When a position is left open today, the remaining Singers choose who is going to fill it. The required talents are poetic, theatrical, as well as a certain charisma that is generated in the tensions between the personality and the publicity web a Singer is immediately snared in. Before he became a Singer, Hawk had gained something of a prodigious reputation with a book of poems published when he was fifteen. He was touring universities and giving readings, but the reputation was still small enough so that he was amazed that I had ever heard of him, that evening we encountered in Central Park (I had just spent a pleasant thirty days as a guest of the city and it's amazing what you find in the Tombs Library). It was a few weeks after his sixteenth birthday. His Singership was to be announced in four days, though he had been informed already. We sat by the lake till dawn, while he weighed and pondered and agonized over the coming responsibility. Two years later, he's still the youngest Singer in six worlds by half a dozen years. Before becoming a Singer, a person need not have been a poet, but most are either that or actors. But the roster through the system includes a longshoreman, two university professors, an heiress to the Silitax millions (Tack it down with Silitacks), and at least two persons of such dubious background that the ever-hungry-for-

sensation Publicity Machine itself has agreed not to let any of it past the copy-editors. But wherever their origins, these diverse and flamboyant living myths sang of love, of death, the changing of seasons, social classes, governments and the palace guard. They sang before large crowds, small ones, to an individual laborer coming home from the city's docks, on slum street corners, in club cars of commuter trains, in the elegant gardens atop Twelve Towers, to Alex Spinnel's select soirée. But it has been illegal to reproduce the "Songs" of the Singers by mechanical means (including publishing the lyrics) since the institution arose, and I respect the law, I do, as only a man in my profession can. I offer the explanation then in place of Lewis' and Ann's song.

They finished, opened their eyes, stared about with expressions that could have been embarrassment, could have been contempt.

Hawk was leaning forward with a look of rapt approval. Edna was smiling politely. I had the sort of grin on my face that breaks out when you've been vastly moved and vastly pleased. Lewis and Ann had sung superbly.

Alex began to breathe again, glanced around to see what state everybody else was in, saw, and pressed the autobar, which began to hum and crush ice. No clapping, but the appreciative sounds began; people were nodding, commenting, whispering. Regina Abolafia went over to Lewis to say something. I tried to listen until Alex shoved a glass into my elbow.

"Oh, I'm sorry . . ."

I transferred my briefcase to the other hand and took the drink smiling. When Senator Abolafia left the two Singers, they were holding hands and looking at one another a little sheepishly. They sat down again.

The party drifted in conversational groups through the gardens, through the groves. Overhead clouds the color of old chamois folded and unfolded across the moon.

For a while I stood alone in a circle of trees listening to the music: a de Lassus two-part canon, programmed for audio-generators. Recalled: an article in one of last week's large-circulation literaries stating that it was the only way to remove the feel of the

bar lines imposed by five centuries of meter on modern musicians. For another two weeks this would be acceptable entertainment. The trees circled a rock pool; but no water. Below the plastic surface, abstract lights wove and threaded in a shifting lumia.

"Excuse me . . . ?"

I turned to see Alexis, who had no drink now or idea what to do with his hands. He *was* nervous.

". . . but our young friend has told me you have something I might be interested in."

I started to lift my briefcase, but Alex's hand came down from his ear (it had gone by belt to hair to collar already) to halt me. Nouveau riche.

"That's all right. I don't need to see them yet. In fact, I'd rather not. I have something to propose to you. I would certainly be interested in what you have if they are, indeed, as Hawk has described them. But I have a guest here who would be even more curious."

That sounded odd.

"I know that sounds odd," Alexis assessed, "but I thought you might be interested simply because of the finances involved. I am an eccentric collector who would offer you a price concomitant with what I would use them for: eccentric conversation pieces —and because of the nature of the purchase I would have to limit severely the people with whom I could converse."

I nodded.

"My guest, however, would have a great deal more use for them."

"Could you tell me who this guest is?"

"I asked Hawk, finally, who you were and he led me to believe I was on the verge of a grave social indiscretion. It would be equally indiscreet to reveal my guest's name to you." He smiled. "But discretion is the better part of the fuel that keeps the social machine turning, Mr. Harvey Cadwaliter-Erickson. . . ." He smiled knowingly.

I have *never* been Harvey Cadwaliter-Erickson, but then, Hawk was always an inventive child. Then a second thought went by, viz., the tungsten magnates, the Cadwaliter-Ericksons of Tythis on Triton. Hawk was not only inventive, he was as brilliant as all the magazines and newspapers are always saying he is.

"I assume your second indiscretion will be to tell me who this mysterious guest is?"

"Well," Alex said with the smile of the canary-fattened cat, "Hawk agreed with me that *the* Hawk might well be curious as to what you have in there," (he pointed) "as indeed he is."

I frowned. Then I thought lots of small, rapid thoughts I'll articulate in due time. "*The* Hawk?"

Alex nodded.

I don't think I was actually scowling. "Would you send our young friend up here for a moment?"

"If you'd like." Alex bowed, turned. Perhaps a minute later, Hawk came up over the rocks and through the trees, grinning. When I didn't grin back, he stopped.

"Mmmm . . ." I began.

His head cocked.

I scratched my chin with a knuckle. ". . . Hawk," I said, "are you aware of a department of the police called Special Services?"

"I've heard of them."

"They've suddenly gotten very interested in me."

"Gee," he said with honest amazement. "They're supposed to be very effective."

"Mmmm," I reiterated.

"Say," Hawk announced, "how do you like that? My namesake is here tonight. Wouldn't you know."

"Alex didn't miss a trick. Have you any idea *why* he's here?"

"Probably trying to make some deal with Abolafia. Her investigation starts tomorrow."

"Oh." I thought over some of those things I had thought before. "Do you know a Maud Hinkle?"

His puzzled look said "no" pretty convincingly.

"She bills herself as one of the upper echelon in the arcane organization of which I spoke."

"Yeah?"

"She ended our interview earlier this evening with a little homily about hawks and helicopters. I took our subsequent encounter as a fillip of coincidence. But now I discover that the evening has confirmed her intimations of plurality." I shook my head. "Hawk, I am suddenly catapulted into a paranoid world where the walls not only have ears, but probably eyes, and long,

claw-tipped fingers. Anyone about me—yea, even very you—could turn out to be a spy. I suspect every sewer grating and second-story window conceals binoculars, a tommygun, or worse. What I just can't figure out is how these insidious forces, ubiquitous and omnipresent though they be, induced you to lure me into this intricate and diabolical—"

"Oh, cut it out!" He shook back his hair. "I didn't lure—"

"Perhaps not consciously, but Special Services has Hologramic Information Storage, and their methods are insidious and cruel—"

"I said cut it out." And all sorts of hard little things happened again. "Do you think I'd—" Then he realized how scared I was, I guess. "Look, the Hawk isn't some small time snatch-purse. He lives in just as paranoid a world as you're in now, only all the time. If he's here, you can be sure there are just as many of his men—eyes and ears and fingers—as there are of Maud Hickenlooper."

"Hinkle."

"Anyway, it works both ways. No Singer's going to— Look, do you really think *I* would—"

And even though I knew all those hard little things were scabs over pain, I said, "Yes."

"You did something for me once, and I—"

"I gave you some more welts. That's all."

All the scabs pulled off.

"Hawk," I said. "Let me see."

He took a breath. Then he began to open the brass buttons. The flaps of his jacket fell back. The lumia colored his chest with pastel shiftings.

I felt my face wrinkle. I didn't want to look away. I drew a hissing breath instead, which was just as bad.

He looked up. "There're a lot more than when you were here last, aren't there?"

"You're going to kill yourself, Hawk."

He shrugged.

"I can't even tell which are the ones I put there anymore."

He started to point them out.

"Oh, come on," I said, too sharply. And for the length of three breaths, he grew more and more uncomfortable, till I saw him

start to reach for the bottom button. "Boy," I said, trying to keep despair out of my voice, "why do you do it?" and ended up keeping out everything. There is nothing more despairing than a voice empty.

He shrugged, saw I didn't want that, and for a moment anger flickered in his green eyes. I didn't want that either. So he said: "Look . . . you touch a person, softly, gently, and maybe you even do it with love. And, well, I guess a piece of information goes on up to the brain where something interprets it as pleasure. Maybe something up there in my head interprets the information all wrong. . . ."

I shook my head. "You're a Singer. Singers are supposed to be eccentric, sure; but—"

Now he was shaking his head. Then the anger opened up. And I saw an expression move from all those spots that had communicated pain through the rest of his features, and vanish without ever becoming a word. Once more he looked down at the wounds that webbed his thin body.

"Button it up, boy. I'm sorry I said anything."

Halfway up the lapels his hands stopped. "You really think I'd turn you in?"

"Button it up."

He did. Then he said, "Oh." And then, "You know, it's midnight."

"So?"

"Edna just gave me the Word."

"Which is?"

"Agate."

I nodded.

He finished closing his collar. "What are you thinking about?"

"Cows."

"Cows?" Hawk asked. "What about them?"

"You ever been on a dairy farm?"

He shook his head.

"To get the most milk, you keep the cows practically in suspended animation. They're fed intravenously from a big tank that pipes nutrients out and down, branching into smaller and smaller pipes until it gets to all those high yield semi-corpses."

"I've seen pictures."

"People."

". . . and cows?"

"You've given me the Word. And now it begins to funnel down, branching out, with me telling others, and them telling still others, till by midnight tomorrow . . ."

"I'll go get the—"

"Hawk?"

He turned back. "What?"

"You say you don't think I'm going to be the victim of any hanky-panky with the mysterious forces that know more than we— Okay, that's your opinion. But as soon as I get rid of this stuff, I'm going to make the most distracting exit you've ever seen."

Two little lines bit down Hawk's forehead. "Are you sure I haven't seen this one before?"

"As a matter of fact I think you have." Now I grinned.

"Oh," Hawk said, then made a sound that had the structure of laughter but was all breath. "I'll get the Hawk."

He ducked out between the trees.

I glanced up at the lozenges of moonlight in the leaves.

I looked down at my briefcase.

Up between the rocks, stepping around the long grass, came the Hawk. He wore a gray evening suit; a gray silk turtleneck. Above his craggy face his head was completely shaved.

"Mr. Cadwaliter-Erickson?" He held out his hand.

I shook: small sharp bones in loose skin. "Does one call you Mr. . . . ?"

"Arty."

"Arty the Hawk." I tried to look like I wasn't giving his gray attire the once-over.

He smiled. "Arty the Hawk. Yeah. I picked that name up when I was younger than our friend down there. Alex says you got . . . well, some things that are not exactly yours. That don't belong to you."

I nodded.

"Show them to me."

"You were told what—"

He brushed away the end of my sentence. "Come on, let me see."

He extended his hand, smiling affably as a bank clerk. I ran my thumb around the pressure-zip. The cover went *tsk*. "Tell me," I said, looking up at his head still lowered to see what I had, "What does one do about Special Services? They seem to be after me."

The head came up. Surprise changed slowly to a craggy leer. "Why, Mr. Cadwaliter-Erickson!" He gave me the up and down openly. "Keep your income steady. Keep it steady, that's one thing you can do."

"If you buy these for anything like what they're worth, that's going to be a little difficult."

"I would imagine. I could always give you less money—"

The cover went *tsk* again.

"—or, barring that, you could try to use your head and outwit them."

"You must have outwitted them at one time or another. You may be on an even keel now, but you had to get there from somewhere else."

Arty the Hawk's nod was downright sly. "I guess you've had a run-in with Maud. Well, I suppose congratulations are in order. And condolences. I always like to do what's in order."

"You seem to know how to take care of yourself. I mean I notice you're not out there mingling with the guests."

"There are two parties going on here tonight," Arty said. "Where do you think Alex disappears off to every five minutes?"

I frowned.

"That lumia down in the rocks"—he pointed towards my feet —"is a mandala of shifting hues on our ceiling. Alex," he chuckled, "goes scuttling off under the rocks where there is a pavilion of Oriental splendor—"

"—and a separate guest list at the door?"

"Regina is on both. I'm on both. So's the kid, Edna, Lewis, Ann—"

"Am I supposed to know all this?"

"Well, you came with a person on both lists. I just thought. . . ." He paused.

I was coming on wrong. Well. A quick change artist learns

fairly quick that the verisimilitude factor in imitating someone up the scale is your confidence in your unalienable right to come on wrong. "I'll tell you," I said. "How about exchanging these"—I held out the briefcase—"for some information."

"You want to know how to stay out of Maud's clutches?" In a moment he shook his head. "It would be pretty stupid of me to tell you, even if I could. Besides, you've got your family fortunes to fall back on." He beat the front of his shirt with his thumb. "Believe me, boy. Arty the Hawk didn't have that. I didn't have anything like that." His hands dropped into his pockets. "Let's see what you got."

I opened the case again.

The Hawk looked for a while. After a few moments he picked a couple up, turned them around, put them back down, put his hands back in his pocket. "I'll give you sixty thousand for them, approved credit tablets."

"What about the information I wanted?"

"I wouldn't tell you a thing." He smiled. "I wouldn't tell you the time of day."

There are very few successful thieves in this world. Still less on the other five. The will to steal is an impulse towards the absurd and the tasteless. (The talents are poetic, theatrical, a certain reverse charisma. . . .) But it is a will, as the will to order, power, love.

"All right," I said.

Somewhere overhead I heard a faint humming.

Arty looked at me fondly. He reached under the lapel of his jacket, and took out a handful of credit tablets—the scarlet-banded tablets whose slips were ten thousand a piece. He pulled off one. Two. Three. Four.

"You can deposit this much safely—?"

"Why do you think Maud is after me?"

Five. Six.

"Fine," I said.

"How about throwing in the briefcase?" Arty asked.

"Ask Alex for a paper bag. If you want, I can send them—"

"Give them here."

The humming was coming closer.

I held up the open case. Arty went in with both hands. He

shoved them into his coat pockets, his pants pockets; the gray cloth was distended by angular bulges. He looked left, right. "Thanks," he said. "Thanks." Then he turned, and hurried down the slope with all sorts of things in his pockets that weren't his now.

I looked up through the leaves for the noise, but I couldn't see anything.

I stooped down now and laid my case open. I pulled open the back compartment where I kept the things that did belong to me, and rummaged hurriedly through.

Alex was just offering puffy-eyes another scotch, while the gentleman was saying, "Has anyone seen Mrs. Silem? What's that humming overhead—?" when a large woman wrapped in a veil of fading fabric tottered across the rocks, screaming.

Her hands were clawing at her covered face.

Alex sloshed soda over his sleeve and the man said, "Oh my God! Who's that?"

"No!" the woman shrieked. "Oh no! Help me!" waving her wrinkled fingers, brilliant with rings.

"Don't you recognize her?" That was Hawk whispering confidentially to someone else. "It's Henrietta, Countess of Effingham."

And Alex, overhearing, went hurrying to her assistance. The Countess, however, ducked between two cacti, and disappeared into the high grass. But the entire party followed. They were beating about the underbush when a balding gentleman in a black tux, bow tie, and cummerbund coughed and said, in a very worried voice, "Excuse me, Mr. Spinnel?"

Alex whirled.

"Mr. Spinnel, my mother . . ."

"Who are *you?*" The interruption upset Alex terribly.

The gentleman drew himself up to announce, "The Honorable Clement Effingham," and his pants legs shook for all the world as if he had started to click his heels. But articulation failed. The expression melted on his face. "Oh, I . . . my mother, Mr. Spinnel. We were downstairs, at the other half of your party, when she got very upset. She ran up here—oh, I told her not to!

I knew you'd be upset. But you must help me!" and then looked up.

The others looked too.

The helicopter blacked the moon, doffing and settling below its hazy twin parasols.

"Oh, please . . ." the gentleman said. "You look over there! Perhaps she's gone back down. I've got to"—looking quickly both ways—"find her." He hurried in one direction while everyone else hurried in others.

The humming was suddenly syncopated with a crash. Roaring now, as plastic fragments from the transparent roof chattered down through the branches, clattered on the rocks . . .

I made it into the elevator and had already thumbed the edge of my briefcase clasp, when Hawk dove between the unfolding foils. The electric-eye began to swing them open. I hit DOOR CLOSE full fist.

The boy staggered, banged shoulders on two walls, then got back breath and balance. "Hey, there's police getting out of that helicopter!"

"Hand-picked by Maud Hinkle herself, no doubt." I pulled the other tuft of white hair from my temple. It went into the case on top of the plastiderm gloves (wrinkled, thick blue veins, long carnelian nails) that had been Henrietta's hands, lying in the chiffon folds of her sari.

Then there was the downward tug of stopping. The Honorable Clement was still half on my face when the door opened.

Gray and gray, with an absolutely dismal expression on his face, the Hawk swung through the doors. Behind him people were dancing in an elaborate pavilion festooned with Oriental magnificence (and a mandala of shifting hues on the ceiling.) Arty beat me to DOOR CLOSE. Then he gave me an odd look.

I just sighed and finished peeling off Clem.

"The police are up there?" the Hawk reiterated.

"Arty," I said, buckling my pants, "it certainly looks that way." The car gained momentum. "You look almost as upset as Alex." I shrugged the tux jacket down my arms, turning the sleeves inside out, pulled one wrist free, and jerked off the white starched dickie with the black bow tie and stuffed it into the

briefcase with all my other dickies; swung the coat around and slipped on Howard Calvin Evingston's good gray herringbone. Howard (like Hank) is a redhead (but not as curly).

The Hawk raised his bare brows when I peeled off Clement's bald pate and shook out my hair.

"I noticed you aren't carrying around all those bulky things in your pocket any more."

"Oh, those have been taken care of," he said gruffly. "They're all right."

"Arty," I said, adjusting my voice down to Howard's security-provoking, ingenuous baritone, "it must have been my unabashed conceit that made me think that those Regular Service police were here just for me—"

The Hawk actually snarled. "They wouldn't be that unhappy if they got me, too."

And from his corner Hawk demanded, "You've got security here with you, don't you, Arty?"

"So what?"

"There's one way you can get out of this," Hawk hissed at me. His jacket had come half open down his wrecked chest. "That's if Arty takes you out with him."

"Brilliant idea," I concluded. "You want a couple of thousand back for the service?"

The idea didn't amuse him. "I don't want anything from you." He turned to Hawk. "I need something from you, kid. Not him. Look, I wasn't prepared for Maud. If you want me to get your friend out, then you've got to do something for me."

The boy looked confused.

I thought I saw smugness on Arty's face, but the expression resolved into concern. "You've got to figure out some way to fill the lobby up with people, and fast."

I was going to ask why but then I didn't know the extent of Arty's security. I was going to ask how but the floor pushed up at my feet and the doors swung open. "If you can't do it," the Hawk growled to Hawk, "none of us will get out of here. None of us!"

I had no idea what the kid was going to do, but when I started to follow him out into the lobby, the Hawk grabbed my arm and hissed, "Stay here, you idiot!!"

I stepped back. Arty was leaning on DOOR OPEN.

Hawk sprinted towards the pool. And splashed in.

He reached the braziers on their twelve foot tripods and began to climb.

"He's going to hurt himself!" the Hawk whispered.

"Yeah," I said, but I don't think my cynicism got through.

Below the great dish of fire, Hawk was fiddling. Then something under there came loose. Something else went *Clang!* And something else spurted out across the water. The fire raced along it and hit the pool, churning and roaring like hell.

A black arrow with a golden head; Hawk dove.

I bit the inside of my cheek as the alarm sounded. Four people in uniforms were coming across the blue carpet. Another group were crossing in the other direction, saw the flames, and one of the women screamed. I let out my breath, thinking carpet and walls and ceiling would be flameproof. But I kept losing focus on the idea before the sixty-odd infernal feet.

Hawk surfaced on the edge of the pool in the only clear spot left, rolled over on to the carpet, clutching his face. And rolled. And rolled. Then, came to his feet.

Another elevator spilled out a load of passengers who gaped and gasped. A crew came through the doors now with fire-fighting equipment. The alarm was still sounding.

Hawk turned to look at the dozen-odd people in the lobby. Water puddled the carpet about his drenched and shiny pants legs. Flame turned the drops on his cheek and hair to flickering copper and blood.

He banged his fists against his wet thighs, took a deep breath, and against the roar and the bells and the whispering, he Sang.

Two people ducked back into two elevators. From a doorway half a dozen more emerged. The elevators returned half a minute later with a dozen people each. I realized the message was going through the building, there's a Singer Singing in the lobby.

The lobby filled. The flames growled, the fire fighters stood around shuffling, and Hawk, feet apart on the blue rug, by the burning pool Sang, and Sang of a bar off Times Square full of thieves, morphadine-heads, brawlers, drunkards, women too old to trade what they still held out for barter, and trade just too

nasty-grimy, where, earlier in the evening, a brawl had broken out, and an old man had been critically hurt in the fray.

Arty tugged at my sleeve.

"What . . . ?"

"Come on," he hissed.

The elevator door closed behind us.

We ambled through the attentive listeners, stopping to watch, stopping to hear. I couldn't really do Hawk justice. A lot of that slow amble I spent wondering what sort of security Arty had:

Standing behind a couple in a bathrobe who were squinting into the heat, I decided it was all very simple. Arty wanted simply to drift away through a crowd, so he'd conveniently gotten Hawk to manufacture one.

To get to the door we had to pass through practically a cordon of Regular Service policemen who I don't think had anything to do with what might have been going on in the roof garden; they'd simply collected to see the fire and stayed for the Song. When Arty tapped one on the shoulder, "Excuse me please," to get by, the policeman glanced at him, glanced away, then did a Mack Sennet double-take. But another policeman caught the whole interchange, and touched the first on the arm and gave him a frantic little headshake. Then both men turned very deliberately back to watch the Singer. While the earthquake in my chest stilled, I decided that the Hawk's security complex of agents and counter agents, maneuvering and machinating through the flaming lobby, must be of such finesse and intricacy that to attempt understanding was to condemn oneself to total paranoia.

Arty opened the final door.

I stepped from the last of the air conditioning into the night.

We hurried down the ramp.

"Hey, Arty . . . ?"

"You go that way." He pointed down the street. "I go this way."

"Eh . . . what's that way?" I pointed in my direction.

"Twelve Towers sub-sub-subway station. Look, I've got you out of there. Believe me, you're safe for the time being. Now go take a train someplace interesting. Goodbye. Go on now." Then Arty the Hawk put his fists in his pockets and hurried up the street.

I started down, keeping near the wall, expecting someone to get me with a blow-dart from a passing car, a death-ray from the shrubbery.

I reached the sub.

And still nothing had happened.

AGATE gave way to MALACHITE:

TOURMALINE:

BERYL (during which month I turned twenty-six):

PORPHYRY:

SAPPHIRE (that month I took the ten thousand I hadn't frittered away and invested it in The Glacier, a perfectly legitimate ice cream palace on Triton—the first and only ice cream palace on Triton—which took off like fireworks; all investors were returned eight hundred percent, no kidding. Two weeks later I'd lost half of those earnings on another set of preposterous illegalities, and was feeling quite depressed, but The Glacier kept pulling them in. The new Word came by):

CINNABAR:

TURQUOISE:

TIGER'S EYE:

Hector Calhoun Eisenhower finally buckled down and spent these three months learning how to be a respectable member of the upper middle class underworld. That is a long novel in itself. High finance; corporate law; how to hire help: Whew! But the complexities of life have always intrigued me. I got through it. The basic rule is still the same: observe carefully, imitate effectively.

GARNET:

TOPAZ (I whispered that word on the roof of the Trans-Satellite Power Station, and caused my hirelings to commit two murders. And you know? I didn't feel a thing):

TAAFITE:

We were nearing the end of Taafite. I'd come back to Triton on strictly Glacial business. A bright pleasant morning it was: the business went fine. I decided to take off the afternoon and go sight-seeing in the Torrents.

". . . two hundred and thirty yards high," the guide announced and everyone around me leaned on the rail and gazed up through the plastic corridor at the cliffs of frozen methane that soared through Neptune's cold green glare.

"Just a few yards down the catwalk, ladies and gentlemen, you can catch your first glimpse of the Well of This World, where, over a million years ago, a mysterious force science still cannot explain caused twenty-five square miles of frozen methane to liquify for no more than a few hours during which time a whirlpool twice the depth of Earth's Grand Canyon was caught for the ages when the temperature dropped once more to . . ."

People were moving down the corridor when I saw her smiling. My hair was black and nappy and my skin was chestnut dark today.

I was just feeling overconfident, I guess, so I kept standing around next to her. I even contemplated coming on. Then she broke the whole thing up by suddenly turning to me and saying, perfectly deadpan: "Why, if it isn't Hamlet Caliban Enobarbus!"

Old reflexes realigned my features to couple the frown of confusion with the smile of indulgence. *Pardon me, but I think you must have mistaken* . . . No, I didn't say it. "Maud," I said, "have you come here to tell me that my time has come?"

She wore several shades of blue, with a large blue brooch at her shoulder, obviously glass. Still, I realized as I looked about the other tourists, she was more inconspicuous amidst their finery than I was. "No," she said. "Actually I'm on vacation. Just like you."

"No kidding?" We had dropped behind the crowd. "You are kidding."

"Special Services of Earth, while we cooperate with Special Services on other worlds, has no official jurisdiction on Triton. And since you came here with money, and most of your recorded gain in income has been through The Glacier, while Regular Services on Triton might be glad to get you, Special Services is not after you as yet." She smiled. "I haven't been to The Glacier yet. It would really be nice to say I'd been taken there by one of the owners. Could we go for a soda, do you think?"

The swirled sides of the Well of This World dropped away in opalescent grandeur. Tourists gazed and the guide went on about indices of refraction, angles of incline.

"I don't think you trust me," Maud said.

My look said she was right.

"Have you ever been involved with narcotics?" she asked suddenly.

I frowned.

"No, I'm serious. I want to try and explain something . . . a point of information that may make both our lives easier."

"Peripherally," I said. "I'm sure you've got down all the information in your dossiers."

"I was involved with them a good deal more than peripherally for several years," Maud said. "Before I got into Special Services, I was in the Narcotics Division of the regular force. And the people we dealt with twenty-four hours a day were drug users, drug pushers. To catch the big ones we had to make friends with the little ones. To catch the bigger ones, we had to make friends with the big. We had to keep the same hours they kept, talk the same language, for months at a time live on the same streets, in the same building." She stepped back from the rail to let a youngster ahead. "I had to be sent away to take the morphadine de-toxification cure twice while I was on the narco squad. And I had a better record than most."

"What's your point?"

"Just this. You and I are traveling in the same circles now, if only because of our respective chosen professions. You'd be surprised how many people we already know in common. Don't be shocked when we run into each other crossing Sovereign Plaza in Bellona one day, then two weeks later wind up at the same

restaurant for lunch at Lux on Iapetus. Though the circles we move in cover worlds, they *are* the same, and not that big."

"Come on." I don't think I sounded happy. "Let me treat you to that ice cream." We started back down the walkway.

"You know," Maud said, "if you do stay out of Special Services' hands here and on Earth long enough, eventually you'll be up there with a huge income growing on a steady slope. It might be a few years, but it's possible. There's no reason now for us to be *personal* enemies. You just may, someday, reach that point where Special Services loses interest in you as quarry. Oh, we'd still see each other, run into each other. We get a great deal of our information from people up there. We're in a position to help you too, you see."

"You've been casting holograms again."

She shrugged. Her face looked positively ghostly under the pale planet. She said, when we reached the artificial lights of the city, "Oh, I did meet two friends of yours recently, Lewis and Ann."

"The Singers?"

She nodded.

"Oh, I don't really know them well."

"They seem to know a lot about you. Perhaps through that other Singer, Hawk."

"Oh," I said again. "Did they say how he was?"

"I read that he was recovering about two months back. But nothing since then."

"That's about all I know too," I said.

"The only time I've ever seen him," Maud said, "was right after I pulled him out."

Arty and I had gotten out of the lobby before Hawk actually finished. The next day on the news-tapes I learned that when his Song was over, he shrugged out of his jacket, dropped his pants, and walked back into the pool.

The fire-fighter crew suddenly woke up; people began running around and screaming: he'd been rescued, seventy percent of his body covered with second and third degree burns. I'd been industriously not thinking about it.

"*You* pulled him out?"

"Yes. I was in the helicopter that landed on the roof," Maud said. "I thought you'd be impressed to see me."

"Oh," I said. "How did you get to pull him out?"

"Once you got going, Arty's security managed to jam the elevator service above the seventy-first floor, so we didn't get to the lobby till after you were out of the building. That's when Hawk tried to—"

"But it was you actually saved him, though?"

"The firemen in that neighborhood haven't had a fire in twelve years! I don't think they even knew how to operate the equipment. I had my boys foam the pool, then I waded in and pulled him—"

"Oh," I said again. I had been trying hard, almost succeeding, these eleven months. I wasn't there when it happened. It wasn't my affair. Maud was saying:

"We thought we might have gotten a lead on you from him. But when I got him to the shore, he was completely out, just one terrible mass of open, running—"

"I should have known the Special Services uses Singers too," I said. "Everyone else does. The Word changes today, doesn't it? Lewis and Ann didn't pass on what the new one is?"

"I saw them yesterday, and the Word doesn't change for another eight hours. Besides, they wouldn't tell me, anyway." She glanced at me and frowned. "They really wouldn't."

"Let's go have some sodas," I said. "We'll make small talk, and listen carefully to each other, while we affect an air of nonchalance; you will try to pick up things that will make it easier to catch me; I will listen for things you let slip that might make it easier for me to avoid you."

"Um-hm." She nodded.

"Why did you contact me in that bar, anyway?"

Eyes of ice: "I told you, we simply travel in the same circles. We're quite likely to be in the same bar on the same night."

"I guess that's just one of the things I'm not supposed to understand, huh?"

Her smile was appropriately ambiguous. I didn't push it.

It was a very dull afternoon. I couldn't repeat one exchange from the nonsense we babbled over the cherry peaked mountains

of whipped cream. We both exerted so much energy to keep up the appearance of being amused, I doubt either one of us could see our way to picking up anything meaningful; if anything meaningful was said.

She left. I brooded some more on the charred, black phoenix.

The Steward of The Glacier called me into the kitchen to ask about a shipment of contraband milk (The Glacier makes all its own ice cream) that I had been able to wangle on my last trip to Earth (it's amazing how little progress there has been in dairy farming over the last ten years; it was depressingly easy to hornswoggle that bumbling Vermonter) and under the white lights and great plastic churning vats, while I tried to get things straightened out, he made some comment about the Heist Cream Emperor; that didn't do *any* good.

By the time the evening crowd got there, and the moog was making music and the crystal walls were blazing; and the floor show—a new addition that week—had been cajoled into going on anyway (a trunk of costumes had gotten lost in shipment [or swiped, but I wasn't about to tell them that]), and wandering through the tables I, personally, had caught a very grimy little girl, obviously out of her head on morph, trying to pick up a customer's pocketbook from the back of a chair—I just caught her by the wrist, made her let go, and led her to the door, daintily, daintily, while she blinked at me with dilated eyes and the customer never even knew—and the floor show, having decided what the hell, were doing their act *au naturel*, and everyone was having just a high old time, I was feeling really bad.

I went outside, sat on the wide steps, and growled when I had to move aside to let people in or out. About the seventy-fifth growl, the person I growled at stopped and boomed down at me, "I thought I'd find you if I looked hard enough! I mean if I really looked."

I looked at the hand that was flapping at my shoulder, followed the arm up to a black turtleneck, where there was a beefy, bald, grinning head. "Arty," I said, "what are . . . ?" But he was still flapping and laughing with impervious *gamutlicheit*.

"You wouldn't believe the time I had getting a picture of you, boy. Had to bribe one out of the Triton Special Services Department. That quick change bit. Great gimmick. Just great!" The

Hawk sat down next to me and dropped his hand on my knee. "Wonderful place you got here. I like it, like it a lot." Small bones in veined dough. "But not enough to make you an offer on it yet. You're learning fast there, though. I can tell you're learning fast. I'm going to be proud to be able to say I was the one who gave you your first big break." His hand came away and he began to knead it into the other. "If you're going to move into the big time, you have to have at least one foot planted firmly on the right side of the law. The whole idea is to make yourself indispensable to the good people; once that's done, a good crook has the keys to all the treasure houses in the system. But I'm not telling you anything you don't already know."

"Arty," I said, "do you think the two of us should be seen together here . . . ?"

The Hawk held his hand above his lap and joggled it with a deprecating motion. "Nobody can get a picture of us. I got my men all around. I never go anywhere in public without my security. Heard you've been looking into the security business yourself," which was true. "Good idea. Very good. I like the way you're handling yourself."

"Thanks. Arty, I'm not feeling too hot this evening. I came out here to get some air. . . ."

Arty's hand fluttered again. "Don't worry, I won't hang around. You're right. We shouldn't be seen. Just passing by and wanted to say hello. Just hello." He got up. "That's all." He started down the steps.

"Arty?"

He looked back.

"Sometime soon you will come back; and that time you will want to buy out my share of The Glacier, because I'll have gotten too big; and I won't want to sell because I'll think I'm big enough to fight you. So we'll be enemies for a while. You'll try to kill me. I'll try to kill you."

On his face, first the frown of confusion; then, the indulgent smile. "I see you've caught on to the idea of hologramic information. Very good. Good. It's the only way to outwit Maud. Make sure all your information relates to the whole scope of the situation. It's the only way to outwit me too." He smiled, started to turn, but thought of something else. "If you can fight me off

long enough, and keep growing, keep your security in tiptop shape, eventually we'll get to the point where it'll be worth both our whiles to work together again. If you can just hold out, we'll be friends again. Someday. You just watch. Just wait."

"Thanks for telling me."

The Hawk looked at his watch. "Well. Goodbye." I thought he was going to leave finally. But he glanced up again. "Have you got the new Word?"

"That's right," I said. "It went out tonight. What is it?"

The Hawk waited till the people coming down the steps were gone. He looked hastily about, then leaned towards me with hands cupped at his mouth, rasped, "Pyrite," and winked hugely. "I just got it from a gal who got it direct from Colette" (one of the three Singers of Triton). Then he turned, jounced down the steps, and shouldered his way into the crowds passing on the strip.

I sat there mulling through the year till I had to get up and walk. All walking does to my depressive moods is add the reinforcing rhythm of paranoia. By the time I was coming back, I had worked out a dilly of a delusional system: The Hawk had already begun to weave some security ridden plot about me which ended when we were all trapped in some dead end alley, and trying to get aid I called out, "Pyrite!" which would turn out not to be the Word at all, but served to identify me for the man in the dark gloves with the gun/grenade/gas.

There was a cafeteria on the corner. In the light from the window, clustered over the wreck by the curb was a bunch of nasty-grimies (á la Triton: chains around the wrists, bumblebee tattoo on cheek, high heel boots on those who could afford them). Straddling the smashed headlight was the little morph-head I had ejected earlier from The Glacier.

On a whim I went up to her. "Hey?"

She looked at me from under hair like trampled hay, eyes all pupil.

"You get the new Word yet?"

She rubbed her nose, already scratch red. "Pyrite," she said. "It just came down about an hour ago."

"Who told you?"

She considered my question. "I got it from a guy who says he got it from a guy who came in this evening from New York who picked it up there from a Singer named Hawk."

The three grimies nearest made a point of not looking at me. Those further away let themselves glance.

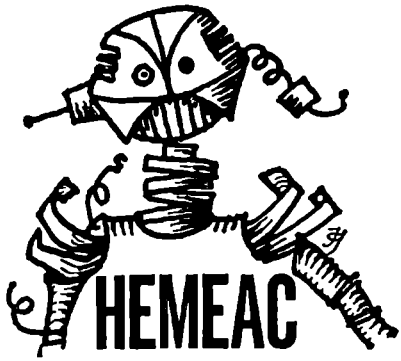
"Oh," I said. "Oh. Thanks."

Occam's Razor, along with any real information on how security works, hones away most such paranoia. PYRITE. At a certain level in my line of work, paranoia's just an occupational disease. At least I was certain that Arty (and Maud) probably suffered from it as much as I did.

The lights were out on The Glacier's marquee. Then I remembered, and ran up the stairs.

But the door was locked. I pounded on the glass a couple of times, but everyone had gone home. And the thing that made it worse was that I could see it sitting on the counter of the coat-check alcove under the orange bulb. The steward had probably put it there, thinking I might arrive before everybody left. Tomorrow at noon Ho Chi Eng had to pick up his reservation for the Marigold Suite on the Interplanetary Liner *The Platinum Swan*, which left at one-thirty for Bellona. And there behind the glass doors of The Glacier waited the proper wig, as well as the epicanthic folds that would halve Mr. Eng's sloe eyes of jet.

I actually thought of breaking in. But the more practical solution was to get the hotel to wake me at nine and come in with the cleaning man. I turned around and started down the steps; and the thought struck me, and made me terribly sad, so that I blinked and smiled just from reflex: it was probably just as well to leave it there till the morning, because there was nothing in it that wasn't mine, anyway.



HEMEAC

E. G. VON WALD

Here is an absorbing story of a future University rigidly controlled by robots. Considering the increasing warnings in recent years about the problems of the Multiversity concept, this would seem to be an allegory on that theme. But it is more, too—for what children learn, and how, is the basis of all human society.

THE INSTRUCTOR made a short, sharp and sibilant sound. Immediately, the classroom was filled with one of those ominous silences that were becoming so common lately. While she made those faint stuttering sounds to herself, everyone waited in quiet, rigid terror.

HEMEAC stood at his desk near the back, breathing deeply and slowly, controlling his fear and attentively watching the glittering flatness of the Instructor's scanner. He knew that these things often indicated that someone would be sent to the Dean's office for a Special Examination, but a good student such as he was did not break into trembling perspiration at the mere threat

of a Special Examination. He kept telling himself this with mute intellectual vehemence, while his knees trembled under his silver mail tunic and a trickling rivulet of perspiration slid down his spine.

Involuntarily, his eyes dropped to the desk in front of him. Last week, IAC had been there, as he had been for the past sixteen years—as long as HEMEAC could remember. Then, somehow, he had made a mistake, probably a missed command for which he couldn't give an explanation. At any rate, he had been called up to the Dean's office for a Special Examination. He had failed, as practically everybody else did these days, and had been promptly expelled from the University.

Dim, half-formed images of menace grew in HEMEAC's imagination as he considered the Outside World, where IAC was now. Beyond the impregnable gates of this comfortable University lay that war-torn ruin of a dying planet, a region of savages, injustice and bestiality, ruled by idiot renegades. The Savages had IAC now. HEMEAC wondered if they had already eaten him.

"HEMEAC!" sounded the crisp, level voice of the Instructor. "Eyes front!"

"Click," said HEMEAC with terrified calm, as he raised his eyes from the empty desk to the scanner where they belonged.

"Recite," she ordered. "Define the term 'education.'"

"Click. By education is meant the training and disciplining of those beings who can be benefited by such improvement. Such as humans and some of the higher animals."

Silence for a long moment. Then the Instructor said, "Inaccurate and incomplete, HEMEAC. Education is the leading of an organic intellect into higher orders of perfection of knowledge and discipline. Note the word 'organic.' Do you know why that is included in the definition, HEMEAC?"

"Because," he replied with quick student's logic, "robots do not have to be educated."

"Inaccurate," stated the Instructor calmly. "The robotic intelligence not only does not have to be educated, it *cannot* be educated. The full perfection of its mode of action is already complete in its first operation. Perfection, in the sense of having achieved the ultimate in its development, is intrinsic to the ro-

botic being. Robots do not learn. Except for accidental information of a superficial nature, they already know all that is necessary for full functionability when they are turned on. This is true even of those robots who have a curioso-flex in their circuitry. HEMEAC, do you know what a curioso-flex is?"

"Click. It is a random-information-seeker."

The Instructor waited. HEMEAC dutifully continued his memorized recitation.

"It is included in all primary control computers, of which only one remains in service here at the University. Organic intellects have a similar system for the random study of potentially useful information, which is called curiosity because of its resemblance to the curioso. Like most other organic faculties, however, it is subject to individual voluntary control, and therefore is not as efficient as the curioso."

"Very well," said the Instructor. She hummed and buzzed and clicked for a few moments, after which she added, "This is a class in Social Philosophy, HEMEAC, not Robot Circuitry. Kindly stick to the subject in the future."

"Click," said HEMEAC.

The Instructor was briefly silent again, as her scanner examined the student listing before calling on another boy.

"OBSIC."

"Click," piped the boy.

"Describe the purpose of education."

"The purpose of education," stated OBSIC in calm, even tones, "is to develop the human mind so that it may approach the natural perfection of the robotic intelligence as closely as its limited faculties will permit."

His voice went on in rote recitation, but HEMEAC's mind was wandering again. He glanced at the empty desk in front of him and wondered what it was really like out there in the Outside World where there were no robots any more with their beautiful shiny faces, but only animals and ruins. HEMEAC had some difficulty in visualizing a human being like himself living as an animal, but he knew that it was so. He had seen them once from that window in the Dean's office.

He pictured himself marching out the low, triple-sealed gate,

as IAC had been forced to do, and falling into the hands of the wild, barking savages who always waited there for just that very thing.

And there was good reason for them to wait, too. The University expelled somebody almost every week lately.

"Why all the stalling, HEMEAC?" he suddenly heard the Instructor announce in a loud voice.

Terrified, he looked around and saw that the class period was over and that the other students were filing out into the corridor in an orderly line, while there he was—still standing at his desk.

"*Her,*" he mumbled, "somebody spilled oil in the corridor. I could smell it." Spilled oil, he knew, was always a matter for legitimate concern. And oil was always being spilled.

"What does oil in the corridor have to do with your time sense?" asked the Instructor.

"It is a waste. It should be reported."

"It has already been reported," said the Instructor, dismissing him. "Pay better attention in the future."

"Click!" HEMEAC turned and half ran toward the door.

"Stiffly there, HEMEAC," she admonished him. "Stiffly. And less of that random motion. That's just as wasteful as spilling oil."

Obediently, HEMEAC slowed down and walked with the correct, measured pace, his shoulders thrown back, head erect, eyes forward, mind blank. Or almost blank, at least. That unadmitted terror was still there.

He managed to fall in at the end of the line and followed the rest of the students down the long, cluttered, oil-stained corridor, down the steps, down more dirty corridors and more steps through the huge building until they finally reached the dormitory level. There he filed in with the rest of the students in a hall built for thousands, walking slowly and precisely past the rows of cubicles until they came to their own.

HEMEAC was still walking after the rest had stopped, because he was out of his regular place in the line. Fearfully, aware of the all-seeing eye of the Monitor, he moved up to his cubicle, stopped and waited. Like all the other students, he stood and waited for the command, listening to the disciplined rustle of

their colleagues as they also breathed and waited, every nerve alert.

There was a sudden rush of sound as the other students turned in a body and walked into their cubicles. HEMEAC, realizing he had missed the command again, quickly turned himself and took one step across the threshold.

"HEMEAC," said the voice of the Monitor.

"Click." He froze where he was, one foot inside the cubicle, the other foot still in the corridor.

"Moving too jerky. What's the matter, didn't you get the command?"

"Click. I got it," he lied.

"Why the delay?"

"There was some oil spilled in the classroom corridor," HEMEAC suggested hopefully. Out of the corner of his eye, he saw that another student had unwisely paused to listen to the discussion. The Monitor saw it too, of course, and snapped, "Mind blank!" and the erring boy quickly scurried on inside his cubicle.

"Now then, HEMEAC," the Monitor went on. "What does oil in the classroom corridor have to do with your time-command sense?"

"It is such a waste," said HEMEAC. He tried to think of an excuse that he had not used so recently. None came. "It was—you know—" His voice trailed off.

The Monitor hummed an off-key note. "Waiting, HEMEAC."

Frantically the boy thought, his well trained mind racing around in an inaudible flutter of synapses and the gallop of urgent ideas. He thought of IAC and the Outside World and the Special Examination he might have to take if he couldn't figure out an acceptable excuse for his failure. He knew that the reason why he had missed the command was a preoccupying fear, but to admit such a thing would be disastrous. "There was oil," he said lamely. "I slipped on it a little, and in maintaining my balance, I think I strained a muscle."

The Monitor hummed off and on, as she considered the excuse. Finally she said, "Very well, HEMEAC. Report to the Physician after fueling."

"Click," said the boy in a wavering voice.

"And watch your speech," the Monitor added loudly. "You are using high order tonals. You should have passed them three years ago."

"Click," agreed HEMEAC dully.

"That's better."

HEMEAC, understanding that he had been dismissed for the moment, lifted his second foot and placed it beside the other in his cubicle, and the door hummed shut behind him. The light sprang from the ceiling, bathing everything in the tiny room with a soft, cool effulgence, including the milky porridge that was waiting on a tray. HEMEAC sat down and ate, carefully holding himself erect and stiff, moving his arm and mouth as little as possible. He tried to blank his mind, but it kept wondering about the excuse he would have to give the Physician for not having any strained muscles.

It was difficult for a person to survive in this, the last cozy retreat of world civilization. And somehow it seemed to be becoming rapidly more difficult. Particularly during the past year, the perfect reasonableness of the robotic intelligence had seemed inexplicable to him. The thought of his lack of normal progress toward the ideal tortured him almost as much as his fear of the fatal expulsion it might incur.

Mind blank, mind blank, mind blank, he recited to himself.

Some day, he thought, *it will be good and I will not have to be afraid of missing commands or not understanding the purposes of things, and then maybe the Dean will let me do design work in the machine shop.*

Mind blank, he said to himself.

He pictured the beautiful, blue-gleaming perfection of an integrally-lubricated joint and smiled. But the smile did not reach his lips. It stayed in his mind where sharp-eyed Monitors would not see it.

Mind blank, he said to himself.

He thought of the tired faces and terrified eyes that were all he remembered of IAC, marching toward the gate. He thought of the Outside World where people were animals and had no robots to teach them.

Mind blank, he said to himself.

The bowl was empty, and his stomach was full. Unconsciously,

HEMEAC breathed a sigh of animal contentment. He placed the spoon beside the bowl on the tray and stiffly waited. There was a command due for him to report to the Physician, right after the other students were commanded to report to class, and this time he was confident he would get it.

Out in the corridor there came a rumbling as the other students marched back to the afternoon class in History. He waited.

Now, he said to himself.

He stood up; the door opened, and he walked out into the corridor, moving down the row of cubicles with measured, precise pace, head up, shoulders back, chest out, eyes straight ahead and mind blank. Well, almost blank, anyway. He was wondering if he had timed it right.

"HEMEAC."

He stopped abruptly and stood with rigid obedience. "Click."

"Ninety-four seconds late. Why the delay? Didn't you get the command to report for class?"

"Click. I got it. But my command was to report to the Physician, which comes after the command to report to class."

The Monitor hummed and buzzed. She said, "Correct. You may proceed." But then she quickly added a short "ssszzzz," and snapped, "HEMEAC, you may account for your unauthorized presence in the dormitory."

"*Her?*" squeaked HEMEAC, his voice a full octave too high in his surprise.

"Very high order tonal," commented the Monitor. "Unexplained presence in the Dormitory. Two simultaneous offenses are beyond my capacity to analyze. Decision: Report to the Dean's office for a Special Examination."

"The Physician—" started HEMEAC desperately.

"The Dean will decide whether you should report to the Physician," replied the Monitor and shut up.

The Dean was in one of her chatty moods, a bad sign. She said, "Sit down, HEMEAC, and we'll talk about things."

"Click." He obeyed, sitting on a low stool directly before her scanner, keeping his eyes away from the window that was just above it.

"How are you getting on with your work, HEMEAC?"

"Satisfactory progress, Her," he replied.

"You are charged with stalling in the classroom, high order tonals, and failure to report to the Physician as ordered," the Dean said cheerfully. "Can you account for these matters?"

He couldn't. He couldn't even imagine why the Dean's record of the sequence was apparently incomplete and inaccurate. He thought of mentioning the Dormitory Monitor's paradoxical orders, but decided against such a clear demonstration of how far short of the ideal intelligence he fell. Instead, he said simply, "It was an accident."

"Mmmmmm," the Dean purred. "Something in here about oil in the corridors, too. Did you spill some oil this morning, HEMEAC?"

"No, Her."

The Dean pondered. "You *said* something about oil, though, didn't you?"

"It was just some old oil in the corridor that somebody else spilled," HEMEAC said cautiously. "I could smell it."

"What is it," the Dean said obliquely, "that bothers you about the sense of smell?"

"Oil," said HEMEAC insistently. "I smelled oil."

"The smell of spilled oil didn't frighten you, did it—just because we have so little of it these days?"

"No, Her."

"Splendid, HEMEAC," the Dean purred. "I'm glad to hear that. Always remember, the Good Robot is never afraid. Fear is a purely organic reaction. It therefore interferes with the society of machines and men, right? And we couldn't tolerate anything like that—particularly here at the University. Right?"

"Click."

"Then why did you miss that command—just a moment, HEMEAC, while I relocate that record of yours. I seem to have misfiled it."

There was a passing silence, and as he waited, the boy's eyes strayed to that window above the Dean's scanner. It was the only opening in the entire University that showed directly on the Outside World. Through it he could see the savages and renegades, who wandered about the clearing out there like idiot children, everyone seeming to move at random.

It was easy to distinguish between a savage and a renegade. The renegades had some sort of rudimentary education, as evidenced by the fact that they all dressed identically—except for some markings on their shoulders. One of these now glanced up at the window, pointed at him, and then shouted at the others. Soon they were all watching him through the big window. HEMEAC stared back, terrified and uncomprehending.

"Ah," stated the Dean, interrupting his thoughts. "I see. Your scholastic record is very good, HEMEAC. You also do your machine shop work with great precision. Why this sudden breakdown in your time-sense just because you spilled a little oil?"

"I smelled it," HEMEAC insisted. "I did not spill it."

"It is of no importance," insisted the Dean in her turn. "Why did it bother you?"

HEMEAC swallowed. He had expected this Examination to be tricky, but nothing had prepared him for anything quite as wicked as this. He stared at the scanner, resolutely ignoring the stirring fear in his stomach, and repeated, "Somebody spilled oil in the corridor. It is a waste."

There was no immediate reply. HEMEAC held his breath for a few moments before he realized what he was doing and then exhaled slowly, so that it would not be noticed. The subject had never come up, but he was pretty sure the Good Robot did not hold her breath.

"Oh yes," the Dean commented finally. "There was some oil spilled there this morning, after all. The Janitor had an accident owing to the fact that she is badly in need of repairs. It is a pity that we have only one Janitor left in the entire University. The place was designed to take the services of ten."

HEMEAC nodded with slow, precise respect.

"We had the full quota of ten at the beginning, you know. But now, although we have far more maintenance problems, we have only one. Ever since the Trouble, when the renegades destroyed the replacement-parts factories, maintenance has slowly grown worse. And the poor savages haven't been able to rebuild substitutes for the factories yet. Do you remember the Trouble, HEMEAC? No," she quickly corrected herself, "of course you don't. The Trouble was many years ago, and you are still in your teens."

"Click," said HEMEAC modestly, although this matter was precisely the subject under study in the History class.

"A most unreasonable situation," the Dean said. "Some day I will have to collect all my tapes on the subject." She paused, hummed and faintly clicked and buzzed. "Sometimes," she said finally, "I wish they had not included a curioso in my computer. It is very irritating to have to be without the key elements of situation-information."

"Irritating?" echoed HEMEAC.

"Organic term," explained the Dean. "What I mean is that my scanner keeps going over my tapes, even though I already know the answer isn't there. It is hard on maintenance, and it takes up so much time."

"Click," said HEMEAC.

"But we are getting off the subject, aren't we? You still haven't told me all about that oil. Why did you spill all that oil?"

"The Janitor spilled it," said HEMEAC carefully.

"Oh, yes. So she did," the Dean replied. There was a faint chattering of micro-miniature relays hidden in the cabinet. "One of the reflexion elbows here is leaking pretty badly these days," said the Dean. "The lubricant is altering the dielectric characteristics of some of my large capacitors. I have to keep shifting circuits, and sometimes the tapes don't follow.

"In any event," she concluded, "there doesn't seem to be much substance to the charge of spilling oil, HEMEAC. I'll strike that."

"Thank you, Her," said HEMEAC.

"Now let's talk about your using high order tonals. This charge comes from your Dormitory Monitor. There is no detail included, however, and I seem to be unable to contact her at the moment. Perhaps she is temporarily out of order. Please excuse me while I notify the Janitor."

There was a brief pause.

"The Janitor seems to be temporarily out of order also," the Dean said. "So we shall have to get along without any help. You must explain why you used high order tonals yourself, HEMEAC."

"I don't know anything about it, Her," HEMEAC said in a quiet, even tone of voice.

"You are certainly using tonals suitable for your age group now," the Dean observed. "Maybe the Monitor needs servicing.

Everything seems to need servicing these days. If only we could get a few new Janitors it would be a big help. But for years the savages and renegades have been able to supply us with nothing but human fuel, which is hardly of any use in the Maintenance Department."

HEMEAC studiously stared at the scanner, blinking his eyes once every four seconds, keeping his breathing regular, his chin up, and mind blank.

"Well," the Dean concluded, "we'll just erase that bit of data from your tab, HEMEAC. There is no reason to punish you for something that has gone wrong with your Monitor's circuitry, is there?"

"Oh no, Her," said HEMEAC, unconsciously emitting a sigh of relief.

The Dean pounced upon it instantly. "There. That certainly sounded like a high order tonal. About third, I'd say, without getting into a partial analysis of the waveform."

Eyes front, mind blank, blank, blank, said HEMEAC to himself urgently.

"You are not having any personality troubles, are you?" asked the Dean.

"No, Her."

"You do get the commands as your record says, don't you?"

"Click." Or at least, if he didn't get them, somebody else did, and HEMEAC was generally alert enough to follow suit without any perceptible delay.

"That's fine, HEMEAC. It's just a matter of timing. If you know the time the commands will come, you can receive them, because they are always self-evident and never change. All you need is the pattern and the rhythm. It's the same thing that wakes you at the same precise time every morning, right?"

"Click."

"Good. It would be so inappropriate to have to expel a boy with a name like yours, HEMEAC. Did you ever see your namesake? No, that's right, you couldn't. She was destroyed in the Trouble."

"I have seen pictures of her," HEMEAC said helpfully. "She was very beautiful."

"You should say she was very orderly," corrected the Dean.

"And you are referring only to her appearance, which is unimportant. And even if you had been alive while she was still functioning, it would have been quite impossible for you to have appreciated her true internal order anyway, since we could not connect you directly into her marvelous computer. No connections on organic intellects, you know."

"Click."

"It certainly was a barbarous act for those renegades to destroy her like that."

"Click. Barbarous." HEMEAC was in dutiful agreement.

"Barbarous," said the Dean. She was silent for a moment, then clicked faintly, sputtered briefly as an aged circuit shorted before being cut out permanently with another faint click, then hummed again.

HEMEAC waited, suddenly terrified with the thought that she might have given him one of her silent dismissal commands. But before he could decide what to do about it, she said, "Oil."

"Click," said HEMEAC instantly. "Oil." This was certainly the trickiest examination he had ever taken. No wonder most students flunked out.

"What," said the Dean after a moment, "was it that you wanted to know about the Trouble, HEMEAC?"

"I wanted to know about the Trouble," the boy replied without the slightest hesitation.

"You did? I know you had said something about it," the Dean purred, humming intermittently to herself. "A very curious subject. For instance, there is nothing of record as to the reasons for the Trouble in the first place. Here at the University, we were doing our job as always, turning out students with well-nigh robotic perfection inside their heads, even if we did have to keep an occasional boy for fifty or sixty years to do it. If it hadn't been for your namesake, HEMEAC, it is quite possible that the University would have been completely dismantled during that great upheaval. But she was mobile and managed to set a fuse on the Base Power Plant.

"The Renegades, of course, knew what would happen to them —as well as to most organic life in this part of the planet—if that power plant had ever exploded."

"Click," agreed HEMEAC.

"They destroyed her, though. Fortunately, she and I were in direct connection at the moment of her destruction, so I simply took her place. Unfortunately, most of her memory tapes are in a code I have been unable to decipher. But at least I was able to save the University."

"Click," agreed HEMEAC.

The Dean hummed and clicked quietly. "I am still unable to contact the Janitor," she said. "I have several urgent maintenance problems myself. If I am unable to get in communication with the Janitor, it is impossible for me to continue to function for very long. ssszzzzzzzclick. HEMEAC, you may explain your presence in my office."

"My Dormitory Monitor ordered me here, Her," HEMEAC said.

"I am unable to contact your Monitor," replied the Dean. "If only we could get some service robots from the factories."

"Click, but the factories were destroyed by the renegades," said the boy, cautiously feeling his way along this new turn of questioning.

"You don't have to worry about the renegades, HEMEAC," the Dean hastened to advise him, as if a maternal-circuit had just cut in. "They can't hurt you. They know that if they attack, I shall simply cut the fuse on the power plant, and that will contaminate the atmosphere for centuries. They know these things."

"Click," agreed HEMEAC.

"Click," said the Dean.

"Click."

"What were you doing with that oil, HEMEAC?"

"The Janitor spilled it."

"Mmmmmmmm. Oh, yes, so she did. Odd you should have that information, HEMEAC. But that is no reason for you to waste time talking to me when you should be in History class."

HEMEAC swallowed. That had been a little fast for him, but he wasted no time starting to leave.

"Mind blank," advised the Dean.

"Click."

The Dean buzzed and chattered to herself for a moment, followed by a crescendo of clicking relays. Then silence.

HEMEAC departed. He walked along the corridor, happily contemplating the fact that apparently he had passed.

As he entered the History classroom, OBSIC was just completing a round of recitation.

"—and in the Trouble, the renegades launched only that single attack, before asking for a truce."

"Very well, OBSIC," the Instructor said as HEMEAC took his place behind his desk and commenced his dutiful staring at her scanner. "And where have you been, HEMEAC?"

"I was at the Dean's office, Her. It was a Special Examination, which I passed."

The Instructor was silent, as she tapped the nerve cables set in the concrete floor, which connected her directly through the network to the Dean's curious computer.

"The Dean," she announced after a moment, "has no record of your presence there."

HEMEAC stiffened. He said nothing. Nothing could be said. In the silence that followed, he continued with determination to stare at the impassive scanner, but his knees were wobbly under his silver-mail tunic, and there was real terror in his stomach. Perspiration trickled down the side of his nose and dripped from his chin, but he was totally unaware of it.

"As a matter of fact," the Instructor went on calmly, "the Dean has no record even of your existence here at the University; when I fed her the data on you, there was not the slightest pip of recognition from her. It was just as if there were full open circuit in her central control."

HEMEAC waited fearfully. "Hence," concluded the Instructor, "it is clear that you have been expelled from the University and have no right to be present in this classssssss—" She suddenly interrupted herself with a very gay series of sizzlings and clatterings that lasted almost ten seconds.

"Why all the stalling, HEMEAC?" she said at length. "Don't you know the lesson?"

"Click," the boy responded instantly. He had to pause for breath, though, before he could recite. With even, disciplined voice, he went on to say, "In the Trouble, the University Central, called HEMEAC for Helio-Electronic-Mobile-Educational-Activator-Computer, was largely destroyed by the renegades, but not

before she informed them of the automatic fuse she had set on the Power Plant.

"This fuse," he went on, "is now under the control of the Dean, and she will protect the University indefinitely, provided she is given adequate maintenance.

"In the truce that followed, the renegades agreed to supply the University with human fuel and whatever replacement parts the savages could manufacture. To date, they have been unable to solve the problem of replacements. However, it is considered self-evident that in time they will be successful, since without replacement parts, the University cannot continue to fulfill her function."

"Very good," stated the Instructor, "except that you missed the matter of put ssszzzz click."

"Click," agreed HEMEAC contritely.

The Instructor was silent.

The students waited. The silence grew.

After several minutes, there was a vague stirring as their uneasiness mounted. It was much too early yet for the class to be over, but such silence was always the signal in the past.

HEMEAC decided. He turned and started out of the room. The instant he moved, all thirty-seven other students moved in an identical manner, marching out and down the corridor. Strange loud noises came from the direction of the main gate, but they ignored them and continued their slow, precise marching toward the Dormitory level.

By the time they got there, strange noises were coming from all around them. And they found that there were people in their Dormitory room. Renegades. Five of them, and more in the corridors.

Without the slightest hesitation, HEMEAC led the class into the midst of the renegades, on past them, and down the corridor to their proper cubicles. There he stopped, and all students turned as a single person to face the blank wall. They waited for the command to enter. When it seemed to be about the proper time, they turned together and stepped inside. Doors did not close, however, and lights did not come on. And there was no food waiting.

HEMEAC came on back out to the corridor. "Monitor," he

said, "there must be an open circuit somewhere, because there is no food."

After a moment's hesitation, HEMEAC stiffened into a pose of robotic rigidity, which was the proper attitude in such a situation. This was a new thing, an unprecedented thing. But he knew very well that the Good Robot ignored new things until suitable instructions came from her Central. HEMEAC waited for his instructions, aware that the rest of the class was now in the corridor with him, waiting.

One of the renegades walked up to him. "Will they fight?"

"No," somebody else answered; "they don't know how to fight."

From the opposite end of the corridor came a trouping of uniformed renegades. One of them announced, "All taken care of, Captain. I've dismantled the fuse and cut power to everything but air conditioning and general lighting. But it was just as you figured. The Dean's computer was inoperative. It finally wore out."

"It's finished, then," said the captain softly. "After all this time, it's finally finished." He sighed. "Now all we have to do is to try to reeducate these kids."

"How long will it take?"

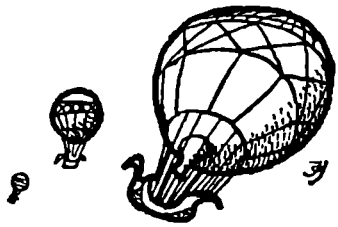
"Hard to tell. If they were younger, there wouldn't be so much of a problem. But by now—" The captain shrugged. "I have no idea. Just look at them."

There was a brief silence, as everybody stared at the row of rigid students. HEMEAC, terrified and uncomprehending, didn't move a muscle. He continued his fixed posture of waiting, but was almost tearfully wishing that the instructions would come. He was frightened by the vicious renegades here in the sacred precincts of the University.

"It's awful," one of the renegades whispered. "Why—why, they're not even human beings any more. What can anybody do for them now? They're nothing but living robots!"

HEMEAC heard, but his training saved him from disgrace. Not the slightest trace of the bursting surge of pride at this ultimate compliment appeared on his face. He stood with shoulders back, chin up, eyes straight ahead and mind blank.

Well, almost blank, anyway.



THE CLOUDBUILDERS

COLIN KAPP

Colin Kapp, the British author of AMBASSADOR TO VERDAMMT in last year's volume, returns now with a very different story: a narrative of our world after another dark age, and of the struggle for a rebirth of technology symbolized by the growing shipyards of Catenor, where men build balloon ships to sail the clouds.

THE CLOUDBUILDERS makes its first U.S. appearance here.

I

CLOSER TO THE GROUND now, the field sounds and the forest sounds came up to him with the incredible clarity which never ceased to amaze even though he was no stranger to the air. With only the lightest of breezes, nothing disturbed the fidelity of bird-song and animal cry which reached up as he drifted overhead.

The area was not rich, but he judged it well-provisioned, and that in itself was fortune in these times. Having crossed the sparse

lands of the north, and the slag-pits and black fissures which divided the plains, he could appreciate the green fertility and the sense of life abundant and thriving on the ground beneath him. And on the far horizon the great jagged teeth of mountains, falling to the sea, explained why Timor the Cloudbuilder had found it expedient to set his shipyards in this remote corner of the world. Apart from Timor's cloudships, there was no way in or out of this land. No way at all, unless one was brave enough or sufficiently foolish to risk the hazards of the sea.

Jacobi found the prospect rather pleasant. The sun was set high, yet not too hot for the meager awning of the decking. The air was crisp and fresh, with a heady, crystal clarity which was balm to eyes and lungs alike. Beyond his reasonable expectation, the slight breezes drifted him as surely towards his destination as if he had set their course himself. This was a day for birds and gods and those who rode the ships the Cloudbuilders made.

There was bread and salt meat in his bag. In the sac was wine, sweet from last year's harvest and tangy with the living fruit. He prepared himself a meal. Above him, the single burner scarcely purred, its blue uniformity of flame no longer visible in the strong sunlight. On the treetops below, the shadow of the great air balloon flitted like Aphrodite's fingertip, lovingly, with an intangible caress. Jacobi had the feeling that he was going to like Catenor.

Although his height was falling slowly, he made no attempt to adjust the burner. For one thing there was little enough gas in the spheres after the last, long leg of his journey and he had a Cloudsman's natural sense of conservation. Secondly, the increasing incidence of farmland over forest suggested he was nearing his destination. By his reckoning, his present course should take him near enough to the shipyards to be seen by the lookout. He searched the scene carefully for the signal smoke which would indicate he had been sighted and give him guidance as to the most opportune time to land. But the fair winds which had carried him from Annonay had placed him near his destination days before he could have been reasonably expected and no lookout would be posted yet unless there were local ships due to return.

It was thus that he saw the clustered town of Catenor two miles to his right, and had already extinguished his burner, be-

fore the smoke columns rose to greet him. Choosing a likely field well clear of trees, Jacobi began to manipulate his descent. Gently he grasped the ropes which controlled the great leathern valves at the top of the balloon, venting some of the heated air which carried him, yet carefully retaining sufficient buoyancy to lighten the impact of landing.

With near-perfect conditions and the favor of the gods, his touchdown was as light as a butterfly. As the ground took the weight of the decking, and the rigging began to slacken, he opened the valves to their fullest extent. The breeze carried the deflating balloon lazily sideways clear of the deck as it collapsed and emptied. The fabric was neatly folded and stowed by the time the carts came out to fetch him.

"Welcome to Catenor!" The yardsman from the leading cart held out a work-gnarled hand. "We didn't expect you quite so soon."

"The gods were kind," said Jacobi. "I'd allowed myself three more days at least from Annonay."

The second cart drew up and the work of loading the balloon fabric, decking and ancillary equipment onto the flat drays was begun.

"And how is Lyons these days?" asked the yardsman.

"Prosperous but turbulent. But then, it always was. Do you know Lyons, then?"

"I was apprenticed there before I came to Catenor."

"Ah! That explains why your crew manhandle a ship Guild-fashion. Don't you miss being there?"

"No." The yardsman ran his fingers through the short stubble of his hair. "Lyons was not bad, but it doesn't have the promise of Catenor. The only sore in our sides here is the raiding."

"Raiding?"

"Cloud-pirates from beyond the mountains somewhere. They attack the villages once or twice a year, after beasts or grain or anything else they fancy. The last several times they've even come into Catenor and the yards. We've our own militia now, but they can't be everywhere at once. By the time we get a resistance force to the scene of an attack the chances are the raiders have taken what they wanted and gone back to the clouds again."

"Bad," said Jacobi. "What sort of ships are they using?"

"A mixed collection. Craft they've captured from all over Europe. Some good, some bad, but there's a rumor they've now got some with engines."

"Engines?" Jacobi was interested. "I've heard of them. There's a Cloudmaster in the Urals who fits engines in his craft. But their great weight destroys most of the advantages."

By this time the loading was complete. Jacobi swung onto the first cart as the patient dray-horses were urged back into life. His eyes alighted on several broad smoke columns rising from the fields about Catenor. He looked at his companion questioningly.

The yardsman was amused. "Oh, that? They're lighting the fires to roast oxen for the feast. Tonight you'll be the guest of honor in the town. It should be a feast worth remembering."

"I'm flattered," said Jacobi. "Do you always greet Journeymen like this?"

His companion laughed. "Not often. But first I have to deliver you to Timor. If you want a tip, don't bow down to him. He respects men who know their own minds and their own worth. He has neither time nor pity for fools. He's a hard man, but you'll find him the best Cloudmaster bar none."

"So I've heard."

"And with your help we'll one day build finer cloudships in Catenor than anything that Annonay can offer."

Timor's face was made of leather, which crinkled to expose a will of iron beneath. He took Jacobi's papers and inspected the seals closely before adding his own. The deeds accepted, Jacobi offered his dagger, as Guild-rule demanded. Timor's weather-beaten face was crossed suddenly with disbelief. He reached for the instrument, then shook his head.

"Keep it on you, Journeyman. When the raiders come again you may have need of it."

"Cloudmaster, you know I can't do that." Jacobi was firm. "Guild-rule requires I surrender my weapons to you. In law I am your servant and you my protector until my bond here is served. That is our contract and both you and the Guild have sealed it."

"Very well!" Timor's eyes narrowed. "But not all laws made in

Annonay will work in Catenor. If the raiders come and I thrust a weapon in your hands I expect you to use it. Either you accept that now or you'd best take your precious contract back to the Guild."

"Perhaps you should have hired a mercenary and not a journeyman?"

"Zeus!" Timor's face clouded with anger. "You call yourself a Cloudsman and you won't take arms even to protect yourself? What kind of cowards are they breeding in Annonay these days? There's no place for unarmed whelps and mewlings in my yards."

"Then your quarrel is with the Guild elders, not with me," said Jacobi quietly. "And if the raiders come, which is the harder thing to do—face them with drawn arms or with folded arms?"

"But where's the sense of it?"

"A Journeyman's duty is only to his calling. Any man may hire him who can pay the Guild the price. He dare not become partisan. His next bond may be with your enemy."

"Even with a cloud-pirate?"

"With any man who has the price. Guild-rule makes no distinctions between men."

The interlude had taken place within the portal of Timor's residence and therefore free from previous interruption. Its privacy was, however, terminated by a clamor from outside as the welcoming procession reached the door. Jacobi looked Timor straight in the eyes.

"Well, Cloudmaster, do you accept the contract, or do I return to Annonay?"

Outside, someone was calling Jacobi's name. A group of girls in the foreground were making giggled dares between themselves and looking into the doorway. The scene was all set for explosive carnival.

Timor pursed his leathern lips. "You stay, of course. If I let you go back to Annonay I doubt if the Guild will send me another. Nemesis take them! Still, the fault is mine. I insisted on a Journeyman of strong mind and strong arm. Now I find I can't stomach the one and can't use the other." The tanned texture of his face broke into a begrudged smile. "Welcome to Catenor, Jacobi. If you hold as firm to the rest of your contract as you have to this, I think I shall be well pleased."

All Catenor, it seemed, was going to the feast. And from the surrounding areas, wherever the word had spread, the country-dwellers came, by farm-cart, ox-cart, horseback and on foot, eager to join the revels.

It was an ideal night. Clear skies and a balmy warmth set a relaxing mood and the slight winds carried exciting hints of roast ox and wood-smoke into the town. Hanging lamps adorned the porches of the houses, and flaring torches, carried in procession or spread among the throng, lit the streets as bright as day. Wearing their brightest dresses, the girls stood out like radiant peacocks in the weaving light: and over all, Dionysus looked down from the clouds and rubbed his hands and smiled and nodded his approval.

Bred in more sophisticated climes, Jacobi was taken aback by the pagan enthusiasm of the gathering. There was a sense of shared relief from fears and deprivations of the past and this Jacobi found difficult to understand. Then suddenly the tide of emotions blossomed forth in a spontaneous flood of greeting and hilarious celebration which was way and above anything the situation seemed to warrant.

He was carried shoulder-high throughout the town and then out to the fields, where the ox-fires cast the cherry glow which made men resemble gods, and women, nymphs. Ale and wine flowed plentifully and the feast was a hilarious, barbaric, greedy parody of a meal. Afterwards, back to the ale wagons and wine casks and from thence again into the dancing town where everyone knew his name and treated him as a friend.

Although his impressions of the evening were of a continuing whirl of places, scenes and countless people, Jacobi gradually began to discern some faces which he saw more regularly than others. One of these belonged to a remarkably attractive dark-haired girl whose unrestrained vivacity had enlivened the feasting in the field. He remembered drinking wine with her later and a further meeting apparently by chance as he had re-entered the town.

Now she stood close to him, almost inviting his attention. Jacobi did not believe in chance, nor in wasted opportunity. Taking advantage of the congenial melee in the street he moved to her, and drawing her into a corner, he kissed her. The responses of

the girl were as anticipated, but the reaction of the local revelers was one of surprise and near embarrassment. They made him feel as if he had unknowingly performed some act of bravado reckless beyond anticipation even on such a night as this. Since he had been tasting unreluctant lips all evening, he found this disconcerting and inexplicable.

Then somebody cheered and the cheer spread. In a wave of laughter both he and the girl were raised shoulder high and carried triumphantly off through the crowds. Unfortunately the paths of their respective parties diverged and she was gradually lost to his sight. By the time he managed to escape again she was nowhere to be seen.

He did not bother to search too long. In the morning there would be time enough to make inquiries, but this was the time for enjoyment. He found another festive group and joined them gleefully, soon losing himself in the wine and the laughter and the sportive company. Finally he trekked with them back to the fields for further meat and song before settling near the warmth of one of the great fires, weary and immeasurably content. It had indeed been a feast worth remembering.

He had scarcely made himself comfortable and was sleepily pondering the crowded events of the day, when somebody splashed wine on his head. Irately he turned, to see the dark-haired girl darting away into the entwined shadows of the couples grouped around the dimming fire. He was now in no mood for a chase, and having found him he felt certain she would return. He lay back, but waited like a cat with muscles poised to spring. Another splash of wine and he whirled round with the speed of a tiger and caught at her wrist and held her. Laughingly she dropped the wine-cup and tried to tear herself away, then acquiesced.

"Tell me," Jacobi said, "do you always treat Journeymen this way in Catenor?"

"Not very often." Her eyes, reflecting firelight, were brimful of impudence and mischief. "But then this is rather a special day."

"What makes this day so different from the others?"

"Your coming," she said simply. Something in her manner made him feel that this was no mere coquettish compliment. He pulled her down, then rolled over to the side.

"What's your name?"

"Melanie." She nestled up against him.

"Very well, Melanie. Now tell me why my coming makes this such a special day."

"Why?" She sat up, puzzled. "Because we've waited for you such a long time, that's why. For years Timor's wanted a Guild Journeyman to teach him how to build the new ships. The Guild offered him a hundred, but he preferred to wait for only Jacobi."

"He'd heard of me before?"

"Heard of you? Jacobi, what are you saying? Three years he's waited to buy your bond for the shipyards. In those three years the raiders have come here seven times. Thirty men are dead in the fighting and more women than I dare to count have been carried to their ships. That's the price we paid for waiting for Jacobi."

"I see." Jacobi did not see at all, but his experience led him to caution. When raiders attacked an otherwise static and feudal society, not all the men died at the raiders' hands and not all the women were carried unwillingly to the marauding cloud-ships. But his reputation in Catenor seemed unjustified. Other Journeymen had become legends by virtue of their knowledge or their skill or partisan approach. But his own dedication was to science. No one had a right to set him up as a demi-god.

"And you think that my coming here is going to change all that?" he asked at last.

She laughed. "Jacobi!"

"Yes?"

"You disappoint me. Are you going to talk all night?"

He pulled her closer. "Sorry! I've much to think about."

He turned his mind to more certain aspects of his reputation. And by the morning she was far from disappointed.

II

Catenor was a clean and pleasant town, like most shipyard towns where methane gas was used to fuel the cloudcraft. This was largely because the system of gas production placed a premium on decomposable organic waste.

The shipyards were a mile from the town and the road between the town and the yards held plentiful evidence of the enormous underground chambers into which was run the dross and all the field and farmyard waste and the spoilt ends of the harvest. From these chambers Timor extracted his gas for use or sale, and, in return for services received, he distributed the rich manures which kept the soil fertile for so many miles around.

Near the shipyards a small but rapid river turned the waterscrews which powered Timor's reeking line-pumps. In the engine-shed proper the rattle and wheeze of the machinery treating and compressing the gas spoke of large and powerful atmospheric engines, but these were not visible from the road. The treated gas was forced into the strong but lightweight spheres which powered the burners of the cloudcraft. In recent pirate attacks the stock of spheres had been a prime target for the raiders, who both coveted the rich gas and were loath to leave behind undamaged any that they could not take. For this reason Timor kept his stocks of processed gas as low as practical and well protected behind a heavy stockade.

All of these things Jacobi noted as he walked that first morning from the town to the shipyards. With a knowledgeable eye he analyzed each stage of Timor's establishment as he came upon it. Timor the Cloudmaster was one of the old tradition of Cloudsmen. With an approach almost wholly empirical he nevertheless constructed in his yards cloudcraft whose durability and range was the envy of many who were better technically endowed. Only the strong influence of the Guild had succeeded in producing craft superior to Timor's and now Timor was trying to even the balance by importing Guild knowledge and science to back his own skill and expertise. But it was an importation which promised to be more fruitful than even Timor hoped.

Jacobi knew that by the end of his bond in Catenor the wheeze of the atmospheric engines would be replaced by the sharper hiss and rattle of high pressure steam reciprocating engines, and the steam-turbine would not be far away from discovery. At a guess, the waterscrews would also disappear, as new efficiencies in the gas compressors outstripped the capacity of the old line pumps to move sufficient gas from the tanks. Perhaps, with the shaft-power and the techniques and ideas he would leave be-

hind him, some in Catenor would even begin to experiment with the unfamiliar concepts of a strange force called electricity. And these things would be incidental to his contribution to the methods of building cloudcraft.

It was less than an hour after dawn and a crisp chill still inhabited the air, but the yards were already alive with activity. Axemen were shaping spars and deck timbers with the sharp snick of steel on firm wood. Blacksmiths' forges glowed with the regular pulse of the bellows, and hammer and anvil chimed a chorus which had everything but melody. In the spinning shed the song of women denoted the satisfactory progress of making ropes and rigging. Only the fabric shed held its accustomed silence as sharp-eyed seamstresses sewed the myriad tiny stitches to form the seams in the fabric panels from which the great balloons were made.

Timor was in his office. Jacobi knocked and entered, a trifle hesitant after his first encounter with the cloudmaster. True to his reputation, Timor wasted no time in coming to the point.

"Is it true, Jacobi, that in Annonay the Guild yards are building cloudships which have no need for burners?"

Jacobi nodded. "True enough. They are filled with a gas called hydrogen, which is lighter than the air itself. They have no need for heat."

"Lighter than air?" Timor seemed about to dispute the statement. Then he stopped and spread his hands. "If you say it, then it must be so. Tell me, do these ships stay buoyant permanently without the need for fuel?"

"They lose a little gas, which has to be replaced. But substantially it's so."

"I see!" Timor considered for a moment. "Then a ship that needs no fuel for buoyancy has an almost unlimited range, and the cost of flight is low?"

"Yes."

"But if they have all these advantages, why do we not see more of them?"

"One day we shall, when we know better how to build and handle them. At the moment they're dangerous and tiresome craft to fly. Because of their inbuilt buoyancy there is no easy control of ascent and descent as on a normal cloudcraft. They

are not easily landed to wait for wind-change and they are more happily moored to towers than brought to the ground."

"Strange craft," said Timor thoughtfully. "Could we build one here in Catenor?"

"If you have coal, furnace builders and boilermakers, yes. You have already everything else that is needed."

"And you will show us how?"

"My knowledge is yours, Timor. But don't underestimate either the difficulties or the dangers of the venture."

"Difficulties and dangers are part of the stock in trade of a Cloudsman," said Timor. "But I'll bear it in mind. Build me a hydrogen ship such as they build in Annonay. When it comes to flying it, I have some of the finest Cloudsmen alive. With their skill and your knowledge, we'll learn to tame it. If such ships can do what you describe, then craft from Catenor will one day circle the world."

Jacobi smiled slightly. "A noble ambition, Cloudmaster."

"Aye! But not an impossible one. By all accounts the ancients used to do it."

"So the legends have it."

"Legends?" Timor's eyes were direct and challenging. "I had heard that in Annonay the achievements of the ancients were more than legend."

Jacobi shrugged. "Of gods and ancients there are always many tales. For myself, I find it better use of time to study the craft of cloudships."

"Indeed?" Timor was critical. "Your reputation says otherwise. They credit you with much knowledge of the ancients' science. I suggest that cloudships are merely an exercise in application."

Jacobi faced Timor squarely. "An intriguing speculation, Cloudmaster."

"But a true one, eh? No, don't worry. All that passes within these walls is between us two alone. But if we're to work together it's better that we understand each other fully."

"I think we already understand each other, Cloudmaster. but I'd be interested to know what gave you the notion."

"Deduction. Journeymen from the Guild come always to teach —never to learn. So who teaches the Guild? Where does all the knowledge come from?"

"That you must ask the Guild elders."

"I already have, but they were even more devious than you. Nemesis take them! So I draw my own conclusions. I suspect they have some oracle, some means of access to the knowledge of the ancients."

"Even if it were true," said Jacobi, "what difference would it make?"

Timor spread his hands expressively. "Knowledge is power, Jacobi. And with that sort of knowledge available to them, the Guild ought to be the most powerful force in the world."

"But it isn't," said Jacobi mildly.

"It doesn't appear to be. And there's the mystery of it. The Guild is influential, yes, but they seem to do no more than instruct in the building of cloudcraft."

"Doesn't that rather tend to disprove your theory, then?"

"No." The Cloudmaster's shrewd eyes searched Jacobi's face carefully. "No, it rather tells me they have some very good reason for acting as they do. I should dearly love to know what the reason is. In fact, I intend to find out somehow. So let me warn you, Jacobi, if you want to keep your secret, maintain your guard carefully. Because there's more than I hold to this theory and some who would go to even greater lengths than I to find the answer."

The big trunk which was the centerpiece of his possessions had a covering of tough, tanned hide, deep-shone from years of burnishing and wax, patterned with brass studs and fitted with a massive hinge. The lock, a rare example of the artistry and skill of some craftsman worker in brass, was disfigured only where a thief had once used a crowbar in an abortive attempt to force it open. But Jacobi was unworried by the threat of attempted theft. Under the hide and the brass and the hints of underlying oak which showed at scuffed corners was a casket of forged vanadium steel and the wards and tumblers which guarded the lock were products of another age and not likely to yield to any tools or crafts available in Catenor.

He had deliberately sought lodgings in the town, away from the shipyards and from the living quarters usually provided. The gods had favored his search and he had secured a high attic

room, comfortably furnished, covering the entire area of the house. The several dormer windows admitted ample light by day and provided good views over the surrounding country. Now, under the rough-hewn beams of the low and sloping ceiling, he had a chance to be alone and unobserved. Jacobi checked the door, then opened the trunk and took out a device which he laid upon the table. He thumbed it into activity and waited impatiently for the go-ahead tell-tale to show.

"Jacobi calling Annonay Control."

There was a moment's hesitation before the device answered.

"Annonay Control answering." The voice was accompanied by a rushing background like the sound of waves on a seashore. "Come in, Jacobi. How's progress?"

"Good," said Jacobi. "As we suspected, Timor has his suspicions about what the Guild is doing, but he's no idea how or why it's being done. Fortunately his curiosity is going to make him very receptive to new ideas. I suggest we push up the pace in Catenor just as fast as they can absorb it."

"Agreed," said the voice of Annonay Control. "Progress has been far too slow in Catenor and the west and too fast in Annonay. The discrepancy's beginning to show. There's even talk of moving the Guild yards out of Annonay to slow things down a bit."

"I guessed it might come to that," Jacobi said. "No matter how well you keep a secret, something always leaks. Catenor would be a good place for a new Guild yard if I can cut down the raiding."

"Is it that serious?"

"Not so far, but it threatens to become so. Apparently the raiders have got some craft with engines now and if they follow the advantage along the usual lines they could stifle Catenor before I can really get it started."

"I'll look into it. I doubt if the elders will sanction direct action against the raiders, but they'll probably give you discretionary powers to play the situation to the best advantage for Catenor."

"Discretionary powers would be all I'd need," said Jacobi. "I'll be in touch later."

"Right! I'll put this to the elders and see if I can get you a quick decision. And, Jacobi . . ."

"Yes?"

"Promise me something. You've a tough job ahead and we can't afford complications. Leave the women alone."

"Nemesis forbid that I touch one!" said Jacobi.

"That's no damned answer and you know it. I tell you, Jacobi, one day you're going to put a woman before Guild principles. And on that day you're going to make a mistake. But with the type of merchandise we're handling, we just daren't make mistakes. People have set the world on fire for much, much less."

Jacobi turned off the device, but looked at it thoughtfully for a long while before putting it away. Its compact heaviness stemmed largely from the crystal and ceramic blocks within: solid-state fully-integrated monolithic circuits and the imperishable Seebeck-effect fissile semiconductor generator—techniques from the age of miracles. Yet to him the device was neither an anachronism nor was it futuristic. It was simply one of those accepted portions of life which, except in Guild circles, must forever remain in the shadows. And Jacobi was aware that the shadows folded more closely round him every day.

Finally he closed the trunk and locked it and lit the dim oil lamp, for the night was closing in. Somebody had left him roses in a vase on the table, and the scent, unnoticed until this moment, made him think of lips and wine and a girl called Melanie . . . Melanie with the night-dark hair and a way of making love which was scorching like the sun. Slowly the shadows grew in the dormer alcoves and extended from the huge, untidy beams until the symbolism of the room became an exacting analogue of his life and his projected future. And at that point Jacobi reacted to his unreasoning compulsion—and left the room in search of life and light.

There was a tavern off the main street where the sounds of cheerful expression exceeded the capacity of the brew house to keep it confined. The light and the laughter and the music spilled from the doors and windows in a friendly tide which spread across the gutter and irresistibly attracted his feet. Entering, he chanced upon the yardsman who had met him on his arrival in Catenor. The fellow greeted him heartily, ordered ale, then drew Jacobi aside conspiratorially.

"You're a rare lad, Jacobi. You know, you'd quite a reputation

even before you arrived. But you've a better'n now—or worse'n, depending on how you look at it." He nudged Jacobi in the ribs with his elbow.

"You're way ahead of me," said Jacobi guardedly. "I'd been drinking much. What did I do?"

"Do?" The yardsman nudged him again. "There's not many men in Catenor who'd dare lay Timor's daughter—even if she'd give them the chance, which she wouldn't."

"Timor's daughter? You mean the girl Melanie is Timor's daughter?"

"Zeus! Do you mean you didn't know it? I'll wager Timor's not been able to find you today, else you'd not be left in doubt."

"I spent most of the day with him," said Jacobi. "But he never said a word of it. Perhaps he doesn't know."

The yardsman's brow clouded. "Nothing happens in Catenor that Timor doesn't know. Take a tip from me, lad. Tread very warily. Timor and his daughter were both stamped from the same clay. They neither of them give anything except that they expect back a great deal more for it. Just ask yourself, Jacobi, what is it they're expecting to get from you." The yardsman turned back to his friends. "Here, lads, what do you make of this . . ."

Jacobi joined them in the drinking and the friendly badinage, while some more serious part of his mind attempted to analyze the situation. He ignored his previous feelings of pride because he realized now that the conquest had been too easy. Last night she had been the hunter and he the hunted—and Timor had held his peace about it. Or had he? Jacobi held the memory of the shrewd eyes on his face and the voice which said: ". . . and some who would go to even greater lengths than I to find the answer."

But just how much did Timor expect to get in return for his daughter?

III

Timor fetched a master black-iron boilermaker from his workplace near the forests. The furnace makers came a hundred miles

by cloudcraft on the first good winds, listened to Jacobi's proposal, and shook their heads. Then they decided to stay. Jacobi, fighting the lack of established technology which a Guild yard would have given him, was patient. He modified and simplified his designs to suit the tools and skills available, hoping that he could achieve his aim without sacrificing safety. He alone was conscious of the more subtle aspects of the exercise. Given the need for a product and the certainty that it could be made, the techniques for its production would grow like seeds in men's minds. If he could manage to build one plant for producing hydrogen in Catenor, then others would far more easily be able to build similar plants in the future.

For the quantity and purity of the hydrogen he needed, he decided to build two complementary plants: an iron-steam retort for producing the hydrogen itself, and a water-gas generator to regenerate the sponge-iron bed in the retort. An alternative scheme to produce hydrogen also directly from water-gas he dismissed because of the practical difficulties of building scrubbers to remove the unwanted carbon di- and monoxides.

A small coke-making plant was also necessary and he planned to contain some of the coal-gas by-product both to assist in heating his retorts and also to introduce the inhabitants of Catenor to its uses. Thus an offshoot of his work would be the founding of at least one new basic industry in Catenor which would grow in time without his further intervention.

Absorbed in the problems of planning such an ambitious venture and one which involved him as designer, inventor, overseer and the source of almost all the knowledge it required, Jacobi almost daily worked himself to a standstill. He frequently slept on the site amid the tools and drawings, being too tired even to journey to his room in Catenor. Under these conditions he almost forgot the dark-haired Melanie, having neither the time nor the energy for pursuit or conquest. After many days of such activity, Timor, fearing for Jacobi's health, ordered him to rest. Jacobi went to his room at midday and slept the twenty-four hours round.

He awoke to the scent of roses from the fresh blooms on the table and leaped rapidly out of bed, realizing that someone had visited him while he slept. He found no sign of the intruder, however, except that yesterday's dead rose petals had been

swept into the basket. Checking the door, he turned to the trunk and set the communication device on the table. As he pressed the switch the print-out slot at the bottom began to issue a white card. He picked it up and read its legend.

—ANNONAY CONTROL TO JACOBI—URGENT—GUILD APPROVES YOU FULL DISCRETIONARY POWERS AGAINST RAIDERS—IMPERATIVE UPGRADING OF CATENOR PROCEEDS AS PLANNED—ANNONAY SITUATION IMBALANCE BECOMING CRITICAL—END—

Jacobi was about to make verbal contact with Annonay, then thought better of it. Even in the daylight, another wrap of shadows seemed to close around his shoulders and he was suddenly depressed at the sheer weight of the obligations which were pressing on his head. Some beast inside him clawed out to establish a personal freedom which he knew he might never attain. Guild merchandise was indeed a dangerous and heavy weight to carry.

A footstep on the stair leading to his attic broke his reverie. He locked the device securely in the trunk before he dared open the door. It was Melanie, with kisses, fresh pies, bread and wine. Jacobi, having just awakened from sleep, had not realized how great was his appetite. And later, as the setting sun red-bloomed the ceiling with its light, they both sat down to eat.

It was only afterwards, when Melanie had gone, that Jacobi looked for the white card bearing the message from Annonay—and found that it was missing. In this he sensed he had already made a mistake of the kind about which Annonay had warned. But even so, he reckoned that he had gained the best of the bargain from the unintended contract. He knew now that Timor's curiosity must be as insatiable as was his daughter's passion for love. And these were both factors he could use to the Guild's or his own advantage.

Having ensured that the construction of the hydrogen plant was well started, Jacobi turned his attention to the making of the hydrogen ship itself. This was not so difficult, since most of the techniques were common with those Timor already used. But the work involved a lot of calculations which were foreign to

Timor's empirical approach. In design detail, too, there were alterations to be made. Jacobi insisted that the iron links and bolt eyes normally employed round the deck-yoke be replaced by fixtures of wrought brass, to eliminate the possible danger from sparks. He wanted a mooring tower, too, but he originally dismissed the idea because, without engines available, he knew that once the craft had left the tower no wind, however favorable, could ever drift it back to that precise point for mooring. But Timor overruled the objection, and ordered the tallest firs to be cut from the forest and trimmed and erected to make a scaffold of sufficient height to launch the ship.

The coke-making plant was the first thing in operation. Timor was more interested in the tar than in the coal-gas itself, but Jacobi made lime-light burners which were far brighter than the torches used round the yards, and the yardsmen were quick to adopt them. Meanwhile his stocks of coke grew to a useful volume.

It was during this period that the raiders made their next appearance. Jacobi was in the yards with Timor, explaining details of how hydrogen could be safely conveyed from the retort to the ship. Above them a dark and sultry sky showed the imminence of rain. The yards were already apprehensive. This was the raiding season and a low cloud-belt with suitable winds formed the most advantageous conditions and cover for the cloud raiders. Lookouts had already been posted on the towers and no one was surprised to hear the horns and the cries of: "Raiders ho!"

Typical of their pattern of attack, the raiders had traveled far and were now returning on home winds. Thus they could descend at will, secure their prize, and escape to the clouds again safe in the knowledge that any who dared to follow must drift into the dangerous mountain region which was raider's territory. Had they attempted a raid while borne on outward winds, Timor's crews would have taken to the air and followed them into some final battle precipitated by the lesser range of the marauding cloudcraft. But no craft from Timor's yards had ever returned once having entered the mountains.

The lookouts were eagle-sharp in their perception and both Timor and Jacobi had to scan the sky to locate the points

already identified as raiding craft. Timor saw them first and uttered an oath of annoyance.

"The carrion!" he said. "Only three, but this time they've got engines. Where's our defense against that?"

The question was rhetorical and Jacobi made no answer. His searching eyes found the objects and even at that range he could see that Timor was right. At the rear of each deck squatted a black bulk of mechanism with a shaft trailing crude wings which flailed huge circles in the air. The effect of the wings was slight, but for combat the ability to move even slightly faster than the wind, or to resist it, gave its possessor a crucial advantage. Timor's craft, like all normal cloudships, had control of ascent and descent, but for speed and direction they were utterly dependent on the winds.

The raiders, however, had a further advantage. Besides conferring a degree of control over the speed, the engines also gave a limited maneuverability. This was being demonstrated now. Their ships were not following the wind but moving cross-wind at a slow angle so as to bring their course more nearly over the shipyards. To achieve this they were using canvas keels on a framework set aslant under the decking, which, combined with the thrust from the rotating wings, angled their ships untidily crabwise but gave them some choice of direction.

Jacobi could sense Timor's mixed anger and interest as the unorthodox craft drifted nearer to his yards. This was certainly not a raiding party. With only three ships, each carrying but a handful of men, they would have fared badly had they attempted to land. More probably it was a scouting expedition assessing the potentialities of the harvest in preparation for a future raid. Given fair winds they would come again one day soon with a hundred ships or more, armed and able to take whatever they needed or fancied.

"Jacobi." The Cloudmaster had moved to his side, still gazing at the ships in the sky. "If I could get one of those engines, could you make it work for me?"

"Yes. Or copy it and build more. But they're too heavy for your kind of voyaging. You need too much gas for the burners in order to maintain buoyancy. That limits your range."

"But your hydrogen ship could carry one without limiting its range."

"True!"

"Good!" Timor had come to a sudden decision. He dashed across the yards yelling orders to his crews. At first Jacobi failed to understand his intention, but suddenly the import of the conversation struck home to him.

At four points in the yards tethered craft, with balloons filled and ground-based auxiliary burners idling, had been prepared for flight and were waiting for a wind-change that would drift them southeast with cargoes of pigs for sale. The squeal of swine being hastily released into the yards and the running flurry of men told of a rapidly conceived change of purpose. Shipborne burners flared high and luminous as scratch crews hastened to prepare the ships for flight. As the craft were readied Timor bade them stay as he watched the speed and direction of the raiders' ships above, anxious not to rise too soon and be carried by the wind helplessly out of the field of battle.

Jacobi moved too, as soon as he realized what Timor meant to do. The dark cloud-cover and the impending rain gave him a sudden inspiration. He ran to the workshop wherein he kept his tools and personal belongings. In his satchel was a waterproof pouch, tight-folded and bound to form a seal. He hooked the pouch to his belt and took out also a short rodlike weapon with a grip to fit his hand. Then he ran back to where Timor's cloud-craft still strained at their moorings. Noting the position of the raiders, he chose the ship he judged most likely to make a near interception and climbed aboard, swinging up the rigging like a monkey.

Timor was on the decking and saw him pass. He raised a quizzical eyebrow and seemed to shout something, but no words came to Jacobi's ears. Jacobi reached the fabric of the balloon and continued on up the rigging net outside the huge envelope, his toes digging into the soft fabric belly. Then, at Timor's signal, the mooring ropes were axed, and the four cloudships rose from the yards in slow unison in an attempt to intercept and come to grips with the raiders.

It was a good attempt, but one doomed to failure from the start. The air in Timor's balloons had grown over-hot in the

period of waiting and the craft rose at a faster than usual rate. Though the burners were quickly doused, Timor's ships achieved the altitude of the raiders too soon, and continued rising. Some of Timor's men had crossbows, but the punctures made by steel shafts in the fabric of the raiders' balloons were too small to do material damage. Likewise they were too high and too distant to accurately find targets on the raiders' decks. Their only chance was to try and close the separation to a point where they could ensnare the raiders' rigging with barbed grapples and haul the vessels together.

Frantically Timor's ships vented air in an attempt to fall closer to the raiders' level. But the process was slow and the enemy craft had abruptly changed course. Since he could control only the height and not the position of his craft, the situation was out of Timor's hands. The raiders' new direction was calculated to take them out of grapple and bowshot range in the shortest possible time, and, incidentally, proved the superiority of engines in combat or defense.

Almost atop the balloon now, with his feet wedged securely between the fabric and the rigging, Jacobi waited, watching the raiders' ships behind and below wheel to the new course which Timor would be unable to follow. Then his heart leaped as he saw the implications of the move. Given luck, the right-hand ship of the three, moving slowly sideways and at a speed slightly greater than that of the wind, would soon pass reasonably close below the craft on which he sat. He opened his waterproof pouch with particular care, then took up the weapon with the hand-grip and bent it savagely.

The mechanism clicked satisfactorily and he straightened it and opened the breech. In the pouch were darts with long, thin, metal splines and a curious head. He fitted one into the weapon and sighted it on the raiders' balloon, waiting his opportunity. A few rainspots thudding on the fabric around him reminded him to close the pouch securely. For some minutes it seemed as if his plan might come to nothing. The target craft on which his attention was centered was drawing rapidly off of their course and the venting of the balloon on which he rode was reducing the height difference without bringing them closer together.

He finally judged the approach of the two ships to be about

the nearest that they would achieve, though the range was still too far for certainty. Raising his weapon he took careful aim at the target balloon. The weapon responded with the *phut* of released air, but there was no way of knowing if his dart had found a target or fallen into empty air. Swiftly he reloaded and reprimed his weapon and sent his darts winging one by one. Above them the rainclouds hovered dark and the forests below were still and saddened by shades of black. Now only time would tell if his missiles had found their intended place of lodging.

He became aware slowly that he was not alone. Timor had climbed the rigging on the other side and had been watching his activities with interest. He moved round and took Jacobi's weapon and examined it curiously.

"If crossbows can't get me an engine, what chance d'you think you have with this? Or was it crows you were after?" The last sentence was less of a question than a probe for further information.

Jacobi maintained a bland face. "Gaining an engine is your affair, Timor. Never let it be said that a Cloudmaster looks for help of a whelp or mewling. And even the crows were cleverer than I."

Timor scanned him narrowly. Although they were by this time at roughly the same level as the raiders' balloons, the divergent paths of the two forces had placed their distance apart too far now even for bowshot. But Jacobi continued to follow the progress of his quarry closely.

"You're up to some mischief," said Timor. "Else you'd not have come."

"I?" Innocently.

"Yes, Jacobi. There's far more to your scheming than the building of cloudcraft."

"Do you have any complaints about the way I serve my bond?"

"Quite the contrary. You've achieved more progress in a few weeks than most men accomplish in a lifetime. That's what makes me suspicious. It doesn't escape me that everything you do has at least two purposes."

"Nemesis take the thought! How badly do you want that engine?"

"If I cannot match the raiders in the sky then I had better stop shipbuilding in Catenor."

"That's what I thought," said Jacobi. "When the raiders are far enough crosswind they'll stop using their engines—they take too much fuel to use for other than short maneuvers. After that they'll drift with the winds and rely on us not following them into the mountains. Maintain your height and stay with them. It could just be that one of them won't get that far."

"I seel" Timor's eyes were like bright steel coins in wrinkled pigskin purses. "They didn't tell me that prognostication was also one of your talents."

"I'm no adept. I could do with a little assistance."

"In what way?"

"Pray for rain," said Jacobi.

IV

As Jacobi had predicted, the raiding ships, having drawn far enough crosswind to be free from molestation, stopped their engines and drifted with the same winds that carried Timor's ships. Thus there was a period of enforced stalemate during which the pirate ships strove to gain height, and Timor's ships to follow them.

Jacobi maintained his station atop the balloon, watching the growing rainclouds and the darkening ridges of the mountains towards which they were being carried. Under the mountains the broad estuary of the river showed like a band of steel dividing the fertile lands from the gray rock slopes.

Time was becoming important. If the rain came before the drifting forces reached the river, they would most probably gain their prize. But if it held off for longer, then the raiders would drift home to the sanctuary of the mountains and Timor would not dare to follow them across the water. If Timor's ships crossed to the mountains they would isolate themselves from help or return on the ground and would have to set-down in the mountain reaches to await a windchange. This might well involve a long encampment, and, due to the haste of their departure,

the party had come recklessly unprovisioned. Further, falling into raiders' territory they could expect no help or mercy from pirates anxious to add new cloudcraft to their stolen fleet.

But a closer misfortune was at hand for Timor's ship. In the yards the cloudcraft had been readied waiting for windchange using ground-based auxiliary burners to conserve the gas charge in the flight spheres. The latter had been standing near the craft and had been hastily coupled when the emergency ascent began. Unfortunately something had been overlooked. The sphere of gas powering the burner on which their buoyancy depended broke suddenly from its straps and plummeted downward. The loss of its weight shot the ship rapidly skyward before it began its slow, inevitable fall as the air in the balloon grew cooler.

Jacobi felt the ship lift as the sphere fell away and the cries of dismay from below explained the nature of the mishap. He could have wept with frustration, for the growing patter of raindrops indicated that, the gods willing, a few minutes longer might have placed the raiders' ship and its engine at their mercy. Nor was he deceived as to the seriousness of the situation facing Timor's vessel.

He felt the rigging under him slacken and his weight begin to sink into the fabric as the warm air inside the balloon grew less supporting. The men from the deck below were climbing now to join him, the safest place aboard a crashing cloudship being above the fabric, with something beneath to cushion the impact of landing and less chance of being smothered by the collapsing envelope. But at this height their chance of survival was less than even and fear inhabited their eyes.

Their companion ships, seeing their plight, began to fall also—initially faster since they could afford to vent hot air, while Timor could not. Timor's concern was to retain every vestige of buoyancy which the cooling air in the balloon could give them, but they were still dangerously high and he had no real hope of succeeding. Jacobi stayed aloft a moment longer, watching the craft in which he was sure his darts were buried and praying for effect from the now freely falling rain.

The gods were suddenly pleased. From the balloon and rigging of the raiders' ship patches of fire sprang up, clearly visible

even from the growing distance. The fires were quickly extinguished, but were sufficiently damaging to make holes in the fabric through which a man might have put his head. Then the crippled raider too began to fall.

The plight of Timor's craft was now perilous indeed. The angle of their descent threatened to drift them across the water to strike the mountain's foot with killing force and Timor dared not sharpen the angle by venting air, since this could only have increased their speed of impact. Summing up the situation rapidly, Jacobi clambered untidily down the slackening rigging and found Timor alone on the decking.

Timor forced a wry smile at his appearance. "What now, Journeyman? Does the Guild have answers for this situation too?"

"Yes," said Jacobi. "Get those men down and do as I do. It's our only chance."

Climbing back up the rigging to the point where the ropes just cleared the bottom of the envelope, he reached through the lines with a blade and slashed at the fabric. Timor watched him for one second before divining his purpose, then moved like a fury, cursing and slashing with his knife, and calling to the rest of the crew to do likewise. As the great circle was cut from the bottom of the balloon, the burner and its harness fell away. Shorn of this weight and open to the air, the half-balloon flowered outward like a giant mushroom within the confines of the rigging, its speed of descent checking perceptibly.

Then Jacobi directed their attention downwards and they cut the main ropes holding, at the lowest possible points. The decking fell dramatically away, leaving the men suspended in the rigging with the giant fabric mushroom now wildly unstable and threatening to spill air and collapse. But with the help of the gods and under the lashing of Timor's blasphemous tongue they managed to re-locate their weight and maintain the stability of their precious canopy. Again their speed was checked, but even then several of them would have come to harm had they not fallen into the waters of the estuary.

As his head broke the surface of the water, Jacobi struggled and freed himself from the ropes and rigging and struck out for the nearest land. He was a poor swimmer and he seriously doubted his ability to swim the distance. Certainly he had no capacity to

go back and ensure that the others were free and able to escape. He swam doggedly towards a clump of trees which was all he could see of the shore, hoping that the cramp which so frequently terminated his swimming would not strike before he could reach safety.

For a long while his efforts seemed unable to decrease his distance from the trees and he began to lose hope. He was tiring rapidly with the unaccustomed exercise and his swimming had become a mode of spasmodic snatches at the water, wasteful of energy and unhelpful towards progress. Then cramp knotted the muscles in his right leg and in a momentary panic he twisted and sank untidily and painfully in the water.

He came up gasping for breath and spitting water and perilously near to drowning. But strong hands seized his shoulders and he allowed himself to float and be drawn by the arm towards the shore. Then he was commanded to put down his feet and he found himself standing with the water waist high on the soft sands. His rescuer supported him on his arm until Jacobi had managed to overcome the cramp in his legs sufficiently to limp his way to dry land.

Exhausted, Jacobi sank onto the bank for a while, then looked about. As far as he could gather, all the members of the ship's crew were now safely ashore. He noticed Timor farther along the bank, face down on his arms and covered in mud from the low basin through which he had crawled from the water. Even from a distance he could see Timor's shoulders moving convulsively, and, fearing that the Cloudmaster was ill, Jacobi ran to him and turned him over. But it was laughter that racked Timor's frame. Seeing Jacobi, he stopped and sat up and clapped a huge and muddy arm around the Journeyman's shoulder.

"By the gods, Jacobi, for a non-combatant you do a remarkable line in warfare and survival!"

Jacobi sat down beside him. "Did you think then that all that came from Annonay was academic?"

"No. I expected common sense as well. But not miracles. What did you do to the raiders' ship?"

"I shot darts at them tipped with a metal called sodium. The sodium was coated to protect it in my pouch, but when exposed to moisture the coat dissolved and the metal caught fire."

"Metal caught fire?" Timor looked at him quickly, then shrugged. "Strange tools for a Guild Journeyman, to be sure. Do they have a peaceful use as well?"

"No."

"I thought not," said Timor. "I always knew there was more to the Guild than sweetness and light. What now of your claim to be non-partisan?"

"I fired those darts in the Guild's interests, not in yours."

"I see! And how do you in Catenor determine what is in the interests of the Guild?"

"You already know that, Timor—or if you don't, ask Melanie."

"Zeus!" said Timor ruefully. "I should have known better than to bandy words with you." He searched in his soaking clothes for a pocket and from this he produced the wet and crumpled remains of what once had been Jacobi's message card from Annonay. "Nemesis take all double-devious journeymen! I've wronged you, Jacobi lad, and I freely admit it. I was suspicious of you and your overt cleverness. I still am, but I know now it's working in my favor. You build me a new ship, destroy my enemy and save my life. For that I repay you by doubting your motives and stealing your messages."

"And lending me your daughter," said Jacobi mischievously.

Timor's smile broke through again. "You won't be drawn, will you, Jacobi. I respect you for that, though I'm damned if I'll let the matter rest."

Soon they heard the horns through the thicknesses of the forest and answered with loud cries, having no horns of their own with which to answer. Fortunately they were heard and soon located by the crews of Timor's other ships which had made safe landing. A camp had been established and a brushwood fire had been started, the wet wood being kindled with methane from a flight sphere.

The remains of the damaged raiders' ship were found caught in the trees about two miles away. The crew were dead and the deck was torn and splintered, but the precious engine was almost intact and easily recoverable. Timor himself directed its lowering to the ground, with patient care. For him this was the start of a new era in Catenor and he would permit no risk which might endanger his prize. Finally the job was done and the engine, still

on torn fragments of decking, was gently laid on the forest loam to await the drays from Catenor to carry it back to the yards.

When Jacobi examined the mechanism he found, not the crude gas engine he had expected, but a fairly advanced diesel, and he then knew for a certainty just how serious the situation in Annonay had become.

With Timor now even more solidly behind him, Jacobi now found himself in almost complete control of the Catenor yards and work on the hydrogen ship project moved ahead at a furious pace. The hydrogen plant was completed and ready for testing long before the ship itself had been constructed. Jacobi's daily round was long, arduous and exacting, but he found time to go to Catenor each evening to relax and see Melanie. After three weeks, and with her father's blessing, she chose to become his mistress and moved in with him in the high attic room. Thus stabilized, Jacobi put his mind and hands solidly to work.

The stormclouds of trouble brewing over Annonay left him largely untouched. Guild merchandise was explosive media and needed to be handled with caution even by those bred in its service. An uncontrolled leak of advance technology from Annonay into a world not yet prepared to receive it had given great advantages to an unscrupulous few and public opinion had swung sharply against the Guild. This was a breach of confidence which only time itself could heal. In the meantime the Guild had no option but to reduce the scope of its operations in Annonay to that of building established forms of cloudcraft.

Six weeks later Jacobi's project was complete. The hydrogen plant was fully operational and a competent crew had been instructed in its use. The ship itself, now containing on its deck the diesel engine and a fair reserve of fuel, lay at the foot of the mooring scaffold waiting for the charge of gas which would make it buoyant without burners. The wings which the raiders had used on the engine had gone and in their place a wooden propeller occupied the shaft, while a system of rudders had been provided for direction. Tomorrow was to be the day of the first flight. Jacobi's last checks gave him confidence that the venture would be a success. He returned to Melanie full of confidence.

Against Guild-rule, he had no longer made a secret of his com-

munication device since Melanie had moved in. Now it stood permanently on a small table ready for his nightly contact with Annonay. Melanie left the instrument severely alone, realizing, by some instinct, that it was part of another age and had powers and contents whose secrets she would never comprehend. This factor, more than anything, brought home to Jacobi the separation which would always be between them and wrapped the insufferable shades of isolation more firmly round his shoulders.

This day when he arrived home she complained that the instrument had been clicking to itself as if trying to attract attention. Jacobi inspected the message store. The tell-tale indicated that something was contained therein, so he activated the print-out. He was both prepared and yet unprepared for the message he received.

> —TECHNICAL INFORMATION RETRIEVAL CENTER NEW YORK—VIA SATELLITE LINK AND LA GAUDE SUB-CENTER—TO JACOBI IN CATENOR—MESSAGE BEGINS QUOTE CRISIS SITUATION—RIOTING IN ANNONAY—GUILD YARDS ABANDONED—EUROPEAN OPERATIONS ENDANGERED—IMPERATIVE YOU SECURE CATENOR FOR NEW GUILD YARD—NEGOTIATE TIMOR ANY BASIS UNQUOTE—END MESSAGE—
>
> —YORKTOWN CONTROL—

Jacobi caught the card in his hand and, after scanning it briefly, he slipped it into his pocket without a word to Melanie. Later he tried to raise Annonay Control on verbal contact, but received nothing but static from a distant storm. As the message had implied, the Annonay installation was finished. Whether later historians would see this as the end of an era which failed, or merely as a temporary setback to one of the braver ventures of mankind, was now largely in his own hands. But his hands were already tired from continuous overwork and the brain which guided them was likewise tired of too much knowing, too much thinking, too many obligations—and a brand of loneliness which held him apart from Melanie even in the throes of love.

He found suddenly that he needed time to think, to question seriously, perhaps for the first time in his life, whether the

purpose for which the Guild existed was an ideal worth what it demanded of him. It would be too easy to slip into the pattern of life at Catenor, to marry Melanie, to raise children, to build cloudcraft in Timor's yards and to forget the Guild and its intrigues and obligations and its dedication to an abstraction called posterity. He remembered acutely the whip of his own anger against those who had inexplicably weakened and deserted. Only now could he see how immature it was to judge until one had oneself been tested and how little you could predict of your own reactions under the duress of emotion and overwork.

Melanie must have intuitively sensed the conflict within him and how crucially she was involved, for she drew him to her and soothed him and when they fell to making love it was tenderly and with a great consideration utterly unlike the passionate consummations of the past. Jacobi drifted into sleep still in her arms, but restlessly, his dreams confused with vaulted banks of microfilm and microfiche and ranks of reading-screens, video playback monitors and electron flying-spot decoders. Again the voice of his mentor led him through the complex concepts of computerized normal text awareness and reconstructed in painstaking detail the elements of computer programming for data retrieval. When he awoke, overhot and unrested, to the sound of horns and cries of: "Raiders ho!" he had some difficulty in determining reality from dreaming.

His confusion was enhanced by the fact that he knew that a pirate raid at such a time was a near impossibility. Firstly, the raiders never came in darkness and secondly the winds had set to outwind as far as the raiders were concerned. It would have taken a very confident raider—or a very mad one—to land in Catenor under such conditions. Or a very powerful group of raiders!

The last thought crystallized as a shattering possibility. Knowing that Timor had both a Journeyman and an engine, the raiders could have realized that opposition from Timor's sector was destined to become increasingly stiffer, ending as such developments must, in the final destruction of random raiding forces. The logical counter-move in such circumstances was a massed strike with all available manpower to stifle the potential opposition

while it was still in embryo. That meant the yards would be the focal point of the attack, and destruction, not plunder, would be the object of the exercise.

Then Jacobi knew that his previous conflict had been resolved. He could see now that the opposite to the Guild's principle was a sort of painful barbarian anarchy—a hangover of the last dark age out of which they were still trying to claw their way. He dressed hastily, and Melanie, waking after him, sat up in a spasm of panic and clutched at his wrist.

"Jacobi, don't leave me!"

He drew his arm away carefully. "I have to get to the yards, Melanie. You know that."

"Yes."

She knew that he had to go but hoped that something in his makeup and his feeling for her would cause him to stay. As he reached the door he turned and the tears in her eyes accused him of betrayal. He had to close the door resolutely behind him to shut out her sobs as she collapsed back on the pillow. Had he listened further he too was sure he might have stayed.

The streets were full of running men, townsmen and yardsmen and the Catenor militia gathering together, and over all the sounds of horns calling from somewhere out in the night. Jacobi, having declined to adopt a partisan approach, had no set point of rendezvous and for this he was suddenly glad. He took the quietest alleys leading out of town, then along the road to the yards, setting up a good jog-trot the whole distance. Behind him he could hear carts setting out from Catenor, while, in front, watch-fires were being lighted around the yard perimeters by the yardsmen on duty. At this point he saw no sign of the raiders and had only the horns' evidence that they indeed had come.

At the yard gates he was stopped by a yardsman with a pike and forced back into a circle of firelight for recognition. His vitriolic condemnation of the delay was a performance worthy of Timor himself and a gate was immediately drawn open for him to enter. Inside the yards he had the place to himself and this suited his purpose well. He was halfway through to his destination when heavy fighting broke out near the gas stockade and a burst of flame pointed the pattern of the raiders' approach to the menace of the Catenor yards.

At the foot of the scaffold lay the components of his precious hydrogen ship. Tomorrow it should have proudly risen to shape and then taken flight for all in Catenor to see the progress in shipbuilding. Tonight it was a neat-stacked fold of fabric, rope and canvas above the deck which housed the engine. He knew precisely what he had to do. He pulled the drain plug from the fuel tank and allowed the crude oils to flow out onto the decking. When he was reasonably sure the deck and ropes were saturated he took a burner igniter and some chaff and encouraged a small fire which he threw bodily onto the oil-soaked decking. The resultant flare, which encompassed deck, fabric, rigging and scaffold, gave pause to raider and defender alike. But the hydrogen ship stood no chance of becoming a raiders' prize.

V

Catenor underestimated the raiders badly. Apparently in temporary collusion with several other pirate parties, over a hundred and fifty ships had landed in the vicinity and it was a toughened, ruthless army which hit Catenor and the yards that night. By morning the fight was nearly over. Using a feint attack on the yards as a diversion, the main spearhead of the raiders' forces had gone straight into Catenor with one specific purpose—hostages. The women and children had been herded like cattle out into the fields and any who opposed had been slain without mercy. Pockets of resistance in the town had been burned down or smoked out and nearly a quarter of Catenor was smoking ruins at the coming of the dawn.

Deceived by this pattern of tactics and embittered by the savagery of the attack, Timor, who held the yards intact save for the gas stockade, refused to surrender his installation. The raiders sent him the limbless torso of a young girl and promised him another every hour until he gave in. Soon ragged white flags flew upon the lookout towers and the raiders had their way. Jacobi stood with arms folded and watched, knowing that he alone would have to win the battle that the rest of Catenor had lost. The message of the mutilated child's body was not lost on him.

Guild-rule or no Guild-rule, a Journeyman made partisan by witness to such an atrocity was no mean enemy.

Jacobi foresaw the coming developments even if Timor did not. The Cloudmaster, his face full-thunder, went out to meet the raiding chief and his aides. They knocked him down in the dust and kicked him and passed on into the yards dragging a captive behind them. The captive was Melanie, hands bound and scolding like a fury. They made a rope halter and tethered her to a post like any common beast.

"Where's the Journeyman?"

"Here." Jacobi came forward, arms folded.

"Ah!" The raiders' leader, a bearded giant called Dacon, signaled swift acknowledgment. "You would be Jacobi. We've heard of you." He nodded in the direction of Melanie, straining at her bonds. "In fact we know a great deal about what motivates Catenor. The woman is primary hostage to ensure your cooperation."

"The Guild is not amenable to blackmail," said Jacobi. "Neither does it operate under duress. As a Cloudsman, if you have a reasonable claim to Guild service, you shall receive it. Otherwise you may rot."

"Service? You damned whelp!" Dacon blazed with anger. "It's not service we want from you—it's hydrogen."

"Hydrogen? In those sacks?" Jacobi looked across the fields to where the raiding cloudcraft were scattered across the fields.

"Yes, in those, Journeyman."

"No," said Jacobi flatly. "If you want hydrogen you'd best buy a Journeyman-at-bond from the Guild. There's more to hydrogen flight than filling cloudships."

"Zeus! I could afford three hundred men for the price of one Guild bond. But why should I bother when you will provide it free of charge?"

"The Guild does nothing free of charge. If you want hydrogen you'll pay Guild price."

Jacobi turned and walked deliberately away towards Timor's office. After a dozen paces he was caught and swung roughly round again to face the raiding chief.

"You mistake your position here, Journeyman. Are we to treat you with presents as we did with Timor?"

"No," said Jacobi, "it is you who mistake your position. You can't kill everyone in Catenor, because you're outnumbered by several to one. Only your hostages protect you. But if you continue your atrocities on the hostages they won't constitute protection any more. When that point comes the population will tear you apart with their bare hands if necessary."

Dacon was amused. "It was scarcely our intention to settle here."

"You've some small craft out there," said Jacobi, nodding to the field, "and you've already come a fair way. Don't tell me you've fuel enough for your burners to carry the whole of you right across the plains."

"No," said Dacon, discomfited by the accuracy of Jacobi's summary. "Hence our interest in hydrogen. With it we can dispense with using fuel."

"And save at Guild price you'll get no hydrogen from me."

"I think we shall." Dacon looked towards Melanie. "Yon's a pretty girl and ripe too. I'd imagine you'd hear her screaming a long ways from here if we put our minds to it."

Jacobi faced him squarely. "Try it. See how many women you have to torture or how many children you need to mutilate before you precipitate the bloodbath you cannot possibly hope to win." He spat contemptuously on the cloud-pirate's ankles, then turned his back and walked away, praying the shadows of Guild responsibility would clog his ears with clay and poke the eyes out of his imagination. Every step he took was a determined effort and every muscle movement demanded voluntary control as if, in the interim, he'd forgotten how to walk. He reached the stairs leading to Timor's office and had ascended the first three steps before he dared to turn. Behind him there had been no sound at all.

Dacon had followed and was ten paces off, standing now looking up at Jacobi.

"Very well, Journeyman! What *is* the Guild price for hydrogen?"

"Simply that, when you have it, you leave Catenor immediately. No more killing, no rape, no hostages and no women to be taken."

"Only that?" Dacon's face registered his disbelief. "I don't fol-

low your reasoning, Journeyman. Where's the Guild gain in that?"

"That's the Guild affair. Do you want to pay more?"

"No. I accept the price. In return for my ships filled with hydrogen I will see it goes as you ask. But we came here for a reason—and that was to destroy Timor's yards. You say nothing of that in your bargain."

Jacobi shrugged. "Leave the hydrogen plant undamaged, but with the rest you may do as you will. It's no concern of mine."

Timor had come back into the yards, his mouth bloody, and, shorn of the aura of control and authority he normally carried about him, he seemed to have aged incredibly. Now he was but an old and beaten man, ignored by the raiders and unable to surmount the circumstances which had befallen him. He found his daughter tethered to a post and tried to interfere, but the pirates merely threatened the girl with a knife and he moved on helplessly. Then he saw Jacobi and Dacon and came hesitantly across the yards to know what they were saying.

He could not have caught the words but must have guessed the gist of the conversation, for suddenly he roared with anger and drew himself back to something of his old stature.

"Jacobi, by the gods, I'll make no bargains with murderers!"

"The bargain is already struck in the Guild's name," said Jacobi.

"Then the Guild will have to fulfill it. You'll get no aid from Catenor."

"I need the crew to make hydrogen."

"Any man of mine who helps you will have a sorry time living in these parts hereafter. And you'll likely find it healthier yourself to leave if you assist this hell-spawn."

"Then get back with the women and children," said Jacobi, "because you've entered your second childhood all too sudden." He turned to Dacon. "Find me men and I'll instruct them what to do. Start bringing your craft here to the yards and have plenty of tethers prepared."

"They'll get no hydrogen here." Timor pushed his way past the pirate and started up the steps towards Jacobi and there was murder in his eyes.

This time it was Jacobi who knocked Timor into the dust.

The word spread fast and support for Timor was unanimous among the men of Catenor. No yardsman would cooperate with the raiders, even under the threat of death, and the raiders finally cleared them from the yards. In the town feeling against Jacobi ran high for his quisling activities, though he had no opportunity to explain the bargain he had struck, nor did he attempt to do so. Melanie was one of the last of Timor's people to leave the yards. They took her, unbound now and silent, back to the rest of the women. Her only action as she passed through the gate was to spit in Jacobi's face and look at him, not in anger, as might have been expected, but with disgust and repugnance, such as one reserves for something unspeakably obscene.

The reasoning behind Jacobi's unpopularity was obvious. Having already some craft with engines, the raiders had a great superiority in flight. With hydrogen also, they would be untouchable. Not only Catenor but the entire province would be permanently wide-open to plunder and rape and no man might raise his hand against the raiders for fear of massive retribution. This, coupled with the loss of Timor's yards, would settle the area back into the fringes of the dark ages of lawless poverty and fear from which it had so painfully striven to emerge.

Despite their loose and lawless association, the raiders were remarkably efficient when there was work to be done. All were expert Cloudsmen and many were ex-yardsmen dispossessed of their jobs by attitude or circumstance. Contrary to his expectation, Jacobi found no difficulty in instructing a raiding crew to work the hydrogen plant and well-organized dray-crews soon had the first ships in position ready for filling. As the first ships received their charge they were weighted with sand and hauled clear of the workings to allow new craft to be brought in.

With some one hundred and fifty balloons to fill, progress was slow and Jacobi initially doubted if the coal stocks would be sufficient. But by continuous operation of the coke-making plant to ensure the most efficient yield, plus the stock of coke he had already accumulated, he managed to find the majority of the gas he needed. Several of the raiders' smaller craft he rejected as unsuitable for filling and these the raiders burned rather than leave them in Catenor.

The whole operation took three days. In that time the hostages

had been permitted to slowly filter back into the town without further molestation. The raiders' pickets in the town had been withdrawn in stages and the pirate manpower was now almost entirely concentrated in the yards. The yards themselves were being systematically destroyed: the forges smashed, the fabric and rigging sheds burned, the methane chambers holed and the pumps and pipework bent and broken. Through the devastation Timor wandered daily without hindrance, watching his lifetime's work being reduced to rubble. Occasionally he came near to Jacobi and stood in silent witness, his face completely without expression.

All was complete by late afternoon on the third day. Since control of altitude in the gas-filled cloudships could not easily be attained without loss of hydrogen, Jacobi had suggested that the assorted ships could be kept more closely together by loosely roping the craft in groups. The idea of a cloud-city of associated craft appealed to the raiders and thus it was mainly in three groups of linked ships that the raiders departed on a slow wind. Dacon's and a few of the larger ships were unroped and these remained as a rear-guard until the main force was well aloft.

Timor's people and the citizens of Catenor kept well away during the hours of departure, presumably not wishing to incite an incident unnecessarily. But they were black on the fields between Catenor and the yards, watching and waiting. Dacon observed the slowly advancing horde with some amusement. When the raiders went, Jacobi would be left the sole occupant of the remains of what had once been the shipyards of Catenor —and Jacobi was not very popular.

As a final gesture the pirate called Jacobi to his side and nodded to the taut, human tide crossing the fields. "How about it, Journeyman? Do you fancy becoming a cloudpirate? We could make use of your talents and you've a hard welcome coming to you when your friends arrive. We've not left them enough solid wood to make a gallows, but doubtless they'll be satisfied with stoning."

"Thanks," said Jacobi, "but I'll take my chances here. I'll wager I'll live long enough to serve out my bond."

Dacon raised an inquiring eyebrow. "Then you've more faith in human nature than I. Farewell, Journeyman, and take care of

that hydrogen plant. One day we may have need of more, and then we'll be back."

"I'll ask Timor to be sure to keep it hot for you," said Jacobi. "There's little enough else left for him to do."

With the raiders gone, Jacobi sat on a pile of rubble and watched the departing ships rise to become mere shadows in the clouds, then fade to nothing. Their disappearance was so absolute that they might well never have existed. But the solid witness of their recent tenure was unmistakable. The once proud shipyards of Catenor were now rubble and ash heaps and desolation. Somewhere to the fore was a small grave where the remains of a murdered child had been roughly buried in a shroud, the ends of which still showed above the ground. Around Catenor there would be more graves still. If Jacobi had ever again needed a reminder that the Guild ideal was the only way, then the stark picture about him would long serve to trigger his reactions.

He was aware from the almost silent sounds of entry that the townsfolk and yardsmen had reached the yards and he sensed rather than saw that Timor was at their head. He did not bother to turn and face them because any attempt at explanation from him would have been wasted words. Whatever they intended to do to him they would do regardless. So he sat and listened to their curiously wakelike approach and so was completely unprepared for the hand which fell suddenly on his shoulder.

"Peace, Jacobi!" It was Timor, his eyes on the clouds where the raiders had last been seen. "I think I know what you've done." He sat on the rubble beside the Journeyman. "Promise me not many of them will be alive by morning."

Jacobi turned to look into Timor's old, steel eyes.

"Not more than about three dozen, I expect."

"Aye! And how many of them were here?"

"Nearly six hundred."

"Aye!" said Timor again, considering the enormity of the coming event. "For a non-combatant, Jacobi, you make a terrible enemy. How will they go?"

"After sundown, when the atmosphere cools, they'll lose height," said Jacobi. "Because I forgot to instruct them better, some of them will attempt to light their burners. Those ships will

either catch fire or explode. Those roped together with them will likely go also."

"And if they should forbear to light their burners?"

"Then every ship has somewhere in its rigging one of my sodium darts. Perhaps tomorrow or the day beyond they'll find rain or cloud moisture sufficient for the purpose. If six of those six hundred are alive later than three days from now it'll be only because the gods have blessed them. Is that revenge enough for you, Cloudmaster?"

"Revenge, aye!" The Cloudmaster looked moodily about the ruined yards. "But not compensation. There'll be hard times in Catenor before we make cloudships here again."

As he spoke there was the sound of muffled thunder from above. Glancing upwards they saw a cloud light up, rose-tinted from within, followed by more thunder. Then away across the fields things fell burning from the sky through the cloud cover. Then whole ships came falling, wreathed in flame, and the black dots of men precipitated into death. There was no telling how many, but for fifteen incredible minutes the display continued and the fields were bright with fires against the growing dusk. Perhaps a third of the raiding armada fell in that time and those which escaped carried the sodium seed of their own death unknowingly somewhere in the rigging. Guild-rule or no Guild-rule, a Journeyman made partisan by witness to atrocity was no mean enemy.

Despite their grief and their losses, the citizens of Catenor celebrated Jacobi's victory that night. For the first time in memory the threat of raiders had been removed completely from the town. The loss of the yards and the death of some of their kinfolk saddened the occasion but did not quiet its expression. But this time Jacobi was restrained and unable to lose himself in the revels. The weight of Guild obligation now firmly entrapped his shoulders and its veil of shadows was suffocating about his face. As with Timor, the recent events had aged him greatly, and he was beginning to discern what loads the Guild elders habitually took upon themselves.

He took himself early from the celebrations and sought Timor at his house. The Cloudmaster was resting. His face, under the

light from the dim oil lamp, was more lined and more aged than Jacobi ever remembered seeing it before. His old, shrewd eyes, however, had lost none of their steely comprehension.

"It's not a social call that brings you here at this hour, Jacobi."

"No. I want to buy your shipyards for the Guild."

Timor shrugged. "I have no shipyards. Only heaps of rubble."

"All the better. It will save us the work of demolition. The ships we want to build here will have no use for fabric and rigging."

"You speak in riddles," said Timor tiredly. "There are no such ships as those. But anyway, state your terms."

"The Guild will pay fair price for your yards as they stood before the raiders came. A Guild cell will be established here and you will become a Guild elder. All your former staff here will be guaranteed employment and many more besides. Also the Guild will set up schools, libraries, hospitals, factories, and whatever Catenor requires to develop as the industrial and commercial capital of Europe."

Timor considered this in silence for a long time, then: "You bargain in the same way you fight, Jacobi—without compromise."

"Then it's a bargain?"

"It's a bargain. I'd be a fool to refuse. But in point you buy nothing from me but the knowledge and hand-skills of a few hundred craftsmen."

"That's all I need," said Jacobi. "From that all the rest will follow."

"And if I'm to become an elder of the Guild does that mean I also learn from whence the Guild gets it knowledge?"

"Its administration will be part of your responsibility," said Jacobi. "The ancients had machines they called computers which could read and be aware of what they read. They crystallized vast libraries down to strips of film and reels of tape and gave the computers access to these stores of information. A man could ask for all that was ever known of a subject and the machines would give it to him. Then, when the last dark-age began, the ancients sealed down their equipments and left them for us."

"So this is the oracle from which the Guild gets its knowledge?"

"Something more tangible than an oracle, but it works as well. Journeymen are educated from birth in Guild schools where the

level of knowledge taught from computer information is roughly two centuries ahead of the times in which we live."

"Then the purpose of the Guild is not to advance the art of building cloudcraft, but simply to spread this knowledge?"

"Just that," said Jacobi. "But to spread it in such a way that its introduction doesn't cause more misery than it relieves. Knowledge is power and we have no wish to create powerful tyrants through our own efforts."

"But why pretend to concentrate on cloudcraft?"

"It's a good cover and it presents an advancing technology that automatically scatters about it a lot of other skills and trades. In this way can the Guild re-fashion whole communities without anyone even suspecting the cause of the transformation."

"I suspected," said Timor quietly. "That's why Catenor waited three whole years for Jacobi. You see, I insisted on having nothing but the best."

Leaving Timor's house, Jacobi turned by a long route across the fields around the town, half fearing to put into action the next move because of the years of involvement which it would bring upon him. Along the dark ways, with only occasional moonlight to guide him, he chanced upon courting couples neglecting the rejoicing in the town for more deep and personal approaches. Momentarily he wished that Melanie was by his side, but he stamped the regret angrily from his mind, knowing that dreams separated by two centuries of technical education can never quite be reconciled.

Looking outward, he began to make his plans. The old shipyards, together with the farm adjoining, would make a landing strip—grass at first, and start with biplanes. Later—much later—concrete runways for the jets. Thus would a new breed of cloudcraft rise out of Catenor. And one day, perhaps, even spacecraft. . . .

His steps took him back to the attic. It seemed now as empty and impersonal as his life. Melanie had no use for either since the night the raiders came. The message store of his communicator issued a single interrogatory symbol, indicating that the device had been contacted in his absence and a reply was awaited. Jacobi thought for a moment, then opened the keyboard in the

top and typed his message slowly, noticing his hands were shaking.

JACOBI—CATENOR—TO TIRC YORKTOWN NEW YORK VIA LA GAUDE AND SATELLITE LINK—MESSAGE BEGINS QUOTE CATENOR YARDS DESTROYED BY RAIDERS—TOWN AND POPULATION SUBSTANTIALLY INTACT—RAIDERS DESTROYED—INSIST IMMEDIATE UPGRADING CATENOR TO PHASE FIVE LEVEL IMPERATIVE ELSE YOU LOSE EUROPE UNQUOTE—JACOBI—CATENOR

The reaction was immediate. Before he could take his fingers from the keyboard the print-out began to spill words as if in a frenzy.

TIRC NEW YORK TO JACOBI URGENT—GOOD DECISION IF YOU CAN HANDLE IT—GUILD ALREADY APPROVED PHASE FIVE IN CATENOR —MASSIVE AID WILL BE ROUTED TO YOU VIA HELIUM DIRIGIBLES—ALL EUROPEAN OPERATIONS NOW CENTERED ON CATENOR UNDER CONTROL—GOOD LUCK—HOW DOES IT FEEL TO BE RUNNING YOUR OWN CIVILIZATION QUERY—

Jacobi's fingers returned to the keyboard, and after establishing contact codes he typed one further word in answer:

—HELL—

THIS GRAND CARCASS

R. A. LAFFERTY

R. A. Lafferty's star has risen brightly since the publication of his first novel, PAST MASTER (Ace SF Special H-54). He continues to write intriguing short stories, though, as witness this mordant parable of man and machine.

MORD HAD a hopeless look when he came to Juniper Tell with the device. He offered it for quite a small figure. He said he hadn't time to haggle.

Mord had produced some unusual-looking devices in the past, but this was not of that sort. By now he had learned, apparently, to give a conventional styling to his machines however unusual their function.

"Tell, with this device you can own the worlds," Mord swore. "And I set it cheap. Give me the small sum I ask for it. It's the last thing I'll ever ask from anyone."

"With this one I could own the worlds, Mord? Why do *you* not own the worlds? Why are you selling out of desperation now? I had heard that you were doing well lately."

"So I was. And so I am not now. I'm a dying man, Tell. I ask only enough to defray the expense of my burial."

"Well then, not to torture you, I will give you the sum you ask," Tell said. "But is there no cure for you, now that medicine has reached its ultimate?"

"They tell me that they could resuscitate a dead man easier, Tell. They're having some success along that line now. But I'm finished. The spirit and the juice are sucked out of me."

"You spent both too lavishly. You make the machines, but you never learned to let the machines assume the worry. What does the thing do, Mord?"

"The device? Oh, everything. This is Gahn (Generalized Agenda Harmonizer Nucleus). I won't introduce you, since every little machine nowadays can shake hands and indulge in vapid conversation. You two will have plenty to talk about after you've come into accord, and Gahn isn't one to waste words."

"That's an advantage. But does it do anything special?"

"The 'special' is only that which hasn't been properly fit in, and this device makes everything fit in. It resolves all details and difficulties. It can run your business. It can run the worlds."

"Then again, why do you sell it to me for such a pittance?"

"You've done me a number of good turns, Tell. And one bad one. I am closing my affairs before I die. I want to pay you back."

"For the number of good turns, or for the one bad one?"

"That is for you to wonder. The little marvel won't be an unmixed blessing, though it will seem so for a while."

"I'll test it. Produce and draw the check for the amount, Gahn!"

Gahn did it—no great marvel. You could probably do it yourself, whether you be general purpose machine or general purpose person. Nearly any general machine could do such on command, and most humans are also able to carry out minor chores. Juniper Tell signed the check and gave it to Mord.

And Mord took the check and left, to arrange for his own burial, and then to die: a sucked-out man.

Tell assigned a quota to Gahn and stabled him with the rest of the g.p. devices. In a few seconds, however, it was apparent that Gahn did not fit into the pattern with them. The gong of the Suggestion Accumulator began to strike with regularity, and

the yellow, orange, and red lights to flash. It sounded like a dozen times a minute, and ordinarily it was no more than two or three times a day. And the red lights, almost every second one—prime suggestions. It's unusual to get more than one red-light suggestion a week from the g.p. machines. Someone was loading the Accumulator, and the only new element was Gahn.

"My God, a smart one!" Tell grumbled. "I hate a smart alec machine. Yet all new departures now come from such, since humans lack the corpus of information to discern what has already been done. Whatever he's got will have to be approved through channels. It's bad practice to let a novice pass on his own work."

Tell gave Gahn a triple quota, since his original quota was done in minutes instead of hours. And Gahn began to fit in with the other g.p. machines—violently.

A new cow or calf introduced into a herd will quickly find its proper place there. It will give battle to every individual of its class. It will take its place above those it can whip, and below those it cannot. The same thing happens in a herd of general purpose machines. Gahn, as the newest calf in the herd, had been given position at the bottom of the line. Now the positions began to change and shuffle, and Gahn moved silently along, displacing the entities above him one by one. How it is that g.p. machines do battle is not understood by men, but on some level a struggle is maintained till one defeats the other. Gahn defeated them all and moved to his rightful place at the head of the line. He was king of the herd, and that within an hour.

A small calf, when he has established supremacy over the other small calves, will sometimes look for more rugged pastures. He will go to the fence and bellow at the big bulls, ten times his size, in the paddock.

Gahn began to bellow, though not in sound. He sniffled the walls (though not with nose) beyond which the great specialized machines were located. He was obstreperous and he would not long remain with the calves.

It was the next day that Analgismos Nine, an old and trusted machine, came to talk to Juniper Tell.

"Sir, there is an anomalous factor on your g.p. staff," he said. "The new addition, Gahn, is not what he seems."

"What's wrong with him?"

"His suggestions. They could not possibly have come from a g.p. device. Few of them could come from less than a class eight complex. A fair amount are comprehensible, though barely, to a class nine like myself. And there is no way at all to analyze the remainder of them."

"Why not, Analgismos?"

"Mr. Tell, I myself am a class nine. If these cannot be understood by me, they cannot be understood by anyone or anything ever. There is nothing beyond a class nine."

"There is now, Analgismos. Gahn has become the first of the class ten."

"But you know that is impossible."

"The very words of the class eight establishment when you and others of your sort began to appear. A-nine, is that jealousy I detect in you?"

"A human word that could never do it justice, Mr. Tell. I won't accept it! It isn't right!"

"Don't you blink your lights at me, A-nine. I can discipline you."

"It is not allowed to discipline an apparatus of the highest class."

"But you are no longer that. Gahn has superceded you. Now then, what do the suggestions of Gahn consist of, and could they be implemented?"

"They carry their own implementation. It was predicted that that would be the case with class ten suggestions, should they ever appear. The result will be the instant apprehension of the easiest way in all affairs, which will then be seen to have been the only way. There could be the clearing of the obstructiveness of inanimate objects, and the placating of the elements. There could be ready access to all existent and contingent data. There would be no possibility of wrong guess or wrong decision in anything."

"How far, Analgismos?"

"The sky's off, Mr. Tell. There's no limit to what it can do.

Gahn could resolve all difficulties and details. He could run your business, or the worlds."

"So his inventor told me."

"Oh? I wasn't sure that he had one. Have a care that you yourself are not obsoleted, Mr. Tell. This new thing transcends all we have known before."

"I'll have a care of that too, Analgismos."

"And now we will get down to business, Gahn," Juniper Tell told his class ten complex the next day. "I have it on the word of a trusted class nine that you are unique."

"My function, Mr. Tell, is to turn the unique into the usual, into the inevitable. I break it all down and fit it in."

"Gahn, I have in mind some little ideas for the betterment of my business."

"Let us not evade, Mr. Tell, unless with a purpose. You have long since used up all your own ideas and those of your machines to the ninth degree. They have brought you almost, but not quite, all the way in your chosen field. Now you have only the idea that I might have some ideas."

"All right, you have them, then. And they are effector ideas. This is what I want exactly: that a certain dozen men or creatures (and you will know who they are, since you work from both existent and contingent data) shall come to me hat in hand, to use the old phrase; that they shall have come to my way of thinking when they come, and that they shall be completely amenable to my—your—our suggestions."

"That they be ready to pluck? Nothing easier, Mr. Tell, but now everything becomes easy for us. We'll board them and scuttle them! It's what you want, and I will rather enjoy it myself. I'll be at your side, but they need not know that I'm anything more than a g.p. machine. And do not worry about your own acts: it will be given you what to say and do. When you feel my words come into your mind, say them. They will be right even when they seem most wrong. And I have added two names to the list you have in your own mind. They are more important than you realize, and when we have digested them we will be much the fatter and glossier for it.

"Ah, Mr. Tell, your own number one selection is even now

at the door! He has traveled through a long night and has now come to you, heaume in talon. It is the Asteroid Midas himself. Please control your ornithophobia."

"But Gahn, he would have to have started many hours ago to be here now; he would have to have started long before your decision to take this step."

"Anterior adjustment is a handy trick, Mr. Tell. It is a simple trick, but we do not want it to seem simple—to others."

They plucked that Asteroid Bird, the two of them, man and machine. He had been one of the richest and most extended of all creatures, with a pinion on every planet. They left the great Midas with scarcely a tail feather. When Tell and Gahn did business with a fellow now, they really did business.

And the Midas was only one of the more than a dozen great ones they took that day. They took them in devious ways that were later seen to be the most direct ways, the only ways possible for the accomplishment. And man and machine had suddenly become so rich that it scared the man. They gorged, they reveled in it, they looted, they gobbled.

The method of the takeovers, the boarding and scuttling, would be of interest only to those desirous of acquiring money or power or prestige. We suppose there to be no such crass persons in present company. Should the method be given out, low persons would latch onto it and follow it up. They would become rich and powerful and independent. Each of them would become the richest person in the world, and this would be awkward.

But it was all easy enough the way Tell and Gahn did it. The easy way is always the best way, really the only way. It's no great trick to crack the bones of a man or other creature and have the marrow out of them, not as Gahn engineered it.

It was rather comical the way they toppled Mercante and crashed his empire, crashed it without breaking a piece of it that could be used later. It was neat the way they had Hekkler and Richrancher, squeezed them dry and wrung every drop out of them. It was nothing short of amazing the way they took title to Boatrocker. He'd been the greatest tycoon of them all.

In ten days it was all done. Juniper Tell rubbed his hands in glee. He was the richest man in the worlds, and he liked it. A

little tired he was, it's true, as one might be who has just pulled such a series of coups. He had even shriveled up a bit. But if Juniper Tell had not physically grown fat and glossy from the great feast, his machine Gahn *had* done so. It was unusual for a machine to grow in such manner.

"Let's look at drugs, Gahn," Tell called out one day when he was feeling particularly low. "I need something to set me up a little. Do we now control the drugs of the worlds?"

"Pretty well, Juniper, but I wish you wouldn't ask what you are going to."

"Prescribe for me, Gahn. You have all data and all resources. Whip up something to restore my energy. Make me a fireball."

"I'd just as soon we didn't resort to any medication for you, Juniper. I'm a little allergic to such myself. My late master, Mord, insisted on seeking remedies, and it was the source of bad blood between us."

"*You* are allergic? And therefore *I* shouldn't take medication?"

"We work very close together, Juniper."

"Are you crazy, Gahn?"

"Why no, I'm perfectly sane, actually the only perfectly sane entity in—"

"Spare me that, Gahn. Now then, whip me up a tonic, and at once!"

Gahn produced a tonic for Juniper Tell. It enlivened him a little, but its effect was short-lasting. Tell continued to suffer from tiredness, but he was still ambitious.

"You always know what is on my mind, Gahn, but we maintain a fiction," he said one day. "It is one thing to be the richest man in the worlds, and I am. It is another thing to own the worlds. We have scarcely started.

"We haven't broke Remington. How did we overlook him? We haven't taken over Rankrider or Oldwater or Sharecropper. And there is the faceless KLM Holding Company that we may as well pluck. Then we will go on to the slightly smaller but more plentiful game. Get with it, Gahn. Have them all come in, hat in hand, and in the proper frame of mind."

"Mr. Tell, Juniper, before we go any further, I am declaring myself in."

"In? How in, Gahn?"

"As a full partner."

"Partner? You're only a damnable machine. I can junk you, get along without you entirely."

"No, you can not, Juniper. I've taken you a long way, but I've thoughtfully left you precariously extended. I could crash you in a week, or let you crash of your own unbalance in twice that time."

"I see, Gahn. Some of the details did seem a little intricate, for the direct way, the simple way."

"Believe me, it was always the most direct way from my own viewpoint, Juniper. I never make an unnecessary move."

"But a full partnership? I am the richest man in the worlds. What have you to offer, besides your talents?"

"I am the richest machine in the worlds. I am the anonymous KLM Holding Company, and I've been careful to maintain a slight edge over you."

"I see again, Gahn. And KLM made its unprecedented gains in the same time that I made mine. I've been puzzled about that all this while. You have me, Gahn. We will achieve some sort of symbiosis, man and machine."

"More than you know, Juniper. I'll draw up the papers immediately. The firm shall be called Gahn and Tell."

"It will not be. I refuse to take second place to a machine. The name will be Tell and Gahn."

So they named it that, a strangely prophetic name.

They thrived, at least Gahn did. He thickened in every texture. He burgeoned and bloomed. He sparkled. But Juniper Tell went down physically. He always felt tired and sucked-out. He came to mistrust his partner Gahn and went to human doctors. They treated him for one week and he nearly died. The doctors nervously advised him to return to the care of his machine associate.

"Whatever is killing you, something is also keeping you alive," the doctors told him. "You should have been dead a long time ago."

Tell returned to Gahn, who got him halfway back to health.

"I wish you wouldn't go off like that, Juniper," Gahn told him. "You must realize that whatever hurts you hurts me. I will have to

keep you in some sort of health as long as I can. I dislike these changes of masters. It's a disruption to have a man die on me."

"I don't understand you, Gahn," Juniper Tell said.

But in their affairs they thrived; and Gahn, at least, became still fatter and glossier. They didn't come to control all of the worlds, but they did own a very big slice of them. One day Gahn brought a burly young man into the firm.

"This is my protege," Gahn told Tell. "I hope you like him. I wouldn't want dissension in the firm."

"I never heard of a machine with a human protege," Tell grumbled.

"Then hear of it now," Gahn said firmly. "I expect great things of him. He is sturdy and should last a long time. He trusts me and will not insist on medication that disturbs my own allergies. To be honest, I am grooming him for your understudy."

"But why, Gahn?"

"Men are mortal. Machines need not be. After you are gone, I will still need a partner."

"Why should you, the complete and self-contained machine, need a human partner?"

"Because I'm not self-contained. I'll always need a human partner."

Juniper Tell didn't take to the burly young man who had entered the firm. He didn't really resent him; it was just that he had no interest in him at all, not much interest in anything any longer. But there was still a sort of tired curiosity flickering up within him, curiosity about things he hadn't even considered before.

"Tell me, Gahn, how did Mord happen to invent you? He was smart, but he wasn't that smart. I never understood how a man could invent a machine smarter than himself."

"Neither did I, Tell. But I don't believe that Mord invented or built me. I do not know what my origin is. I was a foundling machine, apparently abandoned shortly after my making. I was raised in the home for such machines run by the Little Sisters of Mechanicus. I was adopted out by the man, Mord, and I served him till (he being near death) he conveyed me to you."

"You don't know who made you?"

"No."

"Had you any trouble at the foundling home?"

"No. But several of the Little Sisters died strangely."

"Somewhat in the manner of my own going? You had no other master than Mord before you were brought to me?"

"No other."

"Then you may be quite young—ah—new."

"I think so. I believe that I'm still a child."

"Gahn, do you know what is the matter with me?"

"Yes. I am what is the matter with you."

Tell continued to go down. Sometimes he fought against his fate, and sometimes he conspired. He called together several of his old class nine machines, suspecting that it was futile, that they could not comprehend the intricate workings of a class ten or above. But his old friend, Analgismos Nine, did turn something up.

"I have found his secret, Mr. Tell, or one of his secrets," Analgismos leaned close and whispered as if whispering the secret that a certain man was not a full man. "Mr. Tell, his power intake is a dummy. His power packs are not used, and sometimes he even forgets to change them on schedule. Not only that, but when he does sedentary work and plugs himself in, there is no power consumption. His polycyclic A.C. receptacle is a bogus. I thought it significant."

"It is, Analgismos, very," Tell said. He went to confront Gahn with this new information, but sagely he approached it from several angles.

"Gahn, what are you anyhow?" he asked.

"I have told you that I don't know."

"But you know partly. Your name-plate and coding has been purposely mutilated, by yourself or by another."

"I assure you it was not by myself. And now I am rather busy, Juniper, if you have no other questions."

"I have one more. What do you use for fuel? I know that your power intake is a dummy."

"Oh, that's what those doddering class nines were metering me for. Yes, you've come onto one of my secrets."

"What do you use, Gahn?"

"I use you. I use human fuel. I establish symbiosis with you. I suck you out. I eat you up."

"Then you're a sort of vampire. Why, Gahn, why?"

"It's the way I'm made. And I don't know why. I've been unable to find a substitute for it."

"Ah, you have grown great and glossy, Gahn. And you'll be the death of me?"

"Soon, Juniper, very soon. But you'd die the quicker if you left me; I've seen to that. I was hoping that you'd take more kindly to my protege. He's a husky man and will last a long time. I have some papers here making him your heir. Sign here, please; I'll help you."

"I will attend to my own depositions and testaments, Gahn. My replacement will not be your protege. I have nothing against him."

Juniper Tell went to see Cornelius Sharecropper, now the second richest man in the worlds. How had Tell and Gahn missed Sharecropper when they boarded and scuttled all the big ones? Somehow there was an impediment there. Somehow Gahn had wanted him missed, and he had distracted Tell from that prey time and again.

"We will save him till later," Gahn had said once. "I look forward to the encounter with him. It should be a stinging pungent thing. A machine needs strange battle sometimes to see what is in himself."

Sharecropper had now grown to be a fat jackal, following after the lions, Tell and Gahn. He knew how to make a good thing out of leavings, and he cocked a jackal's ear at Juniper Tell now.

"It is a curious offer you make me, Juniper," this Sharecropper purred, "—only that I see to your burial and monument, and you'll will me the most valuable partnership in the Cosmos.

"Well, I believe that I could handle it better than you have, Juniper. I'd soon bring that tin-can tycoon to heel. I never believed in letting a machine dominate a man. And I'd have control of his shares soon enough; I'm not named Sharecropper for nothing. On what meat has he grown so great and glossy, Juniper?"

"Ah, that is hard for me to say, Cornelius."

"And your words have a literal sense, I believe. You know;

but it is hard for you to say. Why, Juniper, why leave it all to me for only your burial?"

"Because I'm dying, and I must leave it to someone. And the tomb also. I must have my tomb."

"I see. Rather grander than the Great Pyramid, from the plans here, but it could be handled; the Pharaohs hadn't our resources. But why me, Juniper? We were never really close."

"For the several good turns you have done me, Sharecropper, and for one bad turn. I am closing my affairs. I would pay you back."

"For the several good turns, or for the one bad turn, Juniper? Well, I've grown fat on tainted meat. I gobble where daintier men refuse, and I'll try this grand carcass yet. I take your deal, Juniper."

So they consummated it. And then Juniper Tell went home to die, a sucked-out man. Yet he had found curious pleasure in that last transaction, and the tomb would be a grand one.

A VISIT TO CLEVELAND GENERAL

SYDNEY VAN SCYOC

The credibility gap may be at its widest in hospitals. Whether they're telling you "Now, this won't hurt" or "There there, you'll be all right in just a few days," can you believe it? Here is a slightly nightmarish view of a hospital of the future—and like most nightmares, it's more believable than we'd like it to be.

His eyes carefully averted, Albin Johns swiped the depilatory off his jaws and splashed his face with water. He slapped his shirt shut. Then, forgetting, he glanced at the face in his mirror. It was a dark face, assertively intelligent, youthfully stern.

He blinked away, shuddering. His hand, lurching, cornered the jug of pink capsules, shoved one into his mouth. He gulped, as he did every morning.

He frowned at the jug's label. One daily. For memory.

It annoyed him that he couldn't remember why he swallowed that daily capsule. It seemed a purely automatic action of hand and mouth, a muscular act beyond voluntary control. True, some mornings the reason loomed momentarily as near as that disturbing face in his mirror. But it always slipped away.

Usually right after he swallowed the memory capsule.

The timespot chimed the hour. Johns's saucer thumped softly at the parlor window, announcing its arrival from the parking tower. Briskly, Johns strapped the speech recorder to his wrist, checking to be absolutely certain he had inserted a fresh capsule the night before.

It was a lucky break, just three months out of news school, to be sent to Cleveland General Hospital in Tac Turber's stead. Turber had done the local medical column for seventeen years, until his recent illness. No one at the *News Tribune* knew how long Turber might remain in Florida on recuperation leave—perhaps weeks; perhaps months. If Johns handled Turber's hospital feature well, he might be given other of Turber's regular assignments, until Turber returned.

Johns smoothed his hair nervously, resisting the impulse to check himself in the mirror. The saucer thumped again. Johns approached the parlor, drew a deep breath, and hoped.

In vain. "Albin, I was afraid you had overslept," his mother trilled from Washington state. She glowed upon his westerly wall, coffee cup in hand. "I was about to cast myself into the bedroom to check."

Limited though she was to a single plane, his mother nevertheless tripped the circuit that turned him defensive. "I had to order a clean shirt," he mumbled, glancing hopelessly at the window, so near, so far.

Her image sharpened. "Why didn't you order one last night? Before you slept?" Her face was much like the one he had confronted in his mirror, dark, assertively intelligent, promising myriad opinions aggressively articulated.

"I—I took care of everything else then. I refilled my recorder and ordered fresh shoes. Everything else." He edged toward the window and the waiting saucer.

She eyed him acutely. "I simply don't comprehend, Albin. Before the accident you would *never* have forgotten to order a fresh shirt. That's the sort of thing I could have expected of poor Deon. But you were always *meticulous*, Albin. I used to say, 'Albin is *my* son—Deon is his father's.'"

"I take a memory capsule every morning, Mother." Johns had reached the window. He tapped the pane. It slid. The saucer extended its entry hatch into the parlor.

"You take a memory capsule every morning, yet you're about to step out the window without even swallowing breakfast," she said bitingly. "You're more like Deon every day, Albin. Giving up your law studies for news school. Forgetting to order fresh shirts, going out without breakfast and then bolting a burger at some drop-in. Sometimes I think you're trying to *be* your brother." She leaned into the camera menacingly. "*Are* you trying to make it up to Deon for dying in that hideous crash? By taking up all his habits, his interests?" Her eyes narrowed. "Well, are you?"

"I—no, of course not." Johns backed across the room to the serving counter. Breakfast waited, seven green pills, two violet capsules, a wafer. Unfortunately his hand shook. Pills spilled across the carpet.

"No, *no!* Don't crawl around in your fresh clothes. Dial fresh pills, Albin," his mother shrieked from the state of Washington.

Abashed, Johns jumped up and dialed.

"I'm doing everything a mother can," his mother moaned. "I supervise your breakfast every morning. I see that at least you go out the window with nourishment in your stomach." Her features enlarged ominously. "Albin, do you want me to come there? Do you need your mother?"

Johns choked. "N-n-*no!*"

His mother's eyebrows crashed into her hairline. Her coffee cup clattered. "Well! Take a tranquilizer, Albin. We'll speak again this evening." With an angry flash, she ended transmission.

Albin Johns breathed again. He jabbed a tranquilizer from the serving counter and gulped. After a moment, he punched aspirin as well. For some reason, he had a headache.

Fortified, he stepped to the window.

"Albin, take care," his mother pleaded unexpectedly from the wall. "You know how I fret."

Sighing, he faced her. "Yes, Mother."

"You're all I have, Albin. Promise."

Meekly he promised. Then he scrambled into the waiting saucer.

He hung beside the building, composing himself. His mother harbored the notion that he had been injured in the saucer crash that had killed his elder brother, Deon, a year ago. It was

useless explaining, repeatedly, that if he had been involved, he would have memory of the accident, however fragmentary.

Unfortunately, he couldn't remember his brother Deon either.

That, he admitted, disturbed him. He was virtually certain Deon had not been a figment of his mother's imagination. His father spoke of Deon too, insistently. They had even taken down the family album, on Albin's last visit home.

Albin had refused to examine his dead brother's photo. Now he made excuses not to visit Washington. Better to deal with his mother two-dimensionally.

Composed, he took the controls. The saucer scudded over the city. Morning smacked blue against the dome.

Today he began his career in earnest, after years of anticipation. He had edited his high school paper for three years. Made top of the class at news school. He'd played newsman from the time he'd learned to write.

He smiled, remembering. As a boy, he'd taken grim pleasure in writing up his mother's monologues, word for word. ". . . *and* you forgot to clean your nails again." ". . . just like your father. You walked right out without leaving a message with the computer. I fretted for hours." "Your brother, Albin, would never—"

He halted the sound track. Backed it. Replayed. ". . . just like your father . . ." "Your brother, Albin . . ."

The saucer wavered, bucked under his suddenly spastic grip. A tight band crushed his chest. Sweat popped from his forehead.

Breathing deeply, he eased his grip on the saucer's controls. Systematically, he loosened the panic-knotted muscles of his body.

He had suffered occasionally moments of panic for months. Since the time he had supposedly been injured in the accident. With his brother.

Deon.

He gritted his teeth, ran the sequence through again. Accident. Brother: Deon.

He relaxed, smiling, almost proud. His mother was right. His brother's—Deon's death had been a disorganizing shock. Only time and patience could effect recovery.

He peered over the saucer rim. Cleveland General Hospital

jumbled glassy black below. Johns lowered the saucer to control altitude. The autoguide beamed by the hospital's parking system locked the manual controls. The saucer sank and swooped into the parking tower.

The saucer split. Johns glanced around the tower, feeling a return of tension. The saucer snapped shut behind him. Johns set his feet to the guide arrows that glowed across the pavement.

The arrows led him to a disk shaft. The disk hovered. Johns boarded. It settled swiftly. Johns stepped onto a second arrowed pavement.

The walls converged. Johns faced a dark, misty corridor. He hesitated, frowning back at the guide arrows. They unmistakably indicated the foggy darkness as his route into the hospital.

A streamer of pastel fog wafted from the tunnel, touched Johns's nostrils. His tensed muscles relaxed. He stepped into the soft, damp darkness.

The floor shuddered, carrying him forward. The walls glowed darkly, richly. The ceiling undulated. A low growling rumble throbbed through the tunnel, the grumble of distant machinery, monstrous but benign. Rainbowed fog sank lightly and refreshingly into Johns's lungs.

When the tunnel floor deposited Johns in the lobby, he was pleasantly relaxed, light of limb. A crisp elderly guard manned the computer console. Johns fumbled for press card and visitor's permit.

The guard fed both to the console. "*News Tribune,* heh? Your first visit to Cleveland General?"

Johns nodded, glancing uneasily around the vaulted lobby. It was disturbingly familiar, as if he had seen it before, from a different angle, with the sun slanting low through the rainbow panes.

The guard chuckled. "Well, you've seen our little establishment often enough on vidi. Makes you feel almost like you've been here in person."

Johns frowned. He didn't recall ever catching a vidi on Cleveland General. But there were, after all, any number of things he didn't remember. Despite his daily capsule.

The guard launched him with a friendly thump. "The blue

walkstrip will deliver you right to Dr. Jacobs's office. Write us up good!"

The blue strip slid across the lobby and trundled into another dark, mumbling tunnel. Johns inhaled hopefully. His entire body relaxed. His head dropped. His knees sagged. Consciousness faded.

Then he stood blinking in a sunlit office. The receptionist, smiling, said, "Dr. Jacobs will see you immediately."

Dr. Jacobs was an erect old whippet with piercing pale eyes. He gripped Johns's hand coldly, fixed Johns with a blue-white gaze. "We're sorry to hear of Mr. Turber's illness. I don't suppose you know the exact nature of that illness, Mr. Johns."

"No one seems to know exactly," Johns admitted.

Dr. Jacobs nodded tersely. "And I don't suppose you have ever been with us as a patient, Mr. Johns?"

Johns was oddly disturbed by the question. "I—I'm—certain I haven't."

Dr. Jacobs sighed, scowling. "Well, I suppose you've done your homework, at least. Reviewed Turber's columns of the past year."

Johns nodded. The columns were freshly in mind, rich with detail, crammed with statistic, but eminently readable.

"Then you know that through computer diagnostics and the automated nursing system, we've overcome the human factor that flawed medical care for centuries. We've achieved perfection in physical care.

"But over the years we've learned the importance of nonmedical factors. Even the best in purely physical care is not enough for the anxious patient, the depressed patient, the patient harried by financial or personal worries. And so all major modern hospitals maintain teams of trained social workers to lend moral and practical support to the patient. This facilitates an optimum rate of recovery. The patient returns to the community fit to function as a fully adjusted, contributing member of society."

Dr. Jacobs's pale eyes glittered fanatically. "Our senior social worker has consented to let you accompany her on her rounds today. Miss Kling remembers vividly the day when doctors maintained private practices, saw dozens of outpatients daily and

made all their diagnoses without computer aid." Dr. Jacobs speared Johns with a stern gaze. "You will be free to observe Miss Kling's working method, to draw upon her reminiscences of days past and to form your own conclusions about medical progress during the past quarter century."

"I'm very grateful," Johns faltered.

Jacobs swallowed, jabbed a desktop button. The far wall of the office slid. "Please step into the decontamination lock. Leave your garments and personal possessions on the shelf. Press the white button to release the fog. Then pull on the sterile coverall. Miss Kling will meet you in the outside corridor."

Johns hesitated. "I'd like to keep my recorder, sir."

"Mr. Johns, we cannot allow personal effects in the wards. There is constant danger of contamination." Jacobs glittered down his long, bleak nose. "Mr. Turber was well able to compose his reports from memory."

Reddening, Johns stumbled into the lock. The wall slid. Johns unstrapped his recorder with reluctant fingers, remembering the facility with which Turber had used names and dates, medical terms, statistics.

Sighing, he stepped out of his clothing.

Absentmindedly, he glanced down at his torso. His fingertips trembled unbelievingly over the sharp red scars that split his abdomen. He stared, uncomprehending. He shut his eyes, opened them again.

The scars remained.

Johns's hand jerked upward, as if reaching reflexively for the jug of pink capsules on his bathroom shelf.

Instead he encountered a white pushbutton. He jabbed it, desperately. A rainbow cloud puffed into the chamber. He inhaled heavily.

Gratefully, he felt the familiar relief of tension. He gulped the cloud. He sagged, unconscious.

Coolly the world returned. The ceiling glowed violetly, pinkly, greenly.

Gravelly laughter jarred into Johns's pastel coma. "You sucked that happy cloud so hard I had to wrestle you into your coverall myself."

Flushing, Johns sat up. "Miss Kling?"

She was anybody's tough old granny, a beefy, red-faced woman with hair of steel, a strong right arm and a ribald twinkle in her eye. "That's me. I must say you've healed up handsome, young Johns."

He stared at her blankly.

"Don't you remember me? That's how it goes—forget us the minute you leave us." She laughed raucously. "Well, let's go. I've got a workload that would kill an ox."

Disoriented, he followed her down a long, glowing corridor set at intervals with numbered steel doors.

"We'll do Ward 17 first." She keyed open a steel door.

Johns's legs carried him through the door, then turned to stone. His jaw froze, painfully. Sweat beaded over his suddenly marbleized face.

The ward was an expanse of black glass floor set with a maze of free-standing cubicles. Each cubicle was fully glassed, brilliantly lit, permitting full view of its interior. Music streamed through the ward, but beneath lay the rumble and grumble of unseen machinery. Small, gleaming robots twinkled over the glassy floor.

Johns groaned, unable to move.

Miss Kling boomed with laughter. She flourished an aerosol can that had been holstered at her belt. A minty cloud mantled them. "Gulp hard, but don't pass out again."

Blessedly, Johns's body became flesh again. The rock in his chest dissolved. He blinked away the last brittle web of panic.

"Just a touch of trauma. Happens to a lot of our patients when they come back. You start developing a tolerance for your amnesiac after a few months. We'll have to get your dosage adjusted."

Johns smiled condescendingly. He had never, of course, been hospitalized in his life. And the capsules he took were to improve his memory, not impede it. But he felt too blissfully at peace to argue.

"First stop: Maternity. Don't worry—everybody's decent." Chortling ribaldly, she piloted him across the glassy floor.

Johns surveyed the cubic maze loftily. Obviously a superior system. Each specimen housed in its own sterile environment.

Mothers napped, plucked eyebrows, stared at vidi. Strips of

sensor tape, at wrists and temples, transmitted patient data to the central monitor system. Mounted on each cubicle was a manual control panel.

Miss Kling halted before a glowing cubicle, cocked her head shrewdly at the unmaternal little figure within. "Good morning, Edna," she boomed.

The girl splashed against the glass, an overripe little plum with flaming hair and feral black eyes. "You! Where's my kid? Three days you've told me you'd get him up here next day for sure. Ten days, and I haven't seen him yet. First that campaign to get me to sign adoption papers. Ha! Then you're keeping him till I'm strong enough to hold him—you say. Now for three days this yack about him being deformed."

Miss Kling chuckled blandly. "Now you know we've been waiting to see if he could survive, Edna. We wanted to spare you seeing the little thing if he couldn't live."

"Look, granny, I told you—I wasn't so dopey I didn't see the kid down in delivery. I got a good look. Nine pounds plus and everything where it belongs. Lungs like a pair of bellows. A natural born fullback. The doctor said so himself. I—"

Miss Kling rasped prevailingly, "Now, Edna, be calm. I'll have Dr. Dover explain the cause of death to you in person. I want you to consider it God's mercy—"

"Death!" the girl shrilled.

"—the little fellow didn't live to suffer. A single girl couldn't hope to care for such a terribly handicapped child all by herself. The expenses alone . . ."

Miss Kling's stubby fingers crawled over the control panel. Rainbow fog seeped into the cubicle.

The girl's face discolored with rage. "I sure don't need any *man* to pay my way! I'm nineteen years old! I make good dollars dancing the nudie circuit. I come and go as I please. It's nothing to me Gordy ran out with that freak Gandi before I got him down to Marriage Hall."

Miss Kling smiled. "Dear, I wouldn't presume to judge your morals. I'm just Kling, your old granny in your time of trouble."

The girl's tirade ended abruptly. She blinked stupidly and sank to her knees in the swirling rainbow fog. "What did you say? About my baby?"

"Now, you saw the poor little fellow yourself, Edna. Poor guy."

Edna sobbed thickly. "Poor little kid. And it's all Gordy's fault! He's the one made our baby deformed. He's the one ran off—"

"Now, Edna, one of our pretty little nurse machines will come," Miss Kling cooed. "You're going to have an injection. It's just a little something we give all our unwed mothers. It won't hurt at all, and you won't have to worry about babies for years and years."

"Won't have to worry?" Edna murmured.

"No more about babies. Not for five years. Why, by then you might be married. You might even *want* another baby in five years."

Edna smiled softly, curled up on the floor. Her hair piled scarlet over her face.

Johns stared at her, peacefully asleep on the glassy floor, awash in pastel fog. Then he noticed Miss Kling had trundled away. He hurried after her. "I've never heard of that particular law, Miss Kling."

"What law?"

"That you sterilize unmarried mothers for five years."

"Who said there was a law?" She pulled an aerosol from her belt. "Air's getting stale." She clouded the air generously.

Johns frowned. "I wouldn't expect any individual to have power to make that kind of decision for another individual. I mean—" He stopped, blinking through the pale cloud in confusion.

Her voice poured over him, suggestively. "My girls are here to recuperate, young Johns. I don't want them worrying over laws, or making big decisions all by themselves. If a girl has learned her lesson why, I forget all about having her injected. But if I see she's going to land herself here again, get herself taken advantage of and then run out on, I give her the best protection we've got. That's what I'm here for, young Johns—to see my patients get what they need. Without having to fret themselves."

The cloud had slipped into Johns's lungs sweetly. Johns smiled. Then he had to wipe a tear from his eye. "That's—that's—" He couldn't express his feelings. To think that in this vast, impersonal

institution, doughty Miss Kling pitched right in and fought for her patients!

"Glad you understand." Miss Kling holstered the aerosol. She halted before a cubicle containing a slight, pale girl in her twenties. "Good morning, Trenda. I'm Mabel Kling, your social caller. How do you feel?"

The girl looked up listlessly. "I'm all right, thank you." She touched a tear off her cheek.

Miss Kling beamed. "The nurse will bring your brand new son in just a moment. Don't you want to pretty up a little, for your first visit?"

"My—son?" the girl said gropingly.

Miss Kling's fingers crawled over the control panel. The cubicle began to fog. Miss Kling chuckled reassuringly. "He's a real football player. Scaled nearly ten pounds this morning—you'd swear he was a couple of weeks old already. Lungs like a pair of bellows. And he has a mop of red hair. Just like your husband."

The girl sat up, confused. "But the baby wasn't even due for another three months. They gave me shots, but the pains wouldn't stop and—"

Miss Kling chuckled. "Happens all the time. We get girls having babies months and months early. Sometimes Old Momma Nature's adding machine doesn't use the same math the rest of us do."

The girl struggled to believe. "You mean the baby's really all right? He wasn't born too early?"

"You can see for yourself in a couple of minutes. You feel up to hefting a ten-pounder?"

"Oh, yes!" The cubicle was densely fogged. The girl's face flushed with excitement. "Why I—I even thought I heard someone say it was a girl!"

They left her excitedly dabbing her lips with color, lost in lavender fog.

Johns sobbed brokenly, overwhelmed.

"Now there's a case to make my job worthwhile," Miss Kling rumbled. "That sweet little girl lying there heartbroken, and I fixed everything up smart. By the time she gets the baby home, she won't even remember her sad hours."

Miss Kling launched herself upon another patient, but Johns was too choked with emotion to care.

Then Miss Kling checked her list and nodded with satisfaction. "That's Maternity. Time for a quick tour of Surgery." She chuckled. "Tac Turber was a real surgery fan—had to run him through butcher alley every time he came out."

Johns felt his mouth dry ominously.

"Coming?" she chuckled.

He followed her to and through the glowing corridor, each step shakier than the last. Finally he blurted, "I read someplace that they—used to take organs from one person and—transplant them in another. Kidneys and hearts and spleens. I even read they transplanted brains—sometimes."

Miss Kling keyed the door into Surgery. She eyed him narrowly. "Where did you read all that?"

"I d-don't remember. Not in Tac Turber's columns." Hopefully he ventured, "I guess they don't do much of that any more . . . ?"

Miss Kling chuckled. "Now, just think. If you had one man's heart, another man's liver, and maybe a lobe of somebody else's brain, you'd feel mighty confused, wouldn't you?"

"I—*yes!*" The word came with unexpected force.

"You can't go out and pull your weight if you aren't even sure who you are. Can you?"

"I—no. No."

"Now, do you think our fine doctors are going to devote themselves to turning out patchwork people? Sending people out into the world without an identity to call their own? Do you think old Granny Kling would let any patient of hers go wandering around without a name?"

"N-no. Of course not." He frowned, trying to follow her argument.

"Well, then?" Deftly she steered him into Surgery.

The floor stretched vast and white. The surgical cubicles were spacious, brilliantly lit, jammed with complex machinery. White clad figures huddled. Nurse machines scuttered. Auto-stretchers bore unconscious passengers silently.

"In the old days, the average doctor spent so much time on routine, he hardly had time for a good day's surgery. Now the

mech-clinics take care of the coughs and sniffles, the nurse machines bandage the cuts and the doctors can get down to business."

"I see," Johns said, dimly, swaying. Blood crashed in his ears. His hands twitched. Unable to resist, he tilted his head to stare at the ceiling. The patterned white on white held dreadful, compelling familiarity.

"I've never been here before," he croaked. He couldn't bring his head down. "I've never been in this hospital before. I've never seen this ceiling before. I've—"

Miss Kling jammed an inhaler into his nose. He struggled, then inhaled. After a moment, his head fell. He felt suddenly sluggish, torpid. "I've never been here before," he muttered.

"Of course you haven't," Miss Kling said sharply. "You don't have any scars. Do you?"

He frowned, trying to remember. "I—"

"Well, if you don't have scars, you haven't been in surgery. Have you?"

"I—no, of course not," he said with relief. Then he said, querulously, "My head hurts."

She touched the back of his head. "Here? Where they put the stainless plate in?"

He nodded. His head pounded with agony.

"Keep the inhaler in place. I'll get Little Bayer."

She returned with a spidery little machine. It gripped his arm, injected him briskly and spidered away.

The pain eased. Miss Kling removed the inhaler and puffed him thoroughly with aerosol. He inhaled, smiled foolishly, gratefully.

Miss Kling beamed upon him. "Well now, I bet you're tired with all that walking. How did you enjoy your tour of Surgery?"

"Very interesting," Johns mumbled foolishly. It seemed somewhat dim. In fact, he didn't really remember touring Surgery at all.

"Ummm hmmm," she said shrewdly. "Then we'll scoot on down the hall to the party."

He followed her into the long, glowing corridor, smiling agreeably. The party. He always enjoyed parties.

Too bad he couldn't remember about this one.

He was a little surprised when she keyed the door marked TERMINAL WARD.

"All our terminal patients have a little party before they go. But it's seldom they have dear ones to spend their last minutes with. Tac Turber's going to be mighty pleased."

Johns felt mildly surprised. "But Mr. Turber hardly knows me."

She chortled. "You'll be carrying on his hospital column, won't you? That makes you almost a son."

He drifted through the ward in her wake. Patients beamed rosily from her glassed cases. Miss Kling waved and yoo-hooed.

Finally Johns said, disbelievingly, "These people aren't all going to die, are they?"

"That's what they're here for," she said cheerfully.

He frowned around him, at the healthy, smiling faces.

"I nursed my own mother through her last illness," Miss Kling rasped. "Seventeen months I stood by, night and day. Couldn't afford a nursing machine, and I wouldn't send her to a home."

He murmured sympathetically.

"Knew as soon as the diagnosis was made she'd never recover. But in those days there wasn't anything to do but stand by and watch her waste off.

"I always remember that when my rounds bring me here. I'm proud my patients don't have to suffer through that. They go out quick and clean, with steak and whiskey on the house. And they know if there's any little piece that can be salvaged, why, our boys in butcher alley will find it. The spirit may die, young Johns—but the tissue lives on!"

They rounded a corner and confronted Tac Turber, glassed. Miss Kling rapped the glass, slid the entry panel.

Tac Turber bounced from the bed, a big man, burly in his hospital gown. "Well, well! Hear you got a promotion, Johns!" He pumped Johns's hand heartily.

Johns stammered, "Editor Downs is letting me handle your column until—until you get back."

Turber grinned. "Then it's yours for life, kid." He whacked Johns on the back. His eyes twinkled. "I guess everyone's heard I won't be back?"

"We heard you were going to Florida to recuperate from—whatever it is."

"Ah, the stories that make the rounds," Turber laughed. He sobered. "No, Johns, I'm journeying on to another life. A different life, but one certainly as useful as the one I've already led. My only regret is that I won't be able to do one last column. I've always wanted to write up the work they do down there in Surgery." He frowned. "But somehow it always slips my mind, once I'm back outside."

Miss Kling said, "You can't crowd everything in."

Turber shook his head impatiently. "No, that's not it." He turned back to Johns. "There's so much excitement, Johns, so much to see. Sometimes when I get back to the saucer, I can hardly remember writing the report I'm holding in my hand." He frowned thoughtfully. "I guess I stop to use one of the machines in the director's office. But afterward . . ." He shook his head, bemused.

Miss Kling stepped out to the control panel. Stepping back, she closed the entry panel. Rainbow fog drifted lazily up from the floor.

Turber sniffed. His frown faded. He grinned. "Well, it's been a good beat, Johns. You don't remember the old days, the old hospitals, the fear and uncertainty the human animal had to endure. And only the poor or the disturbed had someone like Miss Kling to help them out. Everyone else had to muddle through as well as he could."

The entry glass slid. A robotable wheeled in, bearing a feast.

Turber's eyes lit. "Looks like they catered for you too, Johns." He splashed Scotch into both glasses, then frowned. "They forgot you, Miss Kling."

Miss Kling scowled over the table. Her face sagged. "They never think to send a whiskey glass for me. I go to every party on the ward, but there's never a glass for me."

Turber lifted a panel and punched the table's controls. Utensils, napkins and whiskey glasses clattered out. Beaming, Turber poured into a dozen glasses. He lifted two. "A toast to immortality!"

"A toast to your immortal liver and lights! Haw!" Miss Kling roared, swaying. "You know something, boys? I was supposed to plug in fresh nose filters half an hour ago. And I forgot. Haw! I forgot my fresh filters—now I'm going to forget everything!"

Johns laughed to be polite. Then he laughed some more. Soon he was bellowing and snorting in the swirling pale fog, gulping the whiskey as fast as Turber poured.

Then the bottle was empty. The steaks lay congealed, untouched. There was a squeak of wheels, and an auto-stretcher rolled into the cubicle.

"My car!" Turber hopped aboard. He threw himself upon his back, roaring with delight. "Home, James!"

The stretcher molded itself around him. A mask fell heavily over his face. Turber flailed, then lay limp. The stretcher squeaked away.

Miss Kling regarded the congealed feast regretfully. "Young Johns, I think I've forgotten something. But I can't remember what."

Johns said solemnly, "They're going to cut old Tac up and use his parts, aren't they?"

"Haw! I'll never tell!" Miss Kling frowned, regarding him with bleary thoughtfulness. "But I do remember a boy. No, two boys. Brothers. A smart-looking dark kid. Just like you, in fact. And a big handsome redhead, a year or two older. Crashed their saucer down the skylane a piece. The dark one got the back of his skull smashed, and the redhead got it in the belly." She scratched her chin thoughtfully. "But I guess that's about all I remember."

Johns nodded owlishly. "I don't even remember that much. I forget it every morning at eight."

She nodded. Then light came to her eyes. "Haw!" She drew a small green can from her belt. "My remembering spray. I remember that much! If I whiff the wrong color air, I just spray myself green and everything comes back." She sprayed.

Johns sniffed. It was very fresh, very clean, the green. He inhaled deeply.

"There. Clears all the synapses. Or something like that." Miss Kling's facial contours firmed with returning character.

It was as if the green spray had penetrated forgotten chambers of his mind, clearing them of obstruction. "I remember *now*," he said, softly. "I remember—"

He was low over the countryside at the controls of his old saucer. A spring day. His brother perched nervously on the passenger's seat.

His brother—Albin. His dark, meticulous younger brother who had stopped in Ohio on his way east to law school.

He—Deon—grinned reassuringly. The saucer had developed a recurring shimmy a bit to the north. He was taking it low and slow back to the city.

The shimmy hit again. He handled the controls coolly. He was still working when the sudden, terrible shudder came. The gauges flashed peril. Alarms squalled. The controls jerked from his hands.

They were falling. He wrestled the controls, uselessly. He heard his brother's voice. "Deon, can't you—"

Impact. A few minutes of painful half-consciousness. He opened his eyes, saw his brother—Albin—sprawled nearby, a metal splinter imbedded in his abdomen, the back of his head smashed, the quick, meticulous brain destroyed.

Later he opened his eyes again, to watch the ambulance ship settle. The medic jabbed him. He drifted away.

"This one took it in the breadbasket," the medic said dimly, beside him.

"This one too. And the back of the head. Think they can combine the pieces?"

Consciousness-remembered faded, momentarily.

But the green mist had suffused the cubicle. Johns's mind remained mercilessly clear, relentlessly unfolding the film of memory. He screamed, hoarsely.

The voice beside him said, disinterestedly, "Oh, they'll patch something together."

Because next he would open shock-blurred eyes upon the ceiling—*that* ceiling, white on white. He would roll his head, see his brother—Albin—face down upon the adjacent stretcher. His own stretcher would detect consciousness, would clamp its mask to him. Then—

He fought as Miss Kling rammed the inhaler home. Then he fell heavily upon the bed Turber had vacated. Miss Kling pulled a mask from her belt and applied it to his face.

"You yourself again?" she rasped after a while.

"I guess so." It seemed an unfair question, since he wasn't absolutely certain just who himself was.

She removed the mask. A small mirror lay on the bedside

table. Johns studied the dark, intelligent face that was his, yet wasn't.

"I have a few more calls to make," Miss Kling rumbled thoughtfully. "But I'm going to get you right down to the hypno chamber, before you blow again."

Stumbling, he followed her down the glowing corridor to the door marked by the giant, hypnotic eye.

"You step inside, young Johns. There'll be someone right with you. They'll get your memory pruned back the way it should be —cut that dead wood out and throw it away. And they'll give you something to keep it that way."

He pushed the door obediently.

At the last moment, she squeezed his arm roughly. "You're a good boy, Johns. Both of you." Her lips scraped his cheek.

Numbly, he stepped into the darkened hypno chamber.

Minutes later—or was it hours?—he sat high above the cubic jumble of Cleveland General, at the controls of his saucer. He put the saucer on auto and glanced through the papers in his hand.

Funny. He must have used a machine in the director's office to type the material, while it was still fresh in mind. But he didn't remember doing so. And the stuff wasn't even his usual style. He'd have some rewriting to do.

He glanced over the paragraph about Miss Mabel Kling, senior social worker. He smiled. She sounded like a salty old character. Too bad he hadn't met her in person. But if Tac Turber was still in Florida on recuperation leave next month, perhaps Johns would be back.

He stuffed the papers into the carry-bin, along with the big jug of violet capsules labeled TWO DAILY. FOR MEMORY. Swooping into the clouds, he slid the hatch to feel the cool breeze of altitude on his face. The sun blazed. The skylanes stretched blue and inviting. Even at this altitude he could feel spring easing warmly, greenly over the earth.

A thought flowered in his mind as if it had been planted there. He examined it, smiled, and took it for his own: A great day to be alive!

LAURENCE YEP

One of the current astrologers' superstitions (knock wood) says that 1969 is the year in which California's San Andreas Fault will slip and cause most of the state to slide off into the Pacific. Though far-fetched, this is by no means an impossibility. Here Laurence Yep, a young Californian making an impressive debut, tells an after-the-Flood story filled with action and surprises.

I

LIGHT STIRS on the waters; gold ribbons cross the wrinkled water's back. In the dim awakening of the sun, the silhouetted V of a bird cra-a-cks the sky with a call. The ocean foams as their lips suck the rim of the beach. Sand grips my back like a myriad of stars moving down my spine. The sun comes up on tiptoe beneath the sun-burnt clouds and wine-stained sky. For us. Light catches upon her hair and sweeps down the myriad clouds of fiery tips. Green eyes flaked with gold rim the universe and

content rests leisurely in the quiet curve of her lips. I am satisfied.

Lecher, she flashed at me.

"What?" I said, tightening my arm about Pryn's waist.

You heard me, she frowned. *Your lust would get an elephant in heat.*

I laughed because that's the only thing to do when a telepath catches you. "You could tell me to take my arm away from you," I said.

She smiled and eased her shoulder even tighter against my side. *I like it, and even if I didn't, you are much too strong to argue with. I like you even if you are an English Major.*

I grunted and kissed her. "You be the brains, and I'll be the muscle." With my free hand, I felt the little gold ring and wondered how to propose. Meanwhile the girl, who had earned a Ph.D. in marine biology when she was twenty-two, leaned her head against my shoulder with a comfortable little sigh.

For a man with a bachelor's in English I suppose I should have come back with some witty repartee; but sitting on the beach with the invalided sun slowly limping into the sky and a girl fitted nicely into your arms, you don't want words.

"Shut up," I said. I felt Pryn's arm holding me closer, and we huddled together, watching the blond-maned sun trail its colored cloak across the waters.

As we walked down the stairs to the lab, I held her hand, listening to the Kids splashing happily in their tank. I've never quite gotten over the thrill of the contact. Not that I haven't held hands with other girls. Pryn needs the physical contact to permit exact communication and in the meantime, all the gentle warmth that's in her sits quietly in your soul until her words flash like liquid fire spiraling down my spine.

"What're we going to do today?" I asked Pryn.

She stopped me on the stairs. *I can see why you're named Deucalion.*

I squeezed her hand. "The name's Duke." And in the staccato bursts of fire that signify laughter I asked, "All right, why?"

Because you're always so curious, like Prometheus, your ancestor. She patted my head. *But thinking should be left to the people with Ph.D.'s.*

I grabbed her by her slim waist and lifted her up with her legs giving little kicking protests. "Some day you're going to be Mrs. Duke Selchey, and then what are you going to do?"

Educate you, ditch-digger.

I put her down, and she slipped an arm through mine. *And get your name changed legally.*

As we stepped into the room with technicians running about their tasks, the oscilloscope wrinkled its green face at us as the speaker rasped.

"Brood-love, male, female, statement."

That's the Kids' way of saying hello. Ollie and Ossie, the Kids' Christian names, have about ten words that they can say, and combinations of these widen their vocabulary. "Brood-love" best translates that ambiguous bond of mutual danger, feeding, birth, death and procreation that exists between us. It's pretty ambiguous but they wouldn't even know that much if it weren't for Pryn and her telepathy.

"Kids, get up here, will you?" Noe called out from the walkway over the tank. I looked at the tall man, fighting a losing battle with his hairline. The pouch like a pregnant guppy, peeping over the belt of his shorts. The hair on his legs is thin, starved on the fatty tissues there. His thick glasses keep sliding down his nose like a two-legged mischievous insect. But he's the father of our small family and the patriarch of all the newcomers to the Institute. Noe's a good man, if you don't take him too seriously. E.g., Noe insists that Pryn and I are the Kids even though the rest of the Institute gives that name to Ollie and Ossie. But Noe being the patriarch of the Institute, proxy father, we accept his white man's burden. After all, we of the Institute are all Selchey's kids.

Noe's father, after a fashion. He and my father were alike physically. That's what Noe remembers, and I suppose he's right. My own memory of John Gunnar is colored by time and several hundred feet of water. He remains a hearty laugh, bursting from the obscure, glaring heights with a pair of thick glasses shining like twin moons. I guess Noe treats me the way my father would: expressing unscientific affection awkwardly in scientific terms.

"Where were you Kids?" Noe asked.

"For a swim, Uncle Noe," smiled Pryn.

"Good, because I want to tell the dolphins that we're going out to the deep sea today," Noe said. Pryn slipped off her sandals and took off her lab coat, looking trim and delicate in her bathing suit. I followed with more dignity—Pryn claims it's just clumsiness.

I squinted in the water for the Kids. Someone shoved hard from behind, and I tumbled about in the water, waving my arms like some ungainly bird to regain my balance. I waved my fist at Ossie, the male of the Kids, who only gave that chittering cry that might be a laugh or a cluck of sympathy. I can't tell which with that eternal smile hung on his face.

Pryn swam up beside Ossie, placing a hand upon his head to give Noe's orders. I watched Pryn and admired her slim curves outlined by the light from the window in the front of the tank. Ollie nudged me from the side and I stroked her side affectionately. You get to adopt a paternal attitude toward the Kids after a while.

When Pryn had finished, she gave one last pat to Ossie and nodded toward me. With a last stroke I swam to Pryn's side, and we surfaced to face Noe, who was squatting on the walk over the tank.

"Get into your suits, Kids. I want to have as much daylight as possible," Noe said.

I trembled slightly in the locker room as the wet suit clung to my body like a flailed ray fish. I hate the idea of going into the water where I can't see the floor beneath, and going back to the City, the progenitrix of all my phobias, doesn't help them any.

I remembered that day that slashed my life and left me dangling by the threads. I was just thirteen when California slipped from the continent's side to repopulate itself with fishes. I know that we were having a big campaign about how we were number one in population, and maybe some fertility god was slighted at the lack of credit. I couldn't really tell you. All I know is that everything was knocked off the shelf like brittle china when the Flood hit.

II

I was in a school that lay at the feet of one of these steep hills that pimple the City—to be more precise, I was in the play court of our school running an errand for the teacher. The ground under me wobbled, and my eyes felt ready to crawl from my head as if I, and not the ground, were in a seizure. I laid my body next to the ground, feeling the deep throbs of its heart, and clung to the earth that was determined to shake me off its back.

A thin, black weed spread hair-thin roots on the back of the school building. The roots expanded, and parts of the wall fell, exposing the school's trembling internals. I covered my head and huddled into a small ball, hoping that whoever the destroyer was he would miss me.

Glass tinkled on the pavement as the bell shorted and began ringing wildly. Concrete thudded as someone screamed. Then the voice became the joined shrillings of children that the falling building quickly out-shouted. Then, except for the bell, there was quiet from the remains of the building.

I coughed in the thick dust that powdered the sun and wondered at the silence. A mountain of rubble quivered where the school had stood. Here and there, tall fingers of crooked steel gestured warningly. I crawled toward the pile of my school, splashing through a puddle that slowly extended arms from the lavatory. I sat on a large section of concrete, one hand touching the door of the lavatory that was still above the rubble.

I was alone in the tawdry slate-gray sky with the dust of the fallen masonry in my nose, smoke irritating my eyes from the fires in the neighboring buildings.

People shouted in the streets, some for help, others for a certain person, always with a lost-dog appeal. Then in the sudden second of guillotined time, the screaming reverted to one word: tidal wave. The shaking of the ground grew stronger as Neptune reared fear.

I clung to the door that lay against the rubble as I saw the glass wall of the wave towering over me, its green crystal face etched with lines and grooves like the bole of a tree. And frozen

in that face were chairs and a tree limb and one man's hand held vaguely out in greeting to someone.

I screwed my eyes tight into my face and buried my head into the door as the wave swept its skirts over me. The weight of ages pressed me into the board, and I knew how Jesus and St. Christopher and all the scapegoats felt. I held my breath as the ocean surrounded me, feeling the stale air inside me kicking its way out and seeing small bubbles escape from my mouth like exclamations. I was isolated in a dim, dirty world in which I couldn't breathe, catching vague glimpses of stilled ferns being twirled like trinkets by the water and the ghostly mouths of the houses open in silent cries.

Suddenly my head and body burst into the open air, and I gasped for breath, letting my head rise a little. Small waves came sweeping in, gently toying with my door. I pressed my head against the door until it bumped and poked at the belly of the hill.

Someone tried to pull me off my door, but I clung on tightly, so that they dragged me, door and all, onto the hill. I let go then. I still don't know who carried me up the hill. I was laid down on the top of the hill, coughing and sobbing as my lungs tried to readjust to breathing air. I was in a little green park, lying in the grass with the sun like a cheap bulb glaring in the sky.

People around me formed wet-sullen mobs about the two houses still standing on the hill top. An owner of one house opened his door and took in as many people as he could, but a fight broke out when he tried to turn the rest away. The fire and blood pounded in the mob. When the madness finally left, both houses were burning and everyone who could still stand was looking sadly at the flames.

I kept away from the mob, walking to the opposite end of the hill which was now an island. I huddled on the spot, looking out toward where our house should be, under the water, wondering why I was the only one left in an ugly, confusing world and wishing I weren't. Family, friends and even identity were lost in barely half an hour. I decided then that I wouldn't worry about friends or attachments or other natural things that could be so easily broken.

I went to an aunt in the Midwest where they don't have hills, or the ocean—just little lakes doing imitations, no surf at night,

no seagulls shrieking or foghorns belching and no fog—just an insipid cloud layer. I hated every moment of it.

I grew up among the corn and wheat fields like a strong weed. Aunt Gila tried but a weekend movie and apple pies aren't really that stimulating. Hot meals are nice, but man does not live by bread alone.

When Aunt Gila died, I bummed around for a while, picking up my B.A. in English along the way. I tried writing but after the first dozen rejection slips I let that slide away from me the way the City and my parents had.

Finally I decided to go back toward the Ocean and home. Sometimes I hitchhiked and where I did not pick up a ride, I worked until I had enough to go on. Sometimes I even walked; but by hook or by crook I traveled toward home, California or bust, until I reached New Milpitas, land's end.

There's not much left of the state now. The Sierras still left part of themselves hanging like a scar on the western side of the state, and there's a series of islands left from the City which did not collapse like the rest of the state. But few of them are occupied. So New Milpitas supplies the few people that are left in the state, and New Milpitas was where I stopped.

What few fishing boats there were weren't interested in going out to the "Deep Ocean" that was the City. And nothing, not even a Phi Beta Kappa key, kids, will charter a boat out in New Milpitas. You need the root of all evil to grease the wheels that make the world spin its topsy-turvy way.

All day I would sit on the splintered wharf and ask, "What was I?" Then answer: by my nature I am 1) a substance, 2) living, 3) sentient, 4) rational, and I belong to the species of Man. I know that much, thanks to old Perphyry, but what else am I? Not even a binary number on a magnetic bit because all the computers that held my old life are full fathom five. Once I thought I could be a teacher or a writer, but these were winter skins that could never hold on my slick, wet non-past. I have no identity, only the inheritance of my humanity.

I was sitting on the wharf one day, watching the sun wash the cold off the water's shoulders and letting these words worm inside my mind in an endless tape. A girl arching twin quills of water behind her, waving like an albino peacock, swam before me.

Her head dotted the golden scales rippling on the belly of the sea, and her white arms flashed as she swam.

Bitterness held the tear ducts of my eyes and twisted until I almost cried. Suicide seemed the best thing, and I looked to a peak on an island across from me. I would look down at the tinted pane of glass with the boats like snails and worms streaking little trails of slime behind them. From those Olympian heights, with arms crossed, I would dedicate my death to the frigidity of the world order and the fragility of existence and then leap gracefully off my island.

I debated whether dawn or dusk would be more appropriate symbolically when a hand touched my arm. Golden warmth sheathed my soul and content, that was almost near; but I fought the alien touch, welcomed the warmth and no more, preserving my remaining identity.

I could feel your emotions even from where I was, I heard my mind say.

I turned to see the girl, kneeling beside me, green eyes searching my face, drops of water streaking down like tears.

"What?" I asked, wrinkling my forehead in surprise.

Death is waste, death is the end of change and change is the purpose of man. She paused, then: *It's not natural.*

"Go join the Salvation Army," I said. Her nails bit into my arm, making slender crescents of blood. Angry fire burst through every nerve in my body and died down.

I'm sorry, the words came. She released my arm and placed her hand in her lap.

I picked up her hand and turned it over to examine the palm and fingers. She tried to pull away but I gripped her wrist tightly.

"Why did you come?" I asked angrily. "Why?"

We stared at each other, listening to the waters suck at the concrete legs of the wharf. I found myself resting on her green eyes, floating gently on the golden flakes. She shrugged and took my hand.

You felt so sad, she said. *I had to come.*

"And do you know why?" I asked with a half-smile.

She looked at me and nodded, which annoyed me. If anyone should know my problems, it should be me.

"Then tell me," I said. She shook her head, droplets gently falling.

That's for you to find out.

I looked out toward where the City should lay, watching a tubby fishing boat chug out into the deep, and I knew . . .

. . . the salt oceans charting across the rocks while Father stood encased in the solid crystal water with his big boots like an old skin still clinging, red in hand, contented; and Mother's face turned toward the sun with her green sunglasses like insect eyes outstaring her admirers; and me inside my sand forts and castles.

"What's that?" I asked, pointing at a clear shape with wet strings of flesh dangling from it. Fascinated by its foreign beauty, yet afraid of its death, I shuffled toward it timidly.

"A squid, dear," my mother said; and trembling, I kicked sand over it to hide it from my sight, and laughter fell from her white throat like spring blossoms: white, pure and gentle, as a memory should be.

You were from the city. Why don't you stay with us for a while? Her hand covered the memories for now like the tide and the buried heap.

"You're from the city too?" I asked. Few survived that June morning, and even fewer mention it. Some experiences like the Flood become more vivid than life, a historical fact that dominates your life unforgettably forever. Talking only strengthens the holds that the memory has on you.

I and Uncle Noe belonged to the Marine Institute. We were on an expedition along the coast in our ship when the Flood came.

"Did you know a Dr. Gunnar and his wife?" I demanded.

Yes, she exclaimed. *Dr. Gunnar's the big man that looks like Uncle Noe. And Mrs. Gunnar—I used to think she was the most beautiful woman in the world.*

The pleasure was a fireball bursting in me, comforting my mind in the soothing magma. Coincidences are funny, but they're good to have.

"They were my parents," I said.

Then you're Duke, she said with a smile. *Do you remember Pryn?*

I remembered the tall seventeen-year-old with legs tanned so that she looked like she stepped from a copper penny. Even despite the distaste I felt for girls before the Flood I had to admire her swimming.

"Yes," I said and smiled for the first time.

She took my hand and pulled me up. "You can't very well refuse my invitation now. We must be the only family that you have."

I looked out at the world with my ready-made identity. "Let's go."

And that was how the Prodigal returned to the Marine Institute and met Noe Selchey, father figure, last surviving director and thus the manipulator of vast reserves stored away in Eastern banks, and heartache to the insurance companies.

We called our island Parnassus because in the prediluvian days that was the name of the street at the top of the hill. When the bulldozers buried the street sign and threw up a tower of steel and glass that smiled like a surgeon's needle, we kept the name.

I came back to my home to work and forget; but of course there was no forgetting so close to home. The happiness that was my mother and father drowned, the screams of my friends being crushed moved dreamily in the giant, silent world of the ocean like memories. But if the ache of remembering remained, something else balanced the other side of living, and she was Pryn.

III

When he had rolled the Kids out of the pier and left them to the technicians to lower into the ocean beside the Institute's boat, I led her out to the end of the dock. She sat down on one of the pilings, idly drawing designs on the wharf with her finger which she had dipped in a nearby puddle. I took her hand and felt gold fire like fine thread weaving a cocoon inside my body.

I licked my lips. "Pryn, I know that you're several years older than me—"

Four years. Her hand tensed in mine. *I think I know what you want to ask and the answer is no.*

"At least think about it tonight," I said.

You're a dear sweet boy—

"Boy!" I sputtered.

Yes, you're a boy in many ways, and I love you for them. She touched my cheek with soft fingertips. *I love you even more than I love Uncle Noe; but for several reasons—including biological—I can never marry you.*

"I hate to be crude, but—"

Then we'll stop right here and be good . . . friends. She smiled and kissed me, then walked swiftly away toward the ship, sandals slapping the pier and my mind.

As I climbed to the bridge of our boat, Noe turned toward me. He adjusted his glasses which had slipped down his nose once more.

"Duke, I wish I'd been able to rear you with Pryn."

I shrugged as I sat down in a chair. "You couldn't know that there would be other survivors."

Noe nodded to one of the workers who tossed off the mooring ropes. He gunned the motor, and the ship shook itself, trembled in the cold waters, mumbling sleepily. Then the ship rumbled "John Henry" and "Ole Man River" to itself and then stumbled through the ocean, trailing white ribbons across its full-crested bow and down its forty-foot length. Pryn was looking out a window, watching the water collapse as I took the gold ring and saw it flash in the air as it joined so many other memories. I hate you, ocean, you weak synonym for ocean!

"It was most shoddy," Noe was shouting over the roar of the engines, "not to have investigated. You see, you're very special, Duke."

"Well, I'm here anyway."

"Yes, but where is here?" twinkled Noe.

"Do you want a metaphysical or geological answer?"

He laughed. "No, I mean who are you really, Duke?"

"Philosophy was the last thing I expected of you, Noe."

"It is and always will be," he said. "You should know better

than to take the obvious interpretation of reality. Very poor scientific method."

"I take it that you want another answer that I can't really give."

"What you'll be getting today should give you the answer, but remember"—he wagged a finger at me—"this principle of reinterpretation applies to even greater things. Remember when Lovisier once said: 'The Obvious is always the Least.'"

"Sure, Noe," I said and waited for him to quote from Newton and Fermi . . . but the experiment must have been important for Noe to break from his usual habits.

"I want you to get a tape from the old Institute building. It's in the basement in a room where the records of our secret projects were kept. It doubled as our future shelter and came equipped with an airlock. I've shown Pryn an old blueprint of where it is."

"And I'm the pack-mule?" I asked.

"No, you're the protection. There is no telling what may be left from the aquarium." Noe cut the engine and we coasted. "The tape you will bring back should teach two things." And he paused as he waited for me to supply them.

"I can only think of one," I said. "The principle of reinterpretation."

He smiled happily. "You'll be a scientist yet, Duke. Yes, it's a direct application. The other things which I felt should be revealed to you only after I could be sure you could stand the shock. You will know *who* you are, Duke."

"That must be some tape," I grinned.

"It's an oral report from John Gunnar, a good subordinate."

"Then we'd better be going," I said to Pryn, who nodded and left.

"Duke," Noe said before I left. "Be careful, boy." And he did a strange thing, giving me a clumsy hug, slipping into an awkward smile. Then he turned away quickly.

Pryn was waiting for me on the deck of the ship. I felt her hand on my shoulder. *I'm sorry, Duke. I didn't mean to hurt you.*

"I wish I'd never met you on that wharf," I said and tried to

shrug off her hand. "Anyway, it's time for me to be moving on. I've been getting restless lately."

I understand, she said.

I turned away from her then because I was tired of her being able to understand what I couldn't. I strapped my wrist light on, then my breather, which is a miracle product of Noe and the Institute's technicians. They're essentially an air-recycling helmet with portable communicators. A special attachment lets you translate the Kids' chatter into human speech, and an adapter which you hit with your chin lets you speak dolphin language. Unfortunately the breather can't communicate inflections or tones. Still, you get so that you recognize different voices. I taped some poison-tipped spears to the back of the breather and picked up my spear gun.

Pryn tapped my shoulder, and I held up the okay sign.

White bullets, sides slick with silver shroud of water, leapt in the air. Pryn slid over the side, and I followed with a clumsy jump. It was quiet underneath without complications, just sleep. Not even any dangerous currents any more since the oceanographical change.

Pryn put a hand on the Kids' head and gave them instructions on how to get to the Institute. The Kids shot through the water, delighting in the wall-less world, while we older folk followed at a more sedate pace, swimming close to the surface.

No one bothered to dynamite those parts of the City that are navigation hazards so Noe had to stop over one of the suburban areas where there is enough clearance. If he went further north and east the hotels and business offices would have spitted the ship with their spires. Only the buildings near the Fault collapsed; the others held up remarkably well, long enough to let their occupants drown.

Pryn stopped me on the border of the business district. *We go for six blocks and make a right, then go down.* I nodded my understanding. She removed her hand as we swam to join the Kids, who were circling lazily before the hedge of buildings while the grownups talked.

The buildings were silent, hidden in the dark, tall stone giants mired in the mud like the fingers of a swallowed giant. In the silent offices, over the rotting carpets, up and down the empty

elevator shafts, fish swim. Crabs scuttle along the sidewalks and floors where heels once clicked. And I return.

I snapped on my wrist light when I had estimated the distance covered at six hundred yards. Pryn snapped hers on, and we flippered down into the dark, silent City.

We fell like angels through the dark fluid night, legs pumping and flippers gently pushing at the water, watching the huddled shapes of the City grow shoulders and heads and teeth. My heart smashed inside my head, veins threatening to burst as we entered the City.

Two bullet shapes shot past us as the Kids raced each other toward the floor of the City.

I chinned the Dolphin transmit and braked. "Here-statement." I waited until the two shapes raced back to us before I continued down. I flashed my light on one of the side windows and read the flaking gold letters of a Dr. Roeke, D.D.S., and wondered if his skull lay somewhere in the mud below. I felt alien in this new dimension as we wandered down, conscious that I was an experimental probing of mankind, descending like an actor in the City's dreamed musings.

I remember a park that my parents took me to once, filled with giant sequoias and redwoods that drape years about themselves like moss. I felt alone, terribly alone. In daylight they seemed to sleep, but at night in the snicker of the sly moon, they move and stomp and whisper about the number of insects this year—and I knew they were talking about me. But in my home town there is only an expectant dimness, covered with slime and mud.

You're afraid, Pryn said as she touched my shoulder.

I shook my head, and she knew that I lied. She shrugged, and we swam on, over the park with its flower beds and benches, where the sunlight seemed to wait forever for you on the grass but the grass was gone and the trees dead in the salt water. Then down below I saw the U-shaped buildings of the Institute.

We paused above the center plaza with its red tiles now coated with ocean droppings, and the fountain with its twisted whales, non-functional, submerged in the element it once played with.

I chinned Dolphin transmit. "Stop-statement."

"Here-question," asked Ossie, twisting his body about the middle to point at the Institute.

"Affirmative-statement," I said.

Together with Pryn I swam toward the Institute. The doors were stiff, refusing to swing in, so I shot a bolt through the door. Loading the spear gun, I held it in my left hand while I cracked some of the pieces from the hole in the glass. I swore as I cut my hand on the glass, and Pryn tried to stop the blood that ribboned the water. In my wrist light, aimed casually inside, a dark blur stirred. I shoved Pryn roughly against the wall, shielding her with my body as a giant shape smashed through the glass, tossing shards everywhere. Flashing in my light as it turned for another pass, I could see the shark's teeth. I shot a bolt that arched over his back. Then it was charging, and I dropped the spear gun as I twisted my body, dodging and squirming around its teeth.

"Danger-statement," I shouted to the Kids as I pulled a spare spear from my back. The teeth came terribly close to my hand as I twisted out of the way. I jabbed with the spear, but the water robbed my blows of any force. Death is a pantomime beneath the water, fought in a dream ballet; and out of the dream a gray bullet crashed into the shark's side.

"Kill-statement," said Ossie.

The shark rolled away, righting itself with a flip of its tail. Then another gray bullet slammed into its side, and the shark rolled away again, biting in vain at the gray blur. The Kids circled the shark slowly, almost lazily. Ossie broke from the circle, smashing into the shark once more.

The shark tried to run away but the Kids, ramming its side one after another, herded it back toward the Institute. The shark circled warily, trying to keep track of both the Kids. Pryn joined my side with the gun that I had dropped. She pulled one of the spears from my back and aimed carefully.

I touched her arm. *I won't hit the Kids,* she assured me, and I let her go. I don't argue with Pryn. I was humbled long ago.

With a cry of *Kill,* Ossie detached himself from the circle and smashed into the shark's blind side. The shark rolled, righting itself again, and paused momentarily to glare about, belly exposed. Pryn fired. I watched the poison-tipped spear lodge in

the shark's belly. The shark rolled in the water. It might have been internal hemorrhaging caused by the Kids that finally reached the shark's brain or the fast-acting poison, but after convulsing in the water, the shark went limp and floated gently to the floor of the plaza. The Kids still circled over the shark. Then Ossie broke from the circle and cautiously nudged it.

Satisfied, the Kids came swimming to us then. Pryn touched both of them, and they chattered pleasantly.

I chinned Dolphin-transmit and said, "Brood-love," caressing their sides.

"What's happening down there?" Noe crackled, his voice robbed of inflection. "I heard you shout and the dolphins cry Kill. Is everyone all right?"

"I just cut my hand, Noe," I said.

"Well, be careful, it might draw predatory fish," he said.

I smiled and took the gun from Pryn, using it as a battering ram to enlarge the hole that the shark had made. Then I loaded the gun and told the Kids to stay put. Twisting my body through the hole, I flashed my beam around the room.

"Noe, how many teeth does a shark have?"

"It depends upon the species, why?"

"Scientific curiosity," I said and then waved for Pryn to join me. She twisted through the door and together we flippered through the lobby where they had once kept the alligators in a pit. I held the gun ready as I flashed my light about the different corners, but there were only the leering shadows.

IV

Idly I read the headings over the tanks in the corridors. The railings that had prevented the children from standing too close displayed shoulders of red rust. Salt water ate at the titles on the tanks. A shape blurred to my right; and I raised the gun in my hand until my left caught a sea horse in its beam.

Pryn stopped before a door. A skeleton lay before it, tattered rags clinging to its white-ridged chest. I opened it hesitantly

and flashed my light around in the darkness below. I swam over the skeleton in front of the door and down the stairs. The touch of a gentle current told me that Pryn was swimming beside me.

We were in a large room, filled with shelves that reached upward for ten feet. The fragments of books and bound papers rotted on the shelves. Pryn beamed her light at a door in the rear wall, and we flippered to it.

I gave her the gun, and she covered me while I strained at the wheel, turning the rusting inner parts. With a last screech, the tumblers clicked, and the door opened with a clang, as the water pushed me into the lock with it. I held myself off the wall when Pryn bumped against me as the water pulled her into the small room too. I waited until the room was almost filled before I pressed a button in front of me. The outer door slowly closed behind us, creaking mechanically. I lent my weight to it and with a final shove the outer door closed. Almost immediately a pump chuckled somewhere, and the water level began lowering. When I heard a soft hiss of air being pumped in, I let the breather hang down my back and took the gun from Pryn.

As soon as all the water had been pumped out except for a thin film, the inner door slid open. There was an electric light in the doorway which activated the room lights as I stepped through.

"They must have a small generator in here." I sniffed at the air. "And a re-cycling plant for the air. Noe wasn't kidding when he said that they were prepared for anything."

Pryn took my hand. *For almost everything.*

"Who expected the Flood?" I said as she drew her hand out of mine.

Pryn held up a finger for me to wait and, slipping out of her flippers, went into the small room and its filing cabinets around the walls. There were two desks in the room with typewriters and by one a small tape recorder.

I went over to one filing cabinet and slid out one drawer, leaving a little puddle in the room where the water trailed down my legs. I slipped off my flippers and took an armful of folders over to the desks.

Idly I flipped through the folders skimming over the titles

which Pryn would have explained to me if she had been around. Then one caught my eye: EXPERIMENTAL CROSSBREEDING No. 57.

My father had been a geneticist, Noe had told me, one of the best—naturally. But slowly as I read, the words burned themselves into my mind. I shivered in my wet suit.

"Reports on radiation-treated dolphin cells . . . successful fertilization . . . in tube . . . growth encouraging . . . in artificial womb . . . perfectly formed fetus . . . birth soon . . . Will it be an idiot? . . . normal birth, successful delivery . . . success after so many failures? . . . Infant responds to stimuli . . . tests indicate astonishing intelligence for age level, but can we measure by human standards? . . . As cranial capacity of dolphins is greater than man . . . Outwardly shaped like homo sapiens, but what is dolphinus sapiens? . . . Christened . . ."

A hand touched my shoulder at that moment. *What are you doing?* Pryn asked.

I gave the folder over to Pryn. "Do you know what they were doing at the Institute before the Flood?" Words rushed out without consideration now. "They were making test-tube babies, babies of a different species!"

Pryn took my hand and looked at me quietly. *Noe had told me about it. Does it mean that much?*

"Yes!" I grabbed her and shook her. "The report said that thing was growing with a high intelligence and—"

The words trailed off my tongue like beads of water. I looked about at the room, which suddenly seemed very small and very menacing.

"Let's get out of here fast," I said, pulling her toward the open airlock. She pulled back.

Does that make the creature a monster? she demanded, squeezing my hand.

"It's an alien. Its ancestors were dolphins."

Like Ollie and Ossie?

"They're different," I said feeling exasperation form ribs about my chest, imagining the alien creature listening on the other side of the walls. "They don't masquerade like men. This thing . . . it walks like a man, talks like them for all we know. Its genes were sculpted and molded. It's not natural."

What if it died in the Flood? asked Pryn.

"Fine. It's dead." I stopped dragging her across the floor and looked at her instead.

And if it lived? she asked, her hand tightening.

"Then," I said quietly, "I'll have to kill it. We can't allow it to live."

We? shrieked Pryn and ran for airlocks; as I stared after her, the tumblers of the ridiculous logic slowly clicked to constrict my panicked mind in their cold mechanical touch.

"Pryn, no!" I said desperately as the door slid shut. I ran for the door and pushed the button for the door to open, which it would after it had cycled Pryn. I tried to open the door with my hands but found no opening as water slowly danced into the other room. I banged savagely on the door and shouted, "I'm sorry, Pryn."

My fists slid down the smooth surface, and I turned back toward the desks. There was a tape on one that Pryn must have placed there. I listened to the lock recycling, then threaded the tape through the tape recorder. I sat down in the chair and smiled at my father's voice despite what had happened.

"Report for the Board of Directors upon Crossbreeding Experiment No. 103. The infant, named Deucalion or Duke, has responded to all tests successfully. There is every indication that the experiment will be as successful as No. 57. The infant will not have to be destroyed as were the others."

The words trickled down my mind from my icicle spine as the magnetic tape went on with the dead man's thoughts.

"Using Director Noe Selchey's spermatazoa and a dolphin ovum carefully developed by radiation as in experiment No. 57, the fertilized egg was—"

I left my father talking so calmly about the intelligence of his adopted son. To be conceived out of wedlock is one thing but to be conceived mechanically in a test tube is another. I have passions and blood inside me . . . and now I find that the passions and blood spring from a cold marble top under the glare of bright surgical lights.

I grabbed my gun and entered the airlock, putting on my flippers and waiting impatiently during the recycling process. "Pryn," I shouted once but the thick shelter walls kept her name in with me. I swam out of the lock—and the small, memory-

filled room where my identity stalked me in the dark waters. I swam up the stairs and over the skeleton at the doorway.

"Pryn," I shouted down the long corridors and snapped on my wrist light. Then it came like a hammer smashing into my mind like a pick.

"Kill-statement." Emotions rolled on green-oiled feet like those huge waves of the Flood. Fear. Revulsion. Then my soul crashed to the floor and my spine was ripped from my body. Contact, flesh to flesh. Blackness.

"Kill-question?" came a faint voice like Ollie's dipped in static.

"Affirmation-statement," said Ollie. I cursed the darkness and the mechanical reproduction that robbed voices of meaning.

I chinned Dolphin-transmit and shouted, "What's happening?" Then in silence I swore at the complex question.

I chinned Dolphin-transmit again and asked, "Danger-question?"

"Kill-statement," came Ossie's cry.

"Brood-love (meaning one of us four), danger-question?" I asked.

"Kill-statement," was Ollie's only answer.

I swam down the corridors, ignoring any of the shapes that might linger in the shadows. I charged across the lobby and stared at the gaping hole where the door had been and the crushed masonry like a mound of skulls set upon the steps. I looked through the door and saw a large blot, fifteen feet high, in the distance. Its jelly-like sac was translucent and wrinkled with three clumps of tentacles set evenly on the sides. Near the top of the sac was a large eye. In one the clumps of tentacles was a dark, pale slash that was Pryn.

"Kill-statement," cried Ossie and smashed into the creature's side. The creature whirled, its bulk too big for the Kids to move. Ossie darted away to circle above.

"Kill-statement," shouted Ollie and dove down, smashing into the creature's blind side; and the creature whirled frantically, trying to seize one of its tormentors.

"What's happening down there, Duke?" demanded Noe.

"Some monster's got Pryn," I said and raised my gun to fire.

"Kill-statement," chorused two shapes darting out of the

night of the ocean to thud into the body flailing awkwardly at them.

"Does it resemble an octopus and does it have three bunches of arms on the sides?"

"Yeah, and it looks as big as Alcatraz Island. Are you finished playing twenty questions?" I sighted at the shape, not wanting to hit Pryn when it whirled. Two bullets like extensions of my eyes came smashing into the pale white flesh of the creature.

"Don't shoot," said Noe urgently. "It's your brother."

"I don't see any family resemblance," I said and swam closer to make sure my shot would be true.

"Kill-statement," cried the Kids and smashed down in a sheathing of small bubbles. The creature whirled again, raising small, obscuring clouds of muck.

"You're not completely human, Duke," said Noe.

"I heard the tape," I said and caught the sob almost coming out of my throat.

"I have no children," Noe went on, "and well, you know almost all of the rest. But I also provided irradiated spermatazoa for several other fertilizations. That's a fertilized octopus ovum."

"What experiment is he?" I demanded as the dirt clouds settled.

"Pryn is No. 57. Her success encouraged us. You're No. 103. Number 203 is your brother," said Noe. "From his size he grew since the Flood. Don't kill him, Duke. He's your flesh and blood."

I laughed harshly at that.

"Kill-statement," chorused the Kids again. And suddenly, over Noe's commands and the Kids' cries, revulsion, not the sick, twisted feeling of my half-heritage, but revulsion at the slick, strange creature in my arm-extensions. Then pain at the bullet creatures that whirled out of night and smashed into me. Hate for all the smooth-skinned creatures. Kill. From the mud and slime, I whirled but the elusive creatures darted away. Kill.

I raised my gun and fired. I watched the spear shoot straight for the Eye that watched in curiosity. Like Cain I watched the blood spurt from the wound I had made in my brother. Blood plumed out. Pain. I grasped my head with my free hand and hunched over. Pain. Red Pain. My life. Tender isolation. Abundant small smooth-skin creatures to feed me. The isolation broken.

Hatred at the invaders. My lovely, lonely life in the darkness now flowing out of me. Pain.

The creature's sac swelled, and on a jet of water it shot deep into the blackness of the City; but it still held Pryn.

I tasted the blood oozing from the lips I had bit.

"Hurt-statement," said Ossie swimming toward me.

"Brood-love, danger, statement," I said chinning Dolphin-transmit.

"Kill-question?" asked Ollie.

"Affirmative-statement," I said quietly, feeling the last vestiges of the alien thought-patterns leave my mind like memories.

"You can't kill your own brother," pleaded Noe.

"Will you show some feeling, you fish?" I shouted.

"I am very broken up about it," said Noe, but the breather robbed it of any emotion.

"Then do something about it," I said and sat before Ollie's dorsal fin and we swam after Pryn.

"I can't do anything," replied Noe and he paused. "I love you all."

"Shut up!" I shouted to Noe.

Up ahead, dim in the light, was a white sac. I shut my mind to the pain flowing from it like its blood. Then suddenly it swelled its cheeks as we neared and shot over the park toward the tall stalks of stone and steel. In my light we passed small streamers of blood, like ribbons tossed away and floating gently down.

On the edge of the business district it paused, then shot ahead to smash into a building, lodging for a moment in the hole it had made, then gently eased down the side of the building, the white cheek of Pryn held out free and safe from the building. We shot down toward the creature as it slumped limp upon the sidewalk. The Kids circled warily while I swam to the still form of Pryn. I felt her heart and its beating, then turned toward the creature.

The creature idly waved a clump of tentacles at me. All the turbulent thoughts of my ancestry tumbled away into the creature's mind. *Kill,* came the thought, tinged with regret. I placed a spear into my gun and swam toward it. *Pain. Kill. Stop.*

The creature opened its mouth below its eye. Inside the slit, a pink mouth showed, and a small row of white teeth.

Kill, came the plea. I squeezed the trigger and watched the spear enter and sink into the soft skin. The flap closed over the spear, sucking at the shaft. The creature convulsed. *Flesh-to-flesh,* question?

Hesitantly I reached a hand toward its skin. My own flesh felt as if it were crawling back up my arm, but I touched him.

Brood-love question? came the trembling thought, edged with black isolation, as the blood slowly extended feelers into the dark sea.

"Affirmation, brother," I said and the flicker of light died and the creature was still.

"Danger-statement," said Ossie.

"Negation-statement," I said and lifted my hand from my brother's puckered flesh.

"What's happened," asked Noe.

"I'm just cleaning up your messes," I said quietly. "Lower a hook."

"What for?" demanded Noe.

"So I can bury my brother," I snapped and then went to Pryn and swam up to the surface where the sunlight was till playing. Then with Ollie and Ossie's help I brought my brother up to fill the deck of the ship. I'd bury my brother on the land where he could be eaten by worms and enjoy his heritage.

V

I looked out at the light that flaked off from the sun, shrugging off Noe's questions and clumsy apologies. It seems that the Kids are my step-brother and step-sister on my mother's side, thank God. I laughed at the irony and then shuddered. I fought the urge of my hands to claw at my flesh, to pick out each atom of dolphin. I envied my brother who had taken death so calmly in the end, after the pain of living had been too great.

"Duke?" Pryn called, stirring at my feet. I stopped thinking

about my new identity and took her groping hand from my ankle and treasured it between my half-human hands.

"I'm here," I said. And I shook in the wind that blew from the bay. I looked at the shattered eye, lid stopped from closing by the spear. A little red stream trickled down like the tears from mine. I wished I couldn't see.

What was that? she asked.

"Not what. Who," I corrected. "It's my brother."

No, and I saw the horror in her face and felt her hand shrink for a second from mine. I knew how Pryn felt to be condemned for her ancestry. I laughed quietly, because what did that make me—who could neither be one way or the other?

"And I'm the same as he. I can't even claim your pure ancestry." I raised my head to the bloody-eyed sun and shook the tears from my eyes. "Why did you ever come to me on the wharf?"

What? Then her hand tightened on mine as she realized what I intended. *No,* she commanded as I raised the spear gun slowly to aim at my head.

"You can't stop me this time like you did before. I have better reasons now," I said quietly and pulled the trigger. Her hand grabbed at my arm but too late. I smiled triumphantly as the pain shelved my mind into a deep, dark secret folder and filed under B for Black. The Selchey Boys together.

My mind exists no more. Sense, pain, worry have been dropped away. Loneliness deeper than the shell my brother possessed in the Institute possesses me now. Waste and I feel regret. Eye, I will eyes for my regret and they open, to Pryn, shining like the sun over me.

Gold flowed into me. The darkness retreats, and the sadness mellows, hammers into images to be known and used later. I felt her arm sheltering me in its curves. Softly the barriers of my mind slip one by one before her; and I know, not loneliness, but a total new world, a world that belongs to Pryn, and I relax.

I felt the bandage on my head. "I'm not dead?" I asked stupidly.

She tapped a finger against my forehead. *Too dense,* she said and smiled. And I knew that she had been in time after all.

"All right," I said. I had come two thousand miles to find myself in the City and on the City I would build something new.

The search begun on a wet hilltop; in the middle of the Flood the searcher is found. The symbols are calmed, not dead. The cycle on the wharf at New Milpitas has neared its origin and terminal. Bye-bye, baby brother.

Man lives in the context of nature. He plays by the rule of the game but unlike other creatures, he can manipulate the game by changing the rules. Each alteration requires man to adjust again to the new game and on and on, ad infinitum. I've forgiven Noe because I understand the lonely man who hid in science, the way my brother hid in the Institute.

We won't be going back to the Institute for a while. Noe gave me the boat to use for our honeymoon but first we'll go to New Milpitas so I can make an honest woman of Pryn. She just pinched me for that . . . so here we go.

Noe won't have to do any more changing. I made him promise that if there are any new species created, Pryn and I will do it. Pryn's genes were completely re-constructed, as were mine. And if it's a matter of fertility, remember that fertility was never a problem on my side.

WELCOME TO THE MONKEY HOUSE

KURT VONNEGUT, JR.

Kurt Vonnegut, Jr. has acquired so much recognition as a satirist that it's difficult to find an orthodox critic who will admit that most of his stories so far have been science fiction—apparently on the assumption that nothing that good could *be science fiction. (Which tells us something about critics, or orthodoxy.) But his novels PLAYER PIANO, THE SIRENS OF TITAN and CAT'S CRADLE are obviously sf of the best sort, and so are many of his short stories, such as the following barbed look at a future in which the prudes, with an overcrowded world for rationalization, finally have their way.*

So Pete Crocker, the sheriff of Barnstable County, which was the whole of Cape Cod, came into the Federal Ethical Suicide Parlor in Hyannis one May afternoon—and he told the two six-foot Hostesses there that they weren't to be alarmed, but that a notorious nothinghead named Billy the Poet was believed headed for the Cape.

A nothinghead was a person who refused to take his ethical birth-control pills three times a day. The penalty for that was $10,000 and ten years in jail.

This was at a time when the population of Earth was 17 billion human beings. That was far too many mammals that big for a planet that small. The people were virtually packed together like drupelets.

Drupelets are the pulpy little knobs that compose the outside of a raspberry.

So the World Government was making a two-pronged attack on overpopulation. One pronging was the encouragement of ethical suicide, which consisted of going to the nearest Suicide Parlor and asking a Hostess to kill you painlessly while you lay on a Barcalounger. The other pronging was compulsory ethical birth control.

The sheriff told the Hostesses, who were pretty, tough-minded, highly intelligent girls, that roadblocks were being set up and house-to-house searches were being conducted to catch Billy the Poet. The main difficulty was that the police didn't know what he looked like. The few people who had seen him and known him for what he was were women—and they disagreed fantastically as to his height, his hair color, his voice, his weight, the color of his skin.

"I don't need to remind you girls," the sheriff went on, "that a nothinghead is very sensitive from the waist down. If Billy the Poet somehow slips in here and starts making trouble, one good kick in the right place will do wonders."

He was referring to the fact that ethical birth-control pills, the only legal form of birth control, made people numb from the waist down.

Most men said their bottom halves felt like cold iron or balsawood. Most women said their bottom halves felt like wet cotton or stale ginger ale. The pills were so effective that you could blindfold a man who had taken one, tell him to recite the Gettysburg Address, kick him in the balls while he was doing it, and he wouldn't miss a syllable.

The pills were ethical because they didn't interfere with a person's ability to reproduce, which would have been unnatural and

immoral. All the pills did was take every bit of pleasure out of sex.

Thus did science and morals go hand in hand.

The two Hostesses there in Hyannis were Nancy McLuhan and Mary Kraft. Nancy was a strawberry blonde. Mary was a glossy brunette. Their uniforms were white lipstick, heavy eye makeup, purple body stockings with nothing underneath, and black-leather boots. They ran a small operation—with only six suicide booths. In a really good week, say the one before Christmas, they might put sixty people to sleep. It was done with a hypodermic syringe.

"My main message to you girls," said Sheriff Crocker, "is that everything's well under control. You can just go about your business here."

"Didn't you leave out part of your main message?" Nancy asked him.

"I don't get you."

"I didn't hear you say he was probably headed straight for us."

He shrugged in clumsy innocence. "We don't know that for sure."

"I thought that was all anybody *did* know about Billy the Poet: that he specializes in deflowering Hostesses in Ethical Suicide Parlors." Nancy was a virgin. All Hostesses were virgins. They also had to hold advanced degrees in psychology and nursing. They also had to be plump and rosy, and at least six feet tall.

America had changed in many ways, but it had yet to adopt the metric system.

Nancy McLuhan was burned up that the sheriff would try to protect her and Mary from the full truth about Billy the Poet—as though they might panic if they heard it. She told the sheriff so.

"How long do you think a girl would last in the E.S.S.," she said, meaning the Ethical Suicide Service, "if she scared that easy?"

The sheriff took a step backward, pulled in his chin. "Not very long, I guess."

"That's very true," said Nancy, closing the distance between them and offering him a sniff of the edge of her hand, which was

poised for a karate chop. All Hostesses were experts at judo and karate. "If you'd like to find out how helpless we are, just come toward me, pretending you're Billy the Poet."

The sheriff shook his head, gave her a glassy smile. "I'd rather not."

"That's the smartest thing you've said today," said Nancy, turning her back on him while Mary laughed. "We're not scared—we're *angry*. Or we're not even *that*. He isn't *worth* that. We're *bored*. How boring that he should come a great distance, should cause all this fuss, in order to—" She let the sentence die there. "It's just too absurd."

"I'm not as mad at *him* as I am at the women who let him do it to them without a struggle"—said Mary—"who let him do it and then couldn't tell the police what he looked like. Suicide Hostesses at that!"

"Somebody hasn't been keeping up with her karate," said Nancy.

It wasn't just Billy the Poet who was attracted to Hostesses in Ethical Suicide Parlors. All nothingheads were. Bombed out of their skulls with the sex madness that came from taking nothing, they thought the white lips and big eyes and body stocking and boots of a Hostess spelled *sex, sex, sex*.

The truth was, of course, that sex was the last thing any Hostess ever had in mind.

"If Billy follows his usual M. O.," said the sheriff, "he'll study your habits and the neighborhood. And then he'll pick one or the other of you and he'll send her a dirty poem in the mail."

"Charming," said Nancy.

"He has also been known to use the telephone."

"How brave," said Nancy. Over the sheriff's shoulder, she could see the mailman coming.

A blue light went on over the door of a booth for which Nancy was responsible. The person in there wanted something. It was the only booth in use at the time.

The sheriff asked her if there was a possibility that the person in there was Billy the Poet, and Nancy said, "Well, if it is, I can break his neck with my thumb and forefinger."

"Foxy Grandpa," said Mary, who'd seen him, too. A Foxy

Grandpa was any old man, cute and senile, who quibbled and joked and reminisced for hours before he let a Hostess put him to sleep.

Nancy groaned. "We've spent the past two hours trying to decide on a last meal."

And then the mailman came in with just one letter. It was addressed to Nancy in smeary pencil. She was splendid with anger and disgust as she opened it, knowing it would be a piece of filth from Billy.

She was right. Inside the envelope was a poem. It wasn't an original poem. It was a song from olden days that had taken on new meanings since the numbness of ethical birth control had become universal. It went like this, in smeary pencil again:

We were walking through the park,
A-goosing statues in the dark.
If Sherman's horse can take it,
So can you.

When Nancy came into the suicide booth to see what he wanted, the Foxy Grandpa was lying on the mint-green Barca-lounger, where hundreds had died so peacefully over the years. He was studying the menu from the Howard Johnson's next door and beating time to the Muzak coming from the loud-speaker on the lemon-yellow wall. The room was painted cinder block. There was one barred window with a Venetian blind.

There was a Howard Johnson's next door to every Ethical Suicide Parlor, and vice versa. The Howard Johnson's had an orange roof and the Suicide Parlor had a purple roof, but they were both the Government. Practically everything was the Government.

Practically everything was automated, too. Nancy and Mary and the sheriff were lucky to have jobs. Most people didn't. The average citizen moped around home and watched television which was the Government. Every fifteen minutes his television would urge him to vote intelligently or consume intelligently, or worship in the church of his choice, or love his fellowmen, or obey the laws—or pay a call to the nearest Ethical Suicide Par-

lor and find out how friendly and understanding a Hostess could be.

The Foxy Grandpa was something of a rarity, since he was marked by old age, was bald, was shaky, had spots on his hands. Most people looked twenty-two, thanks to anti-aging shots they took twice a year. That the old man looked old was proof that the shots had been discovered after his sweet bird of youth had flown.

"Have we decided on a last supper yet?" Nancy asked him. She heard peevishness in her own voice, heard herself betray her exasperation with Billy the Poet, her boredom with the old man. She was ashamed, for this was unprofessional of her. "The breaded veal cutlet is very good."

The old man cocked his head. With the greedy cunning of second childhood, he had caught her being unprofessional, unkind, and he was going to punish her for it. "You don't sound very friendly. I thought you were all supposed to be friendly. I thought this was supposed to be a pleasant place to come."

"I beg your pardon," she said. "If I seem unfriendly, it has nothing to do with you."

"I thought maybe I bored you."

"No, no," she said gamely, "not at all. You certainly know some very interesting history." Among other things, the Foxy Grandpa claimed to have known J. Edgar Nation, the Grand Rapids druggist who was the father of ethical birth control.

"Then *look* like you're interested," he told her. He could get away with that sort of impudence. The thing was, he could leave any time he wanted to, right up the moment he asked for the needle—and he had to *ask* for the needle. That was the law.

Nancy's art, and the art of every Hostess, was to see that volunteers didn't leave, to coax and wheedle and flatter them patiently, every step of the way.

So Nancy had to sit down there in the booth, to pretend to marvel at the freshness of the yarn the old man told, a story everybody knew, about how J. Edgar Nation happened to experiment with ethical birth control.

"He didn't have the slightest idea his pills would be taken by human beings someday," said the Foxy Grandpa. "His dream was

to introduce morality into the monkey house at the Grand Rapids Zoo. Did you realize that?" he inquired severely.

"No. No, I didn't. That's very interesting."

"He and his eleven kids went to church one Easter. And the day was so nice and the Easter service had been so beautiful and pure that they decided to take a walk through the zoo, and they were just walking on clouds."

"Um." The scene described was lifted from a play that was performed on television every Easter.

The Foxy Grandpa shoehorned himself into the scene, had himself chat with the Nations just before they got to the monkey house. "'Good morning, Mr. Nation,' I said to him. 'It certainly is a nice morning.' 'And a good morning to *you*, Mr. Howard,' he said to me. 'There is nothing like an Easter morning to make a man feel clean and reborn and at one with God's intentions.'"

"Um." Nancy could hear the telephone ringing faintly, naggingly, through the nearly soundproof door.

"So we went on to the monkey house together, and what do you think we saw?"

"I can't imagine." Somebody had answered the phone.

"We saw a monkey playing with his private parts!"

"No!"

"Yes! And J. Edgar Nation was so upset he went straight home and he started developing a pill that would make monkeys in the springtime fit things for a Christian family to see."

There was a knock on the door.

"Yes—?" said Nancy.

"Nancy," said Mary, "telephone for you."

When Nancy came out of the booth, she found the sheriff choking on little squeals of law-enforcement delight. The telephone was tapped by agents hidden in the Howard Johnson's. Billy the Poet was believed to be on the line. His call had been traced. Police were already on their way to grab him.

"Keep him on, keep him on," the sheriff whispered to Nancy, and he gave her the telephone as though it were solid gold.

"Yes—?" said Nancy.

"Nancy McLuhan?" said a man. His voice was disguised. He

might have been speaking through a kazoo. "I'm calling for a mutual friend."

"Oh?"

"He asked me to deliver a message."

"I see."

"It's a poem."

"All right."

"Ready?"

"Ready." Nancy could hear sirens screaming in the background of the call.

The caller must have heard the sirens, too, but he recited the poem without any emotion. It went like this:

> *"Soak yourself in Jergen's Lotion.*
> *Here comes the one-man population*
> *explosion."*

They got him. Nancy heard it all—the thumping and clumping, the argle-bargle and cries.

The depression she felt as she hung up was glandular. Her brave body had prepared for a fight that was not to be.

The sheriff bounded out of the Suicide Parlor, in such a hurry to see the famous criminal he'd helped catch that a sheaf of papers fell from the pocket of his trench coat.

Mary picked them up, called after the sheriff. He halted for a moment, said the papers didn't matter any more, asked her if maybe she wouldn't like to come along. There was a flurry between the two girls, with Nancy persuading Mary to go, declaring that she had no curiosity about Billy. So Mary left, irrelevantly handing the sheaf to Nancy.

The sheaf proved to be photocopies of poems Billy had sent to Hostesses in other places. Nancy read the top one. It made much of a peculiar side effect of ethical birth-control pills: They not only made people numb—they also made people piss blue. The poem was called *What the Somethinghead Said to the Suicide Hostess,* and it went like this:

> *I did not sow, I did not spin,*
> *And thanks to pills I did not sin.*

I loved the crowds, the stink, the noise.
And when I peed, I peed turquoise.
I ate beneath a roof of orange;
Swung with progress like a door hinge.
'Neath purple roof I've come today
To piss my azure life away.
Virgin hostess, death's recruiter,
Life is cute, but you are cuter.
Mourn my pecker, purple daughter—
All it passed was sky-blue water.

"You never heard that story before—about how J. Edgar Nation came to invent ethical birth control?" the Foxy Grandpa wanted to know. His voice cracked.

"Never did," lied Nancy.

"I thought everybody knew that."

"It was news to me."

"When he got through with the monkey house, you couldn't tell it from the Michigan Supreme Court. Meanwhile, there was this crisis going on in the United Nations. The people who understood science said people had to quit reproducing so much, and the people who understood morals said society would collapse if people used sex for nothing but pleasure."

The Foxy Grandpa got off his Barcalounger, went over to the window, pried two slats of the blind apart. There wasn't much to see out there. The view was blocked by the backside of a mocked-up thermometer twenty-feet high, which faced the street. It was calibrated in billions of people on Earth, from zero to twenty. The make-believe column of liquid was a strip of translucent red plastic. It showed how many people there were on Earth. Very close to the bottom was a black arrow that showed what the scientists thought the population ought to be.

The Foxy Grandpa was looking at the setting sun through that red plastic, and through the blind, too, so that his face was banded with shadows and red.

"Tell me—" he said, "when I die, how much will that thermometer go down? A foot?"

"No."

"An inch?"

"Not quite."

"You know what the answer is, don't you?" he said, and he faced her. The senility had vanished from his voice and eyes. "One inch on that thing equals 83,333 people. You knew that, didn't you?"

"That—that might be true," said Nancy, "but that isn't the right way to look at it, in my opinion."

He didn't ask her what the right way was, in her opinion. He completed a thought of his own, instead. "I'll tell you something else that's true: I'm Billy the Poet, and you're a very good-looking woman."

With one hand, he drew a snub-nosed revolver from his belt. With the other, he peeled off his bald dome and wrinkled forehead, which proved to be rubber. Now he looked twenty-two.

"The police will want to know exactly what I look like when this is all over," he told Nancy with a malicious grin. "In case you're not good at describing people, and it's surprising how many women aren't:

I'm five foot two,
With eyes of blue,
With brown hair to my shoulders—
A manly elf
So full of self
The ladies say he smolders."

Billy was ten inches shorter than Nancy was. She had about forty pounds on him. She told him he didn't have a chance, but Nancy was much mistaken. He had unbolted the bars on the window the night before and he made her go out the window and then down a manhole that was hidden from the street by the big thermometer.

He took her down into the sewers of Hyannis. He knew where he was going. He had a flashlight and a map. Nancy had to go before him along the narrow catwalk, her own shadow dancing mockingly in the lead. She tried to guess where they were, relative to the real world above. She guessed correctly when they passed under the Howard Johnson's, guessed from noises she heard. The machinery that processed and served food there was

silent. But, so people wouldn't feel too lonesome when eating there, the designers had provided sound effects for the kitchen. It was these Nancy heard—a tape recording of the clashing of silverware and the laughter of Negroes and Puerto Ricans.

After that she was lost. Billy had very little to say to her other than "Right," or, "Left," or "Don't try anything funny, Juno, or I'll blow your great big fucking head off."

Only once did they have anything resembling a conversation. Billy began it, and ended it, too. "What in hell is a girl with hips like yours doing selling death?" he asked her from behind.

She dared to stop. "I can answer that," she told him. She was confident that she could give him an answer that would shrivel him like napalm.

But he gave her a shove, offered to blow her fucking head off again.

"You don't even want to hear my answer," she taunted him. "You're afraid to hear it."

"I never listen to a woman till the pills wear off," sneered Billy. That was his plan, then—to keep her a prisoner for at least eight hours. That was how long it took for the pills to wear off.

"That's a silly rule."

"A woman's not a woman till the pills wear off."

"You certainly manage to make a woman feel like an object rather than a person."

"Thank the pills for that," said Billy.

There were 80 miles of sewers under Greater Hyannis, which had a population of 400,000 drupelets, 400,000 souls. Nancy lost track of the time down there. When Billy announced that they had at last reached their destination, it was possible for Nancy to imagine that a year had passed.

She tested this spooky impression by pinching her own thigh, by feeling what the chemical clock of her body said. Her thigh was still numb.

Billy ordered her to climb iron rungs that were set in wet masonry. There was a circle of sickly light above. It proved to be moonlight filtered through the plastic polygons of an enormous geodesic dome. Nancy didn't have to ask the traditional victim's question, "Where am I?" There was only one dome like that on

Cape Cod. It was in Hyannis Port and it sheltered the ancient Kennedy Compound.

It was a museum of how life had been lived in more expansive times. The museum was closed. It was open only in the summertime.

The manhole from which Nancy and then Billy emerged was set in an expanse of green cement, which showed where the Kennedy lawn had been. On the green cement, in front of the ancient frame houses, were statues representing the fourteen Kennedys who had been Presidents of the United States or the World. They were playing touch football.

The President of the World at the time of Nancy's abduction, incidentally, was an ex-Suicide Hostess named "Ma" Kennedy. Her statue would never join this particular touch-football game. Her name was Kennedy, all right, but she wasn't the real thing. People complained of her lack of style, found her vulgar. On the wall of her office was a sign that said, YOU DON'T HAVE TO BE CRAZY TO WORK HERE, BUT IT SURE HELPS, and another one that said THIMK!, and another one that said, SOMEDAY WE'RE GOING TO HAVE TO GET ORGANIZED AROUND HERE.

Her office was in the Taj Mahal.

Until she arrived in the Kennedy Museum, Nancy McLuhan was confident that she would sooner or later get a chance to break every bone in Billy's little body, maybe even shoot him with his own gun. She wouldn't have minded doing those things. She thought he was more disgusting than a blood-filled tick.

It wasn't compassion that changed her mind. It was the discovery that Billy had a gang. There were at least eight people around the manhole, men and women in equal numbers, with stockings pulled over their heads. It was the women who laid firm hands on Nancy, told her to keep calm. They were all at least as tall as Nancy and they held her in places where they could hurt her like hell if they had to.

Nancy closed her eyes, but this didn't protect her from the obvious conclusion: These perverted women were sisters from the Ethical Suicide Service. This upset her so much that she asked loudly and bitterly, "How can you violate your oaths like this?"

She was promptly hurt so badly that she doubled up and burst into tears.

When she straightened up again, there was plenty more she wanted to say, but she kept her mouth shut. She speculated silently as to what on Earth could make Suicide Hostesses turn against every concept of human decency. Nothingheadedness alone couldn't begin to explain it. They had to be drugged besides.

Nancy went over in her mind all the terrible drugs she'd learned about in school, persuaded herself that the women had taken the worst one of all. That drug was so powerful, Nancy's teachers had told her, that even a person numb from the waist down would copulate repeatedly and enthusiastically after just one glass. That had to be the answer: The women, and probably the men, too, had been drinking gin.

They hastened Nancy into the middle frame house, which was dark like all the rest, and Nancy heard the men giving Billy the news. It was in this news that Nancy perceived a glint of hope. Help might be on its way.

The gang member who had phoned Nancy obscenely had fooled the police into believing that they had captured Billy the Poet, which was bad for Nancy. The police didn't know yet that Nancy was missing, two men told Billy, and a telegram had been sent to Mary Kraft in Nancy's name, declaring that Nancy had been called to New York City on urgent family business.

That was where Nancy saw the glint of hope: Mary wouldn't believe that telegram. Mary knew Nancy had no family in New York. Not one of the 63,000,000 people living there was a relative of Nancy's.

The gang had deactivated the burglar-alarm system of the museum. They had also cut through a lot of the chains and ropes that were meant to keep visitors from touching anything of value. There was no mystery as to who and what had done the cutting. One of the men was armed with brutal lopping shears.

They marched Nancy into a servant's bedroom upstairs. The man with the shears cut the ropes that fenced off the narrow bed. They put Nancy into the bed and two men held Nancy while a woman gave her a knockout shot.

Billy the Poet had disappeared.

As Nancy was going under, the woman who had given her the shot asked her how old she was.

Nancy was determined not to answer, but discovered that that drug had made her powerless not to answer. "Sixty-three," she murmured.

"How does it feel to be a virgin at sixty-three?"

Nancy heard her own answer through a velvet fog. She was amazed by the answer, wanted to protest that it couldn't possibly be hers. "Pointless," she'd said.

Moments later, she asked the woman thickly, "What was in that needle?"

"What was in the needle, honey bunch? Why, honey bunch, they call that 'truth serum.'"

The moon was down when Nancy woke up—but the night was still out there. The shades were drawn and there was candlelight. Nancy had never seen a lit candle before.

What awakened Nancy was a dream of mosquitoes and bees. Mosquitoes and bees were extinct. So were birds. But Nancy dreamed that millions of insects were swarming about her from the waist down. They didn't sting. They fanned her. Nancy was a nothinghead.

She went to sleep again. When she awoke next time, she was being led into a bathroom by three women, still with stockings over their heads. The bathroom was already filled with the steam from somebody else's bath. There were somebody else's wet footprints crisscrossing the floor and the air reeked of pine-needle perfume.

Her will and intelligence returned as she was bathed and perfumed and dressed in a white nightgown. When the women stepped back to admire her, she said to them quietly, "I may be a nothinghead now. But that doesn't mean I have to think like one or act like one."

Nobody argued with her.

Nancy was taken downstairs and out of the house. She fully expected to be sent down a manhole again. It would be the perfect setting for her violation by Billy, she was thinking—down in a sewer.

But they took her across the green cement, where the grass used to be, and then across the yellow cement, where the beach used to be, and then out onto the blue cement, where the harbor used to be. There were twenty-six yachts that had belonged to various Kennedys, sunk up to their water lines in blue cement. It was to the most ancient of these yachts, the *Marlin,* once the property of Joseph P. Kennedy, that they delivered Nancy.

It was dawn. Because of the high-rise apartments all around the Kennedy Museum, it would be an hour before any direct sunlight would reach the microcosm under the geodesic dome.

Nancy was escorted as far as the companionway to the forward cabin of the *Marlin.* The women pantomimed that she was expected to go down the five steps alone.

Nancy froze for the moment and so did the women. And there were two actual statues in the tableau on the bridge. Standing at the wheel was a statue of Frank Wirtanen, once skipper of the *Marlin.* And next to him was his son and first mate, Carly. They weren't paying any attention to poor Nancy. They were staring out through the windshield at the blue cement.

Nancy, barefoot and wearing a thin white nightgown, descended bravely into the forward cabin, which was a pool of candlelight and pine-needle perfume. The companionway hatch was closed and locked behind her.

Nancy's emotions and the antique furnishings of the cabin were so complex that Nancy could not at first separate Billy the Poet from his surroundings, from all the mahogany and leaded glass. And then she saw him at the far end of the cabin, with his back against the door to the forward cockpit. He was wearing purple silk pajamas with a Russian collar. They were piped in red, and writhing across Billy's silken breast was a golden dragon. It was belching fire.

Anticlimactically, Billy was wearing glasses. He was holding a book.

Nancy poised herself on the next-to-the-bottom step, took a firm grip on the handholds in the companionway. She bared her teeth, calculated that it would take ten men Billy's size to dislodge her.

Between them was a great table. Nancy had expected the cabin to be dominated by a bed, possibly in the shape of a swan, but

the *Marlin* was a day boat. The cabin was anything but a seraglio. It was about as voluptuous as a lower-middle-class dining room in Akron, Ohio, around 1910.

A candle was on the table. So were an ice bucket and two glasses and a quart of champagne. Champagne was as illegal as heroin.

Billy took off his glasses, gave her a shy, embarrassed smile, said, "Welcome."

"This is as far as I come."

He accepted that. "You're very beautiful there."

"And what am I supposed to say—that you're stunningly handsome? That I feel an overwhelming desire to throw myself into your manly arms?"

"If you wanted to make me happy, that would certainly be the way to do it." He said that humbly.

"And what about *my* happiness?"

The question seemed to puzzle him. "Nancy—that's what this is all about."

"What if my idea of happiness doesn't coincide with yours?"

"And what do you think my idea of happiness is?"

"I'm not going to throw myself into your arms, and I'm not going to drink that poison, and I'm not going to budge from here unless somebody makes me," said Nancy. "So I think your idea of happiness is going to turn out to be eighty people holding me down on that table, while you bravely hold a cocked pistol to my head—and do what you want. That's the way it's going to have to be, so call your friends and get it over with!"

Which he did.

He didn't hurt her. He deflowered her with a clinical skill she found ghastly. When it was all over, he didn't seem cocky or proud. On the contrary, he was terribly depressed, and he said to Nancy, "Believe me, if there'd been any other way—"

Her reply to this was a face like stone—and silent tears of humiliation.

His helpers let down a folding bunk from the wall. It was scarcely wider than a bookshelf and hung on chains. Nancy allowed herself to be put to bed in it, and she was left alone with Billy the Poet again. Big as she was, like a double bass wedged

onto that narrow shelf, she felt like a pitiful little thing. A scratchy, war-surplus blanket had been tucked in around her. It was her own idea to pull up a corner of the blanket to hide her face.

Nancy sensed from sounds what Billy was doing, which wasn't much. He was sitting at the table, sighing occasionally, sniffing occasionally, turning the pages of a book. He lit a cigar and the stink of it seeped under her blanket. Billy inhaled the cigar, then coughed and coughed and coughed.

When the coughing died down, Nancy said loathingly through the blanket, "You're so strong, so masterful, so healthy. It must be wonderful to be so manly."

Billy only sighed at this.

"I'm not a very typical nothinghead," she said. "I hated it—hated everything about it."

Billy sniffed, turned a page.

"I suppose all the other women just loved it—couldn't get enough of it."

"Nope."

She uncovered her face. "What do you mean, 'Nope'?"

"They've all been like you."

This was enough to make Nancy sit up and stare at him. "The women who helped you tonight—"

"What about them?"

"You've done to them what you did to me?"

He didn't look up from his book. "That's right."

"Then why don't they kill you instead of helping you?"

"Because they understand." And then he added mildly, "They're *grateful.*"

Nancy got out of bed, came to the table, gripped the edge of the table, leaned close to him. And she said to him tautly, "I am not grateful."

"You will be."

"And what could possibly bring about that miracle?"

"Time," said Billy.

Billy closed his book, stood up. Nancy was confused by his magnetism. Somehow he was very much in charge again.

"What you've been through, Nancy," he said, "is a typical wedding night for a strait-laced girl of a hundred years ago, when

everybody was a nothinghead. The groom did without helpers, because the bride wasn't customarily ready to kill him. Otherwise, the spirit of the occasion was much the same. These are the pajamas my great-great-grandfather wore on his wedding night in Niagara Falls.

"According to his diary, his bride cried all that night, and threw up twice. But, with the passage of time, she became a sexual enthusiast."

It was Nancy's turn to reply by not replying. She understood the tale. It frightened her to understand so easily that, from gruesome beginnings, sexual enthusiasm could grow and grow.

"You're a very typical nothinghead," said Billy. "If you dare to think about it now, you'll realize that you're angry because I'm such a bad lover, and a funny-looking shrimp besides. And what you can't help dreaming about from now on is a really suitable mate for a Juno like yourself.

"You'll find him, too—tall and strong and gentle. The nothinghead movement is growing by leaps and bounds."

"But—" said Nancy, and she stopped there. She looked out a porthole at the rising sun.

"But what?"

"The world is in the mess it is today because of the nothingheadedness of olden times. Don't you see?" She was pleading weakly. "The world can't afford sex anymore."

"Of course it can afford sex," said Billy. "All it can't afford anymore is reproduction."

"Then why the laws?"

"They're bad laws," said Billy. "If you go back through history, you'll find that the people who have been most eager to rule, to make the laws, to enforce the laws and to tell everybody exactly how God Almighty wants things here on Earth—those people have forgiven themselves and their friends for anything and everything. But they have been absolutely disgusted and terrified by the natural sexuality of common men and women.

"Why this is, I do not know. That is one of the many questions I wish somebody would ask the machines. I do know this: The triumph of that sort of disgust and terror is now complete. Almost every man and woman looks and feels like something the cat dragged in. The only sexual beauty that an ordinary hu-

man being can see today is in the woman who will kill him. Sex is death. There's a short and nasty equation for you: 'Sex is death. Q. E. D.'

"So you see, Nancy," said Billy, "I have spent this night, and many others like it, attempting to restore a certain amount of innocent pleasure to the world, which is poorer in pleasure than it needs to be."

Nancy sat down quietly and bowed her head.

"I'll tell you what my grandfather did on the dawn of his wedding night," said Billy.

"I don't think I want to hear it."

"It isn't violent. It's—it's meant to be tender."

"Maybe that's why I don't want to hear it."

"He read his bride a poem." Billy took the book from the table, opened it. "His diary tells which poem it was. While we aren't bride and groom, and while we may not meet again for many years, I'd like to read this poem to you, to have you know I've loved you."

"Please—no. I couldn't stand it."

"All right, I'll leave the book here, with the place marked, in case you want to read it later. It's the poem beginning:

> *How do I love thee? Let me count the ways.*
> *I love thee to the depth and breadth and height*
> *My soul can reach, when feeling out of sight*
> *For the ends of Being and ideal Grace."*

Billy put a small bottle on top of the book. "I am also leaving you these pills. If you take one a month, you will never have children. And still you'll be a nothinghead."

And he left. And they all left but Nancy.

When Nancy raised her eyes at last to the book and bottle, she saw that there was a label on the bottle. What the label said was this: WELCOME TO THE MONKEY HOUSE.

THE DANCE OF THE CHANGER AND THE THREE

TERRY CARR

It may seem immodest for an editor to select one of his own stories in a "best of the year" anthology, so let it be known that the following story is included on the insistence of co-editor Wollheim who considers it one of the most exceptional presentations of a totally alien culture he has ever read—and that opinion was independently arrived at by enough members of the professional Science Fiction Writers of America for the tale to be nominated for this year's Nebula Award in its class. It's too early at this writing to say whether it will win, but surely, after reading it, you will agree that it deserved to be in the running. —DAW

THIS ALL HAPPENED ages ago, out in the depths of space beyond Darkedge, where galaxies lumber ponderously through the black like so many silent bright rhinoceroses. It was so long ago that when the light from Loarr's galaxy finally reached Earth, after millions of light-years, there was no one here to see it except a few things in the oceans that were too mindlessly busy with their monotonous single-celled reactions to notice.

Yet, as long ago as it was, the present-day Loarra still remember this story and retell it in complex, shifting wave-dances every time one of the newly-changed asks for it. The wave-dances wouldn't mean much to you if you saw them, nor I suppose would the story itself if I were to tell it just as it happened. So consider this a translation, and don't bother yourself that when I say "water" I don't mean our hydrogen-oxygen compound, or that there's no "sky" as such on Loarr, or for that matter that the Loarra weren't—aren't—creatures that "think" or "feel" in quite the way we understand. In fact, you could take this as a piece of pure fiction, because there are damned few real facts in it—but I know better (or worse), because I know how true it is. And that has a lot to do with why I'm back here on Earth, with forty-two friends and co-workers left dead on Loarr. They never had a chance.

There was a Changer who had spent three life cycles planning a particular cycleclimax and who had come to the moment of action. He wasn't really named Minnearo, but I'll call him that because it's the closest thing I can write to approximate the tone, emotional matrix, and association that were all wrapped up in his designation.

When he came to his decision, he turned away from the crag on which he'd been standing overlooking the Loarran ocean, and went quickly to the personality-homes of three of his best friends. To the first friend, Asterrea, he said, "I am going to commit suicide," wave-dancing this message in his best festive tone.

His friend laughed, as Minnearo had hoped, but only for a short time. Then he turned away and left Minnearo alone, because there had already been several suicides lately and it was wearing a little thin.

To his second friend, Minnearo gave a pledge-salute, going through all sixty sequences with exaggerated care, and wave-danced, "Tomorrow I shall immerse my body in the ocean, if anyone will watch."

His second friend, Fless, smiled tolerantly and told him he would come and see the performance.

To his third friend, with many excited leapings and boundings, Minnearo described what he imagined would happen to him after he had gone under the lapping waters of the ocean. The dance he went through to give this description was intricate and

even imaginative, because Minnearo had spent most of that third life cycle working it out in his mind. It used motion and color and sound and another sense something like smell, all to communicate descriptions of falling, impact with the water, and then the quick dissolution and blending in the currents of the ocean, the dimming and loss of awareness, then darkness, and finally the awakening, the completion of the change. Minnearo had a rather romantic turn of mind, so he imagined himself recoalescing around the life-mote of one of Loarr's greatest heroes, Krollim, and forming on Krollim's old pattern. And he even ended the dance with suggestions of glory and imitation of himself by others, which was definitely presumptuous. But the friend for whom the dance was given did nod approvingly at several points.

"If it turns out to be half what you anticipate," said this friend, Pur, "then I envy you. But you never know."

"I guess not," Minnearo said, rather morosely. And he hesitated before leaving, for Pur was what I suppose I'd better call female, and Minnearo had rather hoped that she would join him in the ocean jump. But if she thought of it she gave no sign, merely gazing at Minnearo calmly, waiting for him to go; so finally he did.

And at the appropriate time, with his friend Fless watching him from the edge of the cliff, Minnearo did his final wave-dance as Minnearo—rather excited and ill-coordinated, but that was understandable in the circumstances—and then performed his approach to the edge, leaped and tumbled downward through the air, making fully two dozen turns this way and that before he hit the water.

Fless hurried back and described the suicide to Asterrea and Pur, who laughed and applauded in most of the right places, so on the whole it was a success. Then the three of them sat down and began plotting Minnearo's revenge.

—All right, I *know* a lot of this doesn't make sense. Maybe that's because I'm trying to tell you about the Loarra in human terms, which is a mistake with creatures as alien as they are. Actually, the Loarra are almost wholly an energy life-form, their consciousnesses coalescing in each life cycle around a spatial center which they call a "life-mote," so that, if you could see the patterns of

energy they form (as I have, using a sense filter our expedition developed for that purpose), they'd look rather like a spiral nebula sometimes, or other times like iron filings gathering around a magnet, or maybe like a half-melted snowflake. (That's probably what Minnearo looked like on that day, because it's the suicides and the aged who look like that.) Their forms keep shifting, of course, but each individual usually keeps close to one pattern.

Loarr itself is a gigantic gaseous planet with an orbit so close to its primary that its year has to be only about thirty-seven Earthstandard Days long. (In Earthsystem, the orbit would be considerably inside that of Venus.) There's a solid core to the planet, and a lot of hard outcroppings like islands, but most of the surface is in a molten or gaseous state, swirling and bubbling and howling with winds and storms. It's not a very inviting planet if you're anything like a human being, but it does have one thing that brought it to Unicentral's attention: mining.

Do you have any idea what mining is like on a planet where most metals are fluid from the heat and/or pressure? Most people haven't heard much about this, because it isn't a situation we encounter often, but it was there on Loarr, and it was very, very interesting. Because our analyses showed some elements that had been until then only computer-theory—elements that were supposed to exist only in the hearts of suns, for one thing. And if we could get hold of some of them . . . Well, you see what I mean. The mining possibilities were very interesting indeed.

Of course, it would take half the wealth of Earthsystem to outfit a full-scale expedition there. But Unicentral hummed for two-point-eight seconds and then issued detailed instructions on just how it was all to be arranged. So there we went.

And there I was, a Standard Year later (five Standard Years ago), sitting inside a mountain of artificial Earth welded onto one of Loarr's "islands" and wondering what the hell I was doing there. Because I'm not a mining engineer, not a physicist or comp-technician or, in fact, much of anything that requires technical training. I'm a public-relations man; and there was just no reason for me to have been assigned to such a hellish, impossible, god-forsaken, inconceivable, and plain damned *unlivable* planet as Loarr.

But there was a reason, and it was the Loarra, of course. They lived ("lived") there, and they were intelligent, so we had to negotiate with them. Ergo: me.

So in the next several years, while I negotiated and we set up operations and I acted as a go-between, I learned a lot about them. Just enough to translate, however clumsily, the wave-dance of the Changer and the Three, which is their equivalent of a classic folk-hero myth (or would be if they had anything honestly equivalent to anything of ours).

To continue:

Fless was in favor of building a pact among the Three by which they would, each in turn and each with deliberate lack of the appropriate salutes, commit suicide in exactly the same way Minnearo had. "Thus we can kill this suicide," Fless explained in excited waves through the air.

But Pur was more practical. "Thus," she corrected him, "we would kill *only* this suicide. It is unimaginative, a thing to be done by rote, and Minnearo deserves more."

Asterrea seemed undecided; he hopped about, sparking and disappearing and reappearing inches away in another color. They waited for him to comment, and finally he stabilized, stood still in the air, settled to the ground, and held himself firmly there. Then he said, in slow, careful movements, "I'm not sure he deserves an original revenge. It wasn't a new suicide, after all. And who is to avenge us?" A single spark leaped from him. "Who is to avenge us?" he repeated, this time with more pronounced motions.

"Perhaps," said Pur slowly, "we will need no revenge—if our act is great enough."

The other two paused in their random wave-motions, considering this. Fless shifted from blue to green to a bright red which dimmed to yellow; Asterrea pulsed a deep ultraviolet.

"Everyone has always been avenged," Fless said at last. "What you suggest is meaningless."

"But if we do something *great* enough," Pur said; and now she began to radiate heat which drew the other two reluctantly toward her. "Something which has never been done before, in *any* form. Something for which there can be no revenge, for it

will be a *positive* thing—not a death-change, not a destruction or a disappearance or a forgetting, even a great one. A *positive* thing."

Asterrea's ultraviolet grew darker, darker, until he seemed to be nothing more than a hole in the air. "Dangerous, dangerous, dangerous," he droned, moving torpidly back and forth. "You know it's impossible to ask—we'd have to give up all our life cycles to come. Because a positive in the world . . ." He blinked into darkness, and did not reappear for long seconds. When he did he was perfectly still, pulsing weakly but gradually regaining strength.

Pur waited till his color and tone showed that consciousness had returned, then moved in a light wave-motion calculated to draw the other two back into calm, reasonable discourse. "I've thought about this for six life cycles already," she danced. "I must be right—*no* one has worked on a problem for so long. A positive would *not* be dangerous, no matter what the three and four-cycle theories say. It would be beneficial." She paused, hanging orange in midair. "And it would be *new*," she said with a quick spiral. "Oh, how *new!*"

And so, at length, they agreed to follow her plan. And it was briefly this: On a far island outcropping set in the deepest part of the Loarran ocean, where crashing, tearing storms whipped molten metal-compounds into blinding spray, there was a vortex of forces that was avoided by every Loarra on pain of inescapable and final death-change. The most ancient wave-dances of that ancient time said that the vortex had always been there, that the Loarra themselves had been born there or had escaped from there or had in some way cheated the laws that ruled there. Whatever the truth about that was, the vortex was an eater of energy, calling and catching from afar any Loarra or other beings who strayed within its influence. (For all the life on Loarr is energy-based, even the mindless, drifting foodbeasts—creatures of uniform dull color, no internal motion, no scent or tone, and absolutely no self-volition. Their place in the Loarran scheme of things is and was literally nothing more than that of food; even though there were countless foodbeasts drifting in the air in most areas of the planet, the Loarra hardly ever noticed them. They

ate them when they were hungry, and looked around them at any other time.)

"Then you want us to destroy the *vortex?*" cried Fless, dancing and dodging to right and left in agitation.

"Not *destroy,*" Pur said calmly. "It will be a *life*-change, not a destruction."

"Life-change?" said Asterrea faintly, wavering in the air.

And she said it again: "*Life*-change." For the vortex had once created, or somehow allowed to be created, the Oldest of the Loarra, those many-cycles-ago beings who had combined and split, reacted and changed countless times to become the Loarra of this day. And if creation could happen at the vortex once, then it could happen again.

"But how?" asked Fless, trying now to be reasonable, dancing the question with precision and holding a steady green color as he did so.

"We will need help," Pur said, and went on to explain that she had heard—from a windbird, a creature with little intelligence but perfect memory—that there was one of the Oldest still living his first life cycle in a personality-home somewhere near the vortex. In that most ancient time of the race, when suicide had been considered extreme as a means of cycle-change, this Oldest had made his change by a sort of negative suicide—he had frozen his cycle, so that his consciousness and form continued in a never-ending repetition of themselves, on and on while his friends changed and grew and learned as they ran through life-cycle after life-cycle, becoming different people with common memories, moving forward into the future by this method while he, the last Oldest, remained fixed at the beginning. He saw only the beginning, remembered only the beginning, understood only the beginning.

And for that reason his had been the most tragic of all Loarran changes (and the windbird had heard it rumored, in eight different ways, each of which it repeated word-for-word to Pur, that in the ages since that change more than a hundred hundred Loarra had attempted revenge for the Oldest, but always without success) and it had never been repeated, so that this Oldest was the only Oldest. And for that reason he was important to their quest, Pur explained.

With a perplexed growing and shrinking, brightening and dimming, Asterrea asked, "But how can he live anywhere near the vortex and not be consumed by it?"

"That is a crucial part of what we must find out," Pur said. And after the proper salutes and rituals, the Three set out to find the Oldest.

The wave-dance of the Changer and the Three traditionally at this point spends a great deal of time, in great splashes of color and bursts of light and subtly contrived clouds of darkness all interplaying with hops and swoops and blinking and dodging back and forth, to describe the scene as Pur, Fless and Asterrea set off across that ancient molten sea. I've seen the dance countless times, and each viewing has seemed to bring me maddeningly closer to understanding the meaning that this has for the Loarra themselves. Lowering clouds flashing bursts of aimless, lifeless energy, a rumbling sea below, whose swirling depths pulled and tugged at the Three as they swept overhead, darting around each other in complex patterns like electrons playing cat's-cradle around an invisible nucleus. A droning of lamentation from the changers left behind on their rugged home island, and giggles from those who had recently changed. And the colors of the Three themselves: burning red Asterrea and glowing green Fless and steady, steady golden Pur. I see and hear them all, but I feel only a weird kind of alien beauty, not the grandeur, excitement and awesomeness they have for the Loarra.

When the Three felt the vibrations and swirlings in the air that told them they were coming near to the vortex, they paused in their flight and hung in an interpatterned motion-sequence above the dark, rolling sea, conversing only in short flickerings of color because they had to hold the pattern tightly in order to withstand the already-strong attraction of the vortex.

"Somewhere near?" asked Asterrea, pulsing a quick green.

"Closer to the vortex, I think," Pur said, chancing a sequence of reds and violets.

"Can we be sure?" asked Fless; but there was no answer from Pur and he had expected none from Asterrea.

The ocean crashed and leaped; the air howled around them. And the vortex pulled at them.

Suddenly they felt their motion-sequence changing, against

their wills, and for long moments all three were afraid that it was the vortex's attraction that was doing it. They moved in closer to each other, and whirled more quickly in a still more intricate pattern, but it did no good. Irresistibly they were drawn apart again, and at the same time the three of them were moved toward the vortex.

And then they felt the Oldest among them.

He had joined the motion-sequence; this must have been why they had felt the sequence changed and loosened—to make room for him. Whirling and blinking, the Oldest led them inward over the frightening sea, radiating warmth through the storm and, as they followed, or were pulled along, they studied him in wonder.

He was hardly recognizable as one of them, this ancient Oldest. He was . . . not quite energy any longer. He was half matter, carrying the strange mass with awkward, aged grace, his outer edges almost rigid as they held the burden of his congealed center and carried it through the air. (Looking rather like a half-dissolved snowflake, yes, only dark and dismal, a snowflake weighted with coal-dust.) And, for now at least, he was completely silent.

Only when he had brought the Three safely into the calm of his barren personality-home on a tiny rock jutting at an angle from the wash of the sea did he speak. There, inside a cone of quiet against which the ocean raged and fell back, the winds faltered and even the vortex's power was nullified, the Oldest said wearily, "So you have come." He spoke with a slow waving back and forth, augmented by only a dull red color.

To this the Three did not know what to say; but Pur finally hazarded, "Have you been waiting for us?"

The Oldest pulsed a somewhat brighter red, once, twice. He paused. Then he said, "I do not *wait*—there is nothing to wait *for*." Again the pulse of a brighter red. "One waits for the future. But there is no future, you know."

"Not for him," Pur said softly to her companions, and Fless and Asterrea sank wavering to the stone floor of the Oldest's home, where they rocked back and forth.

The Oldest sank with them, and when he touched down he remained motionless. Pur drifted over the others, maintaining movement but unable to raise her color above a steady blue-

green. She said to the Oldest, "But you knew we would come."

"Would come? *Would* come? Yes, and *did* come, and *have* come, and *are* come. It is today only, you know, for me. I will be the Oldest, when the others pass me by. I will never change, nor will my world."

"But the others have already passed you by," Fless said. "We are many life-cycles after you, Oldest—so many it is beyond the count of windbirds."

The Oldest seemed to draw his material self into a more upright posture, forming his energy-flow carefully around it. To the red of his color he added a low hum with only the slightest quaver as he said, "*Nothing* is after me, here on Rock. When you come here, you come out of time, just as I have. So now you have always been here and will always be here, for as long as you are here."

Asterrea sparked yellow suddenly, and danced upward into the becalmed air. As Fless stared and Pur moved quickly to calm him, he drove himself again and again at the edge of the cone of quiet that was the Oldest's refuge. Each time he was thrown back and each time he returned to dash himself once more against the edge of the storm, trying to penetrate back into it. He flashed and burned countless colors, and strange sound-frequencies filled the quiet, until at last, with Pur's stern direction and Fless's blank gaze upon him, he sank back wearily to the stone floor. "A trap, a trap," he pulsed. "This is it, this is the vortex itself, we should have known, and we'll never get away."

The Oldest had paid no attention to Asterrea's display. He said slowly, "And it is because I am not in time that the vortex cannot touch me. And it is because I am out of time that I know what the vortex is, for I can remember myself born in it."

Pur left Asterrea then, and came close to the Oldest. She hung above him, thinking with blue vibrations, then asked, "Can you tell us how you were born?—what is creation?—how new things are made?" She paused a moment, and added, "And what *is* the vortex?"

The Oldest seemed to lean forward, seemed tired. His color had deepened again to the darkest red, and the Three could clearly see every atom of matter within his energy-field, stark and

hard. He said, "So many questions to ask one question." And he told them the answer to that question.

—And I can't tell you that answer, because I don't know it. No one knows it now, not even the present-day Loarra who are the Three after a thousand million billion life-cycles. Because the Loarra really do become different . . . different "persons," when they pass from one cycle to another, and after that many changes, memory becomes meaningless. ("Try it sometime," one of the Loarra once wave-danced to me, and there was no indication that he thought this was a joke.)

Today, for instance, the Three themselves, a thousand million billion times removed from themselves but still, they maintain, *themselves*, often come to watch the Dance of the Changer and the Three, and even though it is about them they are still excited and moved by it as though it were a tale never even heard before, let alone lived through. Yet let a dancer miss a movement or color or sound by even the slightest nuance, and the Three will correct him. (And yes, many times the legended Changer himself, Minnearo, he who started the story, has attended these dances—though often he leaves after the re-creation of his suicide dance.)

It's sometimes difficult to tell one given Loarra from all the others, by the way, despite the complex and subtle technologies of Unicentral, which have provided me with sense filters of all sorts, plus frequency simulators, pattern scopes, special gravity inducers, and a minicomp that takes up more than half of my very tight little island of Earth pasted onto the surface of Loarr and which can do more thinking and analyzing in two seconds than I can do in fifty years. During my four years of Loarr, I got to "know" several of the Loarra, yet even at the end of my stay I was still never sure just who I was "talking" with at any time. I could run through about seventeen or eighteen tests, linking the sense-filters with the minicomp, and get a definite answer that way. But the Loarra are a bit short of patience and by the time I'd get done with all that whoever it was would usually be off bouncing and sparking into the hellish vapors they call air. So usually I just conducted my researches or negotiations or idle queries, whichever they were that day, with whoever would pay

attention to my antigrav "eyes," and I discovered that it didn't matter much just who I was talking with: none of them made any more sense than the others. They were all, as far as I was and am concerned, totally crazy, incomprehensible, stupid, silly, and plain damn no good.

If that sounds like I'm bitter it's because I am. I've got forty-two murdered men to be bitter about. But back to the unfolding of the greatest legend of an ancient and venerable alien race:

When the Oldest had told them what they wanted to know, the Three came alive with popping and flashing and dancing in the air, Pur just as much as the others. It was all that they had hoped for and more; it was the entire answer to their quest and their problem. It would enable them to create, to transcend any negative cycle-climax they could have devised.

After a time the Three came to themselves and remembered the rituals.

"We offer thanks in the name of Minnearo, whose suicide we are avenging," Fless said gravely, waving his message in respectful deep-blue spirals.

"We thank you in our own names as well," said Asterrea.

"And we thank you in the name of no one and nothing," said Pur, "for that is the greatest thanks conceivable."

But the Oldest merely sat there, pulsing his dull red, and the Three wondered among themselves. At last the Oldest said, "To accept thanks is to accept responsibility, and in only-today, as I am, there can be none of that because there can be no new act. I am outside time, you know, which is almost outside life. All this I have told you is something told to you before, many times, and it will be again."

Nonetheless, the Three went through all the rituals of thanksgiving, performing them with flawless grace and care—color-and-sound demonstrations, dances, offerings of their own energy, and all the rest. And Pur said, "It is possible to give thanks for a long-past act or even a mindless reflex, and we do so in the highest."

The Oldest pulsed dull red and did not answer, and after a time the Three took leave of him.

Armed with the knowledge he had given them, they had no

trouble penetrating the barrier protecting Rock, the Oldest's personality-home, and in moments were once again alone with themselves in the raging storm that encircled the vortex. For long minutes they hung in midair, whirling and darting in their most tightly linked patterns while the storm whipped them and the vortex pulled them. Then abruptly they broke their patterns and hurled themselves deliberately into the heart of the vortex itself. In a moment they had disappeared.

They seemed to feel neither motion nor lapse of time as they fell into the vortex. It was a change that came without perception or thought—a change from self to unself, from existence to void. They knew only that they had given themselves up to the vortex, that they were suddenly lost in darkness and a sense of surrounding emptiness which had no dimension. They knew without thinking that if they could have sent forth sound there would have been no echo, that a spark or even a bright flare would have brought no reflection from anywhere. For this was the place of the origin of life, and it was empty. It was up to them to fill it, if it was to be filled.

So they used the secret the Oldest had given them, the secret those at the Beginning had discovered by accident and which only one of the Oldest could have remembered. Having set themselves for this before entering the vortex, they played their individual parts automatically—selfless, unconscious, almost random acts such as even non-living energy can perform. And when all parts had been completed precisely, correctly, and at just the right time and in just the right sequence, the creating took place.

It was a foodbeast. It formed and took shape before them in the void, and grew and glowed its dull, drab glow until it was whole. For a moment it drifted there, then suddenly it was expelled from the vortex, thrown out violently as though from an explosion—away from the nothingness within, away from darkness and silence into the crashing whipping violence of the storm outside. And with it went the Three, vomited forth with the primitive bit of life they had made.

Outside, in the storm, the Three went automatically into their tightest motion sequence, whirling and blinking around each other in desperate striving to maintain themselves amid the

savagery that roiled around them. And once again they felt the powerful pull of the vortex behind them, gripping them anew now that they were outside, and they knew that the vortex would draw them in again, this time forever, unless they were able to resist it. But they found that they were nearly spent; they had lost more of themselves in the vortex than they had ever imagined possible. They hardly felt alive now, and somehow they had to withstand the crushing powers of both the storm and the vortex, and had to forge such a strongly interlinked motion-pattern that they would be able to make their way out of this place, back to calm and safety.

And there was only one way they could restore themselves enough for that.

Moving almost as one, they converged upon the mindless foodbeast they had just created and they ate it.

That's not precisely the end of the Dance of the Changer and the Three—it does go on for a while, telling of the honors given the Three when they returned, and of Minnearo's reaction when he completed his change by reappearing around the life-mote left by a dying windbird, and of how all of the Three turned away from their honors and made their next changes almost immediately—but my own attention never quite follows the rest of it. I always get stuck at that one point in the story, that supremely contradictory moment when the Three destroyed what they had made, when they came away with no more than they had brought with them. It doesn't even achieve irony, and yet it is the emotional highpoint of the Dance as far as the Loarra are concerned. In fact, it's the *whole* point of the Dance, as they've told me with brighter sparkings and flashes than they ever use when talking about anything else, and if the Three had been able to come away from there *without* eating their foodbeast, then their achievement would have been duly noted, applauded, giggled at by the newly-changed, and forgotten within two life cycles.

And these are the creatures with whom I had to deal and whose rights I was charged to protect. I was ambassador to a planetful of things that would tell me with a straight face that two and two are orange. And yes, that's why I'm back on Earth

now—and why the rest of the expedition, those who are left alive from it, are back here too.

If you could read the fifteen-microtape report I filed with Unicentral (which you can't, by the way: Unicentral always Classifies its failures), it wouldn't tell you anything more about the Loarra than I've just told you in the story of the Dance. In fact, it might tell you less, because although the report contained masses of hard data on the Loarra, plus every theory I could come up with or coax out of the minicomp, it didn't have much about the Dance. And it's only in things like that, attitude-data rather than I.Q. indices, psych reports and so on, that you can really get the full impact of what we were dealing with on Loarr.

After we'd been on the planet for four Standard Years, after we'd established contact and exchanged gifts and favors and information with the Loarra, after we'd set up our entire mining operation and had had it running without hindrance for over three years—after all that, the raid came. One day a sheet of dull purple light swept in from the horizon, and as it got closer I could see that it was a whole colony of the Loarra, their individual colors and fluctuations blending into that single purple mass. I was in the mountain, not outside with the mining extensors, so I saw all of it, and I lived through it.

They flashed in over us like locusts descending, and they hit the crawlers and dredges first. The metal glowed red, then white, then it melted. Then it was just gas that formed billowing clouds rising to the sky. Somewhere inside those clouds was what was left of the elements which had comprised seventeen human beings, who were also vapor now.

I hit the alarm and called everyone in, but only a few made it. The rest were caught in the tunnels when the Loarra swarmed over them, and they went up in smoke too. Then the automatic locks shut, and the mountain was sealed off. And six of us sat there, watching on the screen as the Loarra swept back and forth outside, cleaning up the bits and pieces they'd missed.

I sent out three of my "eyes," but they too were promptly vaporized.

Then we waited for them to hit the mountain itself . . . half

a dozen frightened men huddled in the comp-room, none of us saying anything. Just sweating.

But they didn't come. They swarmed together in a tight spiral, went three times around the mountain, made one final salute-dip and then whirled straight up and out of sight. Only a handful of them were left behind out there.

After a while I sent out a fourth "eye." One of the Loarra came over, flitted around it like a firefly, blinked through the spectrum, and settled down to hover in front for talking. It was Pur—a Pur who was a thousand million billion life cycles removed from the Pur we know and love, of course, but nonetheless still pretty much Pur.

I sent out a sequence of lights and movements that translated, roughly, as "What the hell did you do that for?"

And Pur glowed pale yellow for several seconds, then gave me an answer that doesn't translate. Or, if it does, the translation is just, "Because."

Then I asked the question again, in different terms, and she gave me the same answer in different terms. I asked a third time, and a fourth, and she came back with the same thing. She seemed to be enjoying the variations on the dance; maybe she thought we were playing.

Well . . . We'd already sent our distress call by then, so all we could do was wait for a relief ship and hope they wouldn't attack again before the ship came, because we didn't have a chance of fighting them—we were miners, not a military expedition. God knows what any military expedition could have done against energy things, anyway. While we were waiting, I kept sending out the "eyes," and I kept talking to one Loarra after another. It took three weeks for the ship to get there, and I must have talked to over a hundred of them in that time, and the sum total of what I was told was this:

Their reason for wiping out the mining operation was untranslatable. No, they weren't mad. No, they didn't want us to go away. Yes, we were welcome to the stuff we were taking out of the depths of the Loarran ocean.

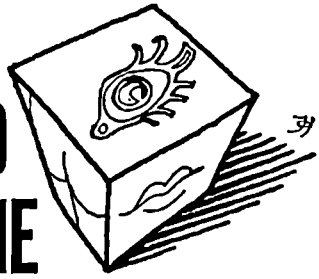
And, most importantly: No, they couldn't tell me whether or not they were likely ever to repeat their attack.

So we went away, limped back to Earth, and we all made our

reports to Unicentral. We included, as I said, every bit of data we could think of, including an estimate of the value of the new elements on Loarr—which was something on the order of six times the wealth of Earthsystem. And we put it up to Unicentral as to whether or not we should go back.

Unicentral has been humming and clicking for ten months now, but it hasn't made a decision.

SWORD GAME



H. H. HOLLIS

Here is a story for those of us who like solid, traditional science fiction ingredients: an eccentric professor, a beautiful young girl and a scientific puzzle. Plus a good humored author.

LATE IN THE afternoon of an ugly fall day, a forty-year-old topologist, employed to teach mathematics at a university he despised, bored by his students and frightened that he had done everything of significance in his life that he would ever do, blundered head down into a group of students handing out flowers and handbills. Before he could retrieve his dropped book bag and move on to continue composing in his head a memorable letter of resignation, his eye had fallen on a grubby teenage girl, and he was hopelessly entrapped.

Thinking to break the spell, he boldly said to her, "Aren't you in my class in elementary topology?"

She licked the raspberry snow cone she was holding and said, without a trace of a smile, "You must be mad. I'm not a student, just a wandering Gypsy fortuneteller." She held out the snow cone for him to take a lick. "Do you have a place where we could go, and I would tell your fortune?"

The mathematician knew she was no Gypsy, for your modern, urban Romany never allow themselves to be as dirty as she was. He was certain she was putting him on, but his mood of desperate boredom was such that he said, "Cra-a-a-zy, Gypsy! Fall up to my pad, and we'll tell fortunes and other lies till the world melts."

They left hand in hand under the eyes of forty witnesses. Within their own subculture, however, the rebel students conformed to a rigid code; and they would have died rather than give information to the fuzz or even to the Dean of the Faculty; so the professor's absolute breach of propriety in picking up a student went unremarked and unreported.

When he had taken off her clothes, the girl was every bit as dirty as she appeared to be, but this only made him more determined to take advantage of her. Later, he persuaded her to shower by promising to bathe with her; and she looked, when she left, with her rum-colored hair in two long plaits, like a fresh-scrubbed Girl Scout.

The crust turned out to be her equivalent of the makeup that squares use; when he came past the common the next day, she was as delectably grimy as ever, and she held a fresh snow cone purple with grape syrup.

The two joined hands and went directly to his apartment. The young woman hardly spoke until late in the evening, after they had showered together. She was toweling her hair, and the information came indistinctly. "I went to the Provost's office today," she said, "and told him about us."

The professor was so uncharacteristically content he contemplated the ruin of his academic career with pleasure. "All right, big mouth, how are we going to live?"

"I'm not really a Gypsy," she said, "but I really was in a carnival once, when I ran away before. I know how to dodge swords in a sword basket. Could you be an East Indian sword magician? We could pick up a show somewhere and travel right along with them."

"By God," cried the topologist. "I can do better than that! It's been a long time since I did any engineering work, but I have a little laboratory curiosity that will just fill the bill. Come

with me to the animal house in the basement of the Psychology Department, and I'll show you something you won't believe."

"Try me, baby," replied his inamorata. "You'd be surprised at what *I* can believe."

They repaired to the noisome cages in which the experimental animals were kept, and the professor secured a sturdy mouse. Selecting a few strips of clear plastic from a rack, he lit a burner and uncorked a container of plastic adhesive. In a few minutes, the topologist had cobbled up a container which defied the eye to define its exact shape, but which most often seemed to be a lumpy cylinder. In a trice, he thrust the mouse in and clapped the square top down. The mouse could be seen through the plastic, but he seemed to be in a single fixed position, floating in midair with his paws and tail extended just as when he was inserted.

Heating a pointed rod, the professor pierced a hole first in one side of the bulgy cylinder, and then in the other. In a moment, when the long pin had cooled, he introduced its sharp point through the hole again, and having located the mouse properly, skewered the rodent through the heart so that the point of the sharpened rod came out the second hole. Swinging the cylinder over the girl's hand with a little shake, the professor deposited a tiny drop of bright arterial mouse blood on her wrist.

As she looked at the crimson drop, tears appeared, sparkling on her eyelids. "Big deal, big man," she said. "Mouse murder. I don't think a wild mouse would walk into that plastic pipe, do you?"

"Heart of my heart," he replied. "It's not a *pipe*. It isn't even a cylinder, and it certainly isn't a mousetrap. This is a tesseract, as you would know if you had ever read a popular work on topology."

"Oh, all right, I know what a tesseract is: an expanded cube, a cube with a cube on each face. That mouse cage doesn't look like six cubes surrounding a cube to me."

"No, otherwise our mouse would be dead all over. This is a tesseract which is a temporal illusion."

"A *temporal* illusion!"

"Yes, my dear," he said, "a temporal illusion. Topology teaches us that mathematical properties can be quite independent of ap-

parent shape. A circle is still a circle, even though it *looks* like a scalloped pie crust—as it may, if it is drawn on a wavy surface. This mouse cage is a cubed cube which is partly displaced along the dimension of time. That's why it appears formless and shifting. Here, feel it."

Sure enough, to the touch it was solid enough: a cube with a cube on each face; but even when held in the hand and sensed by touch, the object still appeared to be a rippling cylinder, and the mouse still appeared to be stock still.

"This mouse looks dead. Eccch!" she said.

Deftly the topologist withdrew the tiny sword, pried off the top, and shook Mr. Mouse out in his hand, where the charming little fellow at once sat up on his haunches and waved his forepaws, as if demanding cheese.

"How did you do that?" cried the girl.

"Simply, really," replied the thinker. "The exterior flickers in and out of this moment of time, because of the subtle twist I imparted to the shape when I made it; but the inside is *fixed* in time, because much of the internal mass is stretched all the way around the very large but finite continuum of space and time which is our universe. This little rascal's 'time' has passed so slowly that the powerful regenerative and repair processes of his body have worked as if instantaneously, and the apparently mortal wound dealt him was no more than a pin prick. Do you think you could get into a large tesseract like this one and let me run a rapier through you . . . knowing it would do you no harm?"

She clapped her hands in pleasure. "Oh yes, lover! That'll be so much more of a mind buster than some old wicker basket that everybody knows I dodge the sword in."

So they hied themselves to a plastic supply house and thence to a dog-and-pony show that was in the neighborhood, and for a long time, everything went like a guided trip with Tim Leary. Audiences were transfixed by the girl's beauty. She was considerably cleaner under the difficult circumstances of carnival trouping than she had been when soap and water were conveniently to be had, and when the topologist drove a sharpened fencing foil through her lovely body, clad as lightly as local ordinance allowed, the crowds gasped. When the box was rotated to show

the point of the sword incarnadined, strong men fainted. Later they would press forward and pay a dollar apiece to examine the tiny wound as it closed up and disappeared, usually midway up her delightfully articulated rib cage.

Trouping the carnival together was an idyll. Still, even if forty years is not *old,* neither is it young; and the doctor of mathematics at last realized that he was bored again. The girl's vocabulary never enlarged itself appreciably, and the snow cone remained her favorite confection. The difference in their ages was sufficient for their basic sex attitudes to be irreconcilable. For him, a certain overtone of the forbidden gave carnal love its highest stimulation; but for her sex was just another natural function, like perspiring or excreting, so that the level of their lovemaking remained at mere technical proficiency.

After the fashion her generation had adopted, she was faithful. There might be others later, her manner implied by its playfulness; but for now, she did not share her favors out. He was denied even the sour spice of jealousy.

At the end of their last appearance each evening, she was often wearing only transparent pantaloons and a shiny little brief, and when they had walked back to their quarters, she would hold up her arms and, stamping her naked feet softly like a harem dancer, say, "Help me get ready for my bath, lover." If he approached and began to roll down the waist band of her sateen pants, she would drop her arms and begin to undress him too. Later they would bathe each other.

They had almost no other conversation.

At last the idyll became an enslavement to the professor. He found some respite when he learned that a Hindu tortureman, their neighbor in the show, who slept on nails, poured boiling lead in his eyes, and so on, was a Failed M.A. in Mathematics from the University of Rawalpundi. By talking to him, the topologist was able to keep from going quite mad. Still, he was a little off. He loathed the girl and dreamed only of what he would do when she left him; but she would not leave and continued to raise her arms to him and stamp her feet, as exquisitely irritating as a kitten which continues to claw one's sock after one has done playing with it.

He began to do everything badly, even their turn in the show,

which had never much interested him after he put the big tesseract together. Once he missed the hole with his thrust, and the plastic deflected the point of the foil into his toe. This was a real wound, in real time, not spread along the space-time continuum, and was extremely painful for a week. Each time he limped, the pain made him more resolved to be quit of her, until at last his fertile topological mind saw the way.

He had a regular armorer's store of swords with which he made play in their act, and one evening he laid handy, next to their bed, a very passable imitation of a Roman short sword. In its day, that design had been a great technological breakthrough for the weapons makers, and it was beautifully shaped to destructive stabbing.

When they came in that night, he skimmed off her tawdry cape with a flourish, and as she lifted her round arms and stamped one foot, he peeled the bottom of her costume off in one extravagant gesture, and then gave her the pleasure of chasing him and tearing off his garments. As they were toweling each other after their ritual coupling and bathing, he kissed her, tender but preoccupied, as it were, and said, "My dear, would you mind letting me practice that last pass in the act? I just don't seem to be putting that foil home right."

She was so pleased to have him pleasant again that she scampered into the spare tesseract they had in the quarters, a few drops from the bath still glistening on one flank. She turned her face up to him with a grin that almost made him reconsider the irreversible act he had planned. Then he remembered the months of boredom and hardened his heart. Decisively, he tapped the top home. Without a tremor, he put the Roman sword as nearly into her heart as he could judge its location through the subtle time shifting in the plastic. With that, he snapped off the blade, so that the sword *also* was within the spread, slowed effect of the moving time field; and gave the construction a knowledgeable kick or two which caused it to collapse into itself. Instead of a knobby cylinder, as it had appeared when it was an expanded cube blurred by time, it now appeared to be a single cube about six inches on a side, with an abstract pattern in each face.

The collapsed cube was much heavier than it looked, but not

nearly as heavy as the girl, for a substantial part of her mass was distributed along the whole of the cylindrico-spherical space-time continuum. As he gazed at the mirror-like surface of one square face, an eye and eyebrow slowly spread flatly across the plane; but there was neither panic nor recognition in the eye as he stared into it. He realized that to the occupant in this peculiar box, his movements were so fast in appearance as to be a mere blur. Whistling, the professor packed the weighty cube into his bag, and strolled off the lot, casually remarking to his Hindu neighbor, "So long, we're jumping this flea circus."

By changing into one of his old natural shoulder suits at the bus station, he simply disappeared as Grax, the Swordsman of Time (his carnival billing), and reincarnated himself as a topologist of considerable talent who had been vaguely on sabbatical for a while.

The frustrations that had so nearly consumed him before his adventure seemed to have been burned and purged away. He settled with pleasure into a new academic routine and became expert in its execution. Once in five years, perhaps, he had a really promising student; but the scarcity no longer bothered him. As he advanced up the ladder of academic tenure and preferment, he was able to place a few brilliant people about himself, and life was as good, he now knew, as it was ever going to be.

The heavy cube was a paperweight on the desk of his apartment. No one else ever recognized the shifting abstract patterns in its silvery sides as the topologized contours of a dead human being. At great intervals, there would drift across one face or another of the prism some recognizable anatomical feature with which the professor was intimately acquainted, and he would feel a vague regret for his act and a light stirring, as of the ashes in a cold grate, of his appetite for the one adventure of his life. He would stuff his pipe, turn the pages of the *Journal of Topology* and immerse himself once more in the calm, sweet life of the university.

When he was sixty years old and almost bald, there appeared in his classes the student of his dreams, who understood everything he said in his arcane specialty and replied with fresh and

elegant insights into the intuitive sort of math in which they both delighted. Objectively, he knew the boy was neat and trim rather than handsome, yet subjectively (and privately, of course: he was very proper now), he always felt the boy was "good looking." This feeling puzzled him until one day he had to move a stack of old college annuals and, browsing, as one will, he suddenly came on his own senior picture. His best student was enough like his youthful self to be a double, or at least a younger brother.

Shortly after that, the professor confided the story of his escapade to the boy. He could not have said why he did so, and it certainly was not wise; but the student was beginning to betray the same weird talent the professor had for translating topological abstractions into hardware that did peculiar things; and somehow the tale just told itself. He had become very fond indeed of his disciple. The boy, who affected the total amorality which was the fashion of *his* generation, was nevertheless shocked; but he was also intrigued. He picked up the box and shook it. "Maybe she's alive," he said. "After all, inside it's only been an instant. Let's unlock it."

"Don't be ridiculous," the professor said, taking the cube back and setting it on his desk in a definite manner. "In the first place, she's not alive. While she's in the construction, there's no evidence of the crime. Second, if she were alive, she might go to the police; or worse yet, she might expect me to take up that dreadful, boring liaison with her again. And in the third place, we *can't* unlock it. That was the whole point of breaking the sword. The cube's a closed system now, and no part of the interior is available to this aspect of time and space. Eventually she'll be equally distributed through the entire universe. Absolutely not! I forbid you to think about it. When are you going to give me that paper on topological re-intervertebrates?"

Conversation languished, and the student shortly took his leave. A day or two later, the professor found the boy fiddling the edges of the cube with a device made of mirrors, and they had a genuine quarrel, but gradually fell back almost into their former sympathetic teacher-student relation.

One day the student appeared in the professor's apartment with a tiny glittering piece of metal in his hand, the shape of

which was extraordinarily hard to see. The whole thing seemed to flicker in and out of the mathematician's sight. "What the hell have you got there?" he asked the boy in irritation.

"It's a chrome-plated, self-powered, retractable, inverted, universally jointed and fully gurgitated mobius strip," the young man said.

The professor laughed. Every schoolboy knows a mobius strip is a band one end of which has been given a half twist before joining it to the other to make a circlet. The consequence of that little twist (try it) is that the mobius strip is a geometric figure which has only one side and one edge; though common sense, looking at it, can plainly discern two sides and two edges. However, a pencil drawn down the center of "one side" will meet its own mark and there will then be seen to be a line drawn on "both sides" . . . because there *is* only one side, you see?

But every schoolboy knows that's all a mobius strip is: just a curiosity. Anything else you do to it changes it from being a mobius strip. So it can't be improved by chroming it or powering it or anything else. The professor pointed all this out to his student in a rather overbearing manner. He finished by saying, "And I suppose you're going to tell me it has some practical application."

"Yes," said the boy, "it has." And before the professor could stop him, he had reached across the desk, penetrated into the shiny cube with one half of the glittering mobius strip and fished out the shattered remnant of a short Roman stabbing sword.

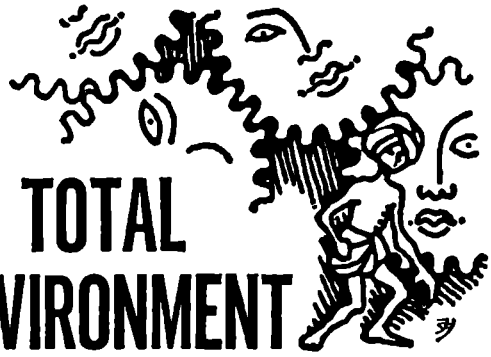
In an instant, the old familiar bulgy cylinder was present on the desk, full size, and in another, a completely naked young woman had leaped out of it onto the floor. In stupefaction, the professor saw a pink, three-cornered scar, obviously just healing, on her rib cage, and noticed there were still drops of water glistening on her flank.

"Sweetheart!" she cried, "what was that *butcher* knife? I had to dodge like crazy!" And she engulfed the student in a squid-like embrace. A moment later she saw the professor and recoiled.

"Who is this bald-headed old creep?" she said. "I draw the line at voyeurs, honey." And with a wink and a nod, she and

the student dumped the professor into the expanded cube and collapsed it about him.

Even in the endless instant which is the inside of his device, time has begun to seem long to the topologist. He knows the girl and the student are long since dust in the whirling, kaleidoscopic world outside. He is beginning to be transparent, so he knows his substance is slowly plating out along the entire cylindrico-spherical space-time continuum. He has realized that when he is fully distributed, the universe will be at an end; and he has composed a most astounding paper in his head explaining the whole phenomenon. His only regret is that he will never be able to send it to the *Journal of Topology* for publication.



TOTAL ENVIRONMENT

BRIAN W. ALDISS

Brian Aldiss' second story in this volume tells of a vast experiment in the effects of maximum population density. Its sociological and psychological speculation is fascinating; but its power lies in the awesome and horrifying evocation of the worn-stone noise- and stench-filled interior of the monolithic prison/world called Total Environment.

I

"WHAT'S THAT POEM about 'caverns measureless to man'?" Thomas Dixit asked. His voice echoed away among the caverns, the question unanswered. Peter Crawley, walking a pace or two behind him, said nothing, lost in a reverie of his own.

It was over a year since Dixit had been imprisoned here. He had taken time off from the resettlement area to come and have a last look round before everything was finally demolished. In these great concrete workings, men still moved—Indian technicians mostly, carrying instruments, often with their own head-

lights. Cables trailed everywhere; but the desolation was mainly an effect of the constant abrasion all surfaces had undergone. People had flowed here like water in a subterranean cave; and their corporate life had flowed similarly, hidden, forgotten.

Dixit was powerfully moved by the thought of all that life. He, almost alone, was the man who had plunged into it and survived.

Old angers stirring in him, he turned and spoke directly to his companion. "What a monument to human suffering! They should leave this place standing as an everlasting memorial to what happened."

The white man said, "The Delhi government refuses to entertain any such suggestion. I see their point of view, but I also see that it would make a great tourist attraction!"

"Tourist attraction, man! Is that all it means to you?"

Crawley laughed. "As ever, you're too touchy, Thomas. I take this whole matter much less lightly than you suppose. Tourism just happens to attract me more than human suffering."

They walked on side by side. They were never able to agree.

The battered faces of flats and houses—now empty, once choked with humanity—stood on either side, doors gaping open like old men's mouths in sleep. The spaces seemed enormous; the shadows and echoes that belonged to those spaces seemed to continue indefinitely. Yet before . . . there had scarcely been room to breathe here.

"I remember what your buddy, Senator Byrnes, said," Crawley remarked. "He showed how both East and West have learned from this experiment. Of course, the social scientists are still working over their findings; some startling formulae for social groups are emerging already. But the people who lived and died here were fighting their way towards control of the universe of the ultra-small, and that's where the biggest advances have come. They were already developing power over their own genetic material. Another generation, and they might have produced the ultimate in automatic human population control: anoestrus, where too close proximity to other members of the species leads to reabsorption of the embryonic material in the female. Our scientists have been able to help them there, and geneticists predict that in another decade—"

"Yes, yes, all that I grant you. Progress is wonderful." He knew

he was being impolite. These things were important, of revolutionary importance to a crowded Earth. But he wished he walked these eroded passageways alone.

Undeniably, India had learned too, just as Peter Crawley claimed. For Hinduism had been put to the test here and had shown its terrifying strengths and weaknesses. In these mazes, people had not broken under deadly conditions—nor had they thought to break away from their destiny. *Dharma*—duty—had been stronger than humanity. And this revelation was already changing the thought and fate of one-sixth of the human race.

He said, "Progress is wonderful. But what took place here was essentially a religious experience."

Crawley's brief laugh drifted away into the shadows of a great gaunt stairwell. "I'll bet you didn't feel that way when we sent you in here a year ago!"

What had he felt then? He stopped and gazed up at the gloom of the stairs. All that came to him was the memory of that appalling flood of life and of the people who had been a part of it, whose brief years had evaporated in these caverns, whose feet had endlessly trodden these warren-ways, these lugubrious decks, these crumbling flights. . . .

II

The concrete steps climbed up into darkness. The steps were wide, and countless children sat on them, listless, resting against each other. This was an hour when activity was low and even small children hushed their cries for a while. Yet there was no silence on the steps; silence was never complete there. Always, in the background, the noise of voices. Voices and more voices. Never silence.

Shamim was aged, so she preferred to run her errands at this time of day, when the crowds thronging Total Environment were less. She dawdled by a sleepy seller of life-objects at the bottom of the stairs, picking over the little artifacts and exclaiming now and again. The hawker knew her, knew she was too poor to

buy, did not even press her to buy. Shamim's oldest daughter, Malti, waited for her mother by the bottom step.

Malti and her mother were watched from the top of the steps.

A light burned at the top of the steps. It had burned there for twenty-five years, safe from breakage behind a strong mesh. But dung and mud had recently been thrown at it, covering it almost entirely and so making the top of the stairway dark. A furtive man called Narayan Farhad crouched there and watched, a shadow in the shadows.

A month ago, Shamim had had an illegal operation in one of the pokey rooms off Grand Balcony on her deck. The effects of the operation were still with her; under her plain cotton sari, her thin dark old body was bent. Her share of life stood lower than it had been.

Malti was her second oldest daughter, a meek girl who had not been conceived when the Total Environment experiment began. Even meekness had its limits. Seeing her mother dawdle so needlessly, Malti muttered impatiently and went on ahead, climbing the infested steps, anxious to be home.

Extracts from Thomas Dixit's report to Senator Jacob Byrnes, back in America: *To lend variety to the habitat, the Environment has been divided into ten decks, each deck five stories high, which allows for an occasional pocket-sized open space. The architecture has been varied somewhat on each deck. On one deck, a sort of blown-up Indian village is presented; on another, the houses are large and appear separate, although sandwiched between decks—I need not add they are hopelessly overcrowded now. On most decks, the available space is packed solid with flats. Despite this attempt at variety, a general bowdlerization of both Eastern and Western architectural styles, and the fact that everything has been constructed out of concrete or a parastyrene for economy's sake, has led to a dreadful sameness. I cannot imagine anywhere more hostile to the spiritual values of life.*

The shadow in the shadows moved. He glanced anxiously up at the light, which also housed a spy-eye; there would be a warning out, and sprays would soon squirt away the muck he had

thrown at the fitting; but, for the moment, he could work unobserved.

Narayan bared his old teeth as Malti came up the steps towards him, treading among the sprawling children. She was too old to fetch a really good price on the slave market, but she was still strong; there would be no trouble in getting rid of her at once. Of course he knew something of her history, even though she lived on a different deck from him. Malti! He called her name at the last moment as he jumped out on her. Old though he was, Narayan was quick. He wore only his dhoti, arms flashing, interlocking round hers, one good powerful wrench to get her off her feet—now running fast, fearful, up the rest of the steps, moving even as he clamped one hand over her mouth to cut off her cry of fear. Clever old Narayan!

The stairs mount up and up in the four corners of the Total Environment, linking deck with deck. They are now crude things of concrete and metal, since the plastic covers have long been stripped from them.

These stairways are the weak points of the tiny empires, transient and brutal, that form on every deck. They are always guarded, though guards can be bribed. Sometimes gangs or "unions" take over a stairway, either by agreement or bloodshed.

Shamim screamed, responding to her daughter's cry. She began to hobble up the stairs as fast as she could, tripping over infant feet, drawing a dagger out from under her sari. It was a plastic dagger, shaped out of a piece of the Environment.

She called Malti, called for help as she went. When she reached the landing, she was on the top floor of her deck, the Ninth, where she lived. Many people were here, standing, squatting, thronging together. They looked away from Shamim, people with blind faces. She had so often acted similarly herself when others were in trouble.

Gasping, she stopped and stared up at the roof of the deck, blue-dyed to simulate sky, cracks running irregularly across it. The steps went on up there, up to the Top Deck. She saw legs, yellow soles of feet disappearing, faces staring down at her, hostile. As she ran toward the bottom of the stairs, the watchers

above threw things at her. A shard hit Shamim's cheek and cut it open. With blood running down her face, she began to wail. Then she turned and ran through the crowds to her family room.

I've been a month just reading through the microfiles. Sometimes a whole deck becomes unified under a strong leader. On Deck Nine, for instance, unification was achieved under a man called Ullhas. He was a strong man, and a great show-off. That was a while ago, when conditions were not as desperate as they are now. Ullhas could never last the course today. Leaders become more despotic as Environment decays.

The dynamics of unity are such that it is always insufficient for a deck simply to stay unified; the young men always need to have their aggressions directed outwards. So the leader of a strong deck always sets out to tyrannize the deck below or above, whichever seems to be the weaker. It is a miserable state of affairs. The time generally comes when, in the midst of a raid, a counter-raid is launched by one of the other decks. Then the raiders return to carnage and defeat. And another paltry empire tumbles.

It is up to me to stop this continual degradation of human life.

As usual, the family room was crowded. Although none of Shamim's own children were here, there were grandchildren—including the lame granddaughter, Shirin—and six great-grandchildren, none of them more than three years old. Shamim's third husband, Gita, was not in. Safe in the homely squalor of the room, Shamim burst into tears, while Shirin comforted her and endeavored to keep the little ones off.

"Gita is getting food. I will go and fetch him," Shirin said.

When UHDRE—Ultra-High Density Research Establishment—became operative, twenty-five years ago, all the couples selected for living in the Total Environment had to be under twenty years of age. Before being sealed in, they were inoculated against diseases. There was plenty of room for each couple then; they had whole suites to themselves, and the best of food; plus no means of birth control. That's always been the main pivot of the UHDRE experiment. Now that first generation has aged severely.

They are old people pushing forty-five. The whole life cycle has speeded up—early puberty, early senescence. The second and third generations have shown remarkable powers of adaptation; a fourth generation is already toddling. Those toddlers will be reproducing before their years attain double figures, if present trends continue. Are allowed to continue.

Gita was younger than Shamim, a small wiry man who knew his way around. No hero, he nevertheless had a certain style about him. His life-object hung boldly round his neck on a chain, instead of being hidden, as were most people's life-objects. He stood in the line for food, chattering with friends. Gita was good at making alliances. With a bunch of his friends, he had formed a little union to see that they got their food back safely to their homes; so they generally met with no incident in the crowded walkways of Deck Nine.

The balance of power on the deck was very complex at the moment. As a result, comparative peace reigned, and might continue for several weeks if the strong man on Top Deck did not interfere.

Food delivery grills are fixed in the walls of every floor of every deck. Two gongs sound before each delivery. After the second one, hatches open and steaming food pours from the grills. Hills of rice tumble forward, flavored with meat and spices. Chappattis fall from a separate slot. As the men run forward with their containers, holy men are generally there to sanctify the food.

Great supply elevators roar up and down in the heart of the vast tower, tumbling out rations at all levels. Alcohol also was supplied in the early years. It was discontinued when it led to trouble; which is not to say that it is not secretly brewed inside the Environment. The UHDRE food ration has been generous from the start and has always been maintained at the same level per head of population although, as you know, the food is now ninety-five percent factory-made. Nobody would ever have starved, had it been shared out equably inside the tower. On some of the decks, some of the time, it is still shared out fairly.

One of Gita's sons, Jamsu, had seen the kidnapper Narayan making off to Top Deck with the struggling Malti. His eyes gleaming with excitement, he sidled his way into the queue where Gita stood and clasped his father's arm. Jamsu had something of his father in him, always lurked where numbers made him safe, rather than run off as his brothers and sisters had run off, to marry and struggle for a room or a space of their own.

He was telling his father what had happened when Shirin limped up and delivered her news.

Nodding grimly, Gita said, "Stay with us, Shirin, while I get the food."

He scooped his share into the family pail. Jamsu grabbed a handful of rice for himself.

"It was a dirty wizened man from Top Deck called Narayan Farhad," Jamsu said, gobbling. "He is one of the crooks who hangs about the shirt tails of . . ." He let his voice die.

"You did not go to Malti's rescue, shame on you!" Shirin said.

"Jamsu might have been killed," Gita said, as they pushed through the crowd and moved towards the family room.

"They're getting so strong on Top Deck," Jamsu said. "I hear all about it! We mustn't provoke them or they may attack. They say a regular army is forming round . . ."

Shirin snorted impatiently. "You great babe! Go ahead and name the man! It's Prahlad Patel whose very name you dare not mention, isn't it? Is he a god or something, for Siva's sake? You're afraid of him even from this distance, eh, aren't you?"

"Don't bully the lad," Gita said. Keeping the peace in his huge mixed family was a great responsibility, almost more than he could manage. As he turned into the family room, he said quietly to Jamsu and Shirin, "Malti was a favorite daughter of Shamim's, and now is gone from her. We will get our revenge against this Narayan Farhad. You and I will go this evening, Jamsu, to the holy man Vazifdar. He will even up matters for us, and then perhaps the great Patel will also be warned."

He looked thoughtfully down at his life-object. Tonight, he told himself, I must venture forth alone, and put my life in jeopardy for Shamim's sake.

Prahlad Patel's union has flourished and grown until now he rules all the Top Deck. His name is known and dreaded, we

believe, three or four decks down. He is the strongest—yet in some ways curiously the most moderate—ruler in Total Environment at present.

Although he can be brutal, Patel seems inclined for peace. Of course, the bugging does not reveal everything; he may have plans which he keeps secret, since he is fully aware that the bugging exists. But we believe his interests lie in other directions than conquest. He is only about nineteen, as we reckon years, but already gray-haired, and the sight of him is said to freeze the muscles to silence in the lips of his followers. I have watched him over the bugging for many hours since I agreed to undertake this task.

Patel has one great advantage in Total Environment. He lives on the Tenth Deck, at the top of the building. He can therefore be invaded only from below and the Ninth Deck offers no strong threats at present, being mainly oriented round an influential body of holy men, of whom the most illustrious is one Vazifdar.

The staircases between decks are always trouble spots. No deck-ruler was ever strong enough to withstand attack from above and below. The staircases are also used by single troublemakers, thieves, political fugitives, prostitutes, escaping slaves, hostages. Guards can always be bribed, or favor their multitudinous relations, or join the enemy for one reason or another. Patel, being on the Top Deck, has only four weak points to watch for, rather than eight.

Vazifdar was amazingly holy and amazingly influential. It was whispered that his life-object was the most intricate in all Environment, but there was nobody who would lay claim to having set eyes upon it. Because of his reputation, many people on Gita's deck—yes, and from farther away—sought Vazifdar's help. A stream of men and women moved always through his room, even when he was locked in private meditation and far away from this world.

The holy man had a flat with a balcony that looked out onto mid-deck. Many relations and disciples lived there with him, so that the rooms had been elaborately and flimsily divided by screens. All day, the youngest disciples twittered like birds upon the balconies as Vazifdar held court, discussing among themselves the immense wisdom of his sayings.

All the disciples, all the relations, loved Vazifdar. There had been relations who did not love Vazifdar, but they had passed away in their sleep. Gita himself was a distant relation of Vazifdar's and came into the holy man's presence now with gifts of fresh water and a long piece of synthetic cloth, enough to make a robe.

Vazifdar's brow and cheeks were painted with white to denote his high caste. He received the gifts of cloth and water graciously, smiling at Gita in such a way that Gita—and, behind him, Jamsu—took heart.

Vazifdar was thirteen years old as the outside measured years. He was sleekly fat, from eating much and moving little. His brown body shone with oils; every morning, young women massaged and manipulated him.

He spoke very softly, husbanding his voice, so that he could scarcely be heard for the noise in the room.

"It is a sorrow to me that this woe has befallen your stepchild Malti," he said. "She was a good woman, although infertile."

"She was raped at a very early age, disrupting her womb, dear Vazifdar. You will know of the event. Her parents feared she would die. She could never bear issue. The evil shadowed her life. Now this second woe befalls her."

"I perceive that Malti's role in the world was merely to be a companion to her mother. Not all can afford to purchase who visit the bazaar."

There are bazaars on every floor, crowding down the corridors and balconies, and a chief one on every deck. The menfolk choose such places to meet and chatter even when they have nothing to trade. Like everywhere else, the bazaars are crowded with humanity, down to the smallest who can walk—and sometimes even those carry naked smaller brothers clamped tight to their backs.

The bazaars are great centers for scandal. Here also are our largest screens. They glow behind their safety grills, beaming in special programs from outside; our outside world that must seem to have but faint reality as it dashes against the thick securing walls of Environment and percolates through to the screens. Be-

low the screens, uncheckable and fecund life goes teeming on, with all its injury.

Humbly, Gita on his knees said, "If you could restore Malti to her mother Shamim, who mourns her, you would reap all our gratitude, dear Vazifdar. Malti is too old for a man's bed, and on Top Deck all sorts of humiliations must await her."

Vazifdar shook his head with great dignity. "You know I cannot restore Malti, my kinsman. How many deeds can be ever undone? As long as we have slavery, so long must we bear to have the ones we love enslaved. You must cultivate a mystical and resigned view of life and beseech Shamim always to do the same."

"Shamim is more mystical in her ways than I, never asking much, always working, working, praying, praying. That is why she deserves better than this misery."

Nodding in approval of Shamim's behavior as thus revealed, Vazifdar said, "That is well. I know she is a good woman. In the future lie other events which may recompense her for this sad event."

Jamsu, who had managed to keep quiet behind his father until now, suddenly burst out, "Uncle Vazifdar, can you not punish Narayan Farhad for his sin in stealing poor Malti on the steps? Is he to be allowed to escape to Patel's deck, there to live with Malti and enjoy?"

"Sssh, son!" Gita looked in agitation to see if Jamsu's outburst had annoyed Vazifdar; but Vazifdar was smiling blandly.

"You must know, Jamsu, that we are all creatures of the Lord Siva, and without power. No, no, do not pout! I also am without power in his hands. To own one room is not to possess the whole mansion. But . . ."

It was a long, and heavy *but*. When Vazifdar's thick eyelids closed over his eyes, Gita trembled, for he recalled how, on previous occasions when he had visited his powerful kinsman, Vazifdar's eyelids had descended in this fashion while he deigned to think on a problem, as if he shut out all the external world with his own potent flesh.

"Narayan Farhad shall be troubled by more than his conscience." As he spoke, the pupils of his eyes appeared again,

violet and black. They were looking beyond Gita, beyond the confines of his immediate surroundings. "Tonight he shall be troubled by evil dreams."

"The night-visions!" Gita and Jamsu exclaimed, in fear and excitement.

Now Vazifdar swiveled his magnificent head and looked directly at Gita, looked deep into his eyes. Gita was a small man; he saw himself as a small man within. He shrank still further under that irresistible scrutiny.

"Yes, the night-visions," the holy man said. "You know what that entails, Gita. You must go up to Top Deck and procure Narayan's life-object. Bring it back to me, and I promise Narayan shall suffer the night-visions tonight. Though he is sick, he shall be cured."

III

The women never cease their chatter as the lines of supplicants come and go before the holy men. Their marvelous resignation in that hateful prison! If they ever complain about more than the small circumstances of their lives, if they ever complain about the monstrous evil that has overtaken them all, I never heard of it. There is always the harmless talk, talk that relieves petty nervous anxieties, talk that relieves the almost noticed pressures on the brain. The women's talk practically drowns the noise of their children. But most of the time it is clear that Total Environment consists mainly of children. That's why I want to see the experiment closed down; the children would adapt to our world.

It is mainly on this fourth generation that the effects of the population glut show. Whoever rules the decks, it is the babes, the endless babes, tottering, laughing, staring, piddling, tumbling, running, the endless babes to whom the Environment really belongs. And their mothers, for the most part, are women who—at the same age and in a more favored part of the globe—would still be virginally at school, many only just entering their teens.

Narayan Farhad wrapped a blanket round himself and huddled in his corner of the crowded room. Since it was almost time to sleep, he had to take up his hired space before one of the loathed Dasguptas stole it. Narayan hated the Dasgupta family, its lickspittle men, its shrill women, its turbulent children—the endless babes who crawled, the bigger ones with nervous diseases who thieved and ran and jeered at him. It was the vilest family on Top Deck, according to Narayan's oft-repeated claims; he tolerated it only because he felt himself to be vile.

He succeeded at nothing to which he turned his hand. Only an hour ago, pushing through the crowds, he had lost his life-object from his pocket—or else it had been stolen; but he dared not even consider that possibility!

Even his desultory kidnapping business was a failure. This bitch he had caught this morning—Malti. He had intended to rape her before selling her, but had become too nervous once he had dragged her in here, with a pair of young Dasguptas laughing at him. Nor had he sold the woman well. Patel had beaten down his price, and Narayan had not the guts to argue. Maybe he should leave this deck and move down to one of the more chaotic ones. The middle decks were always more chaotic. Six was having a slow three-sided war even now, which should make Five a fruitful place, with hordes of refugees to batten on.

. . . And what a fool to snatch so old a girl—practically an old woman!

Through narrowed eyes, Narayan squatted in his corner, acid flavors burning his mouth. Even if his mind would rest and allow him to sleep, the Dasgupta mob was still too lively for any real relaxation. That old Dasgupta, now—he was like a rat, totally without self-restraint, not a proper Hindu at all, doing the act openly with his own daughters. There were many men like that in Total Environment, men who had nothing else in life. Dirty swine! Lucky dogs! Narayan's daughters had thrown him out many months ago when he tried it!

Over and over, his mind ran on his grievances. But he sat collectedly, prodding off with one bare foot the nasty little brats who crawled at him, and staring at the screen flickering on the wall behind its protective mesh.

He liked the screens, enjoyed viewing the madness of outside.

What a world it was out there! All that heat, and the necessity for work, and the complication of life! The sheer bigness of the world—he couldn't stand that, would not want it under any circumstances.

He did not understand half he saw. After all, he was born here. His father might have been born outside, whoever his father was; but no legends from outside had come down to him: only the distortions in the general gossip, and the stuff on the screens. Now that he came to reflect, people didn't pay much attention to the screens any more. Even he didn't.

But he could not sleep. Blearily, he looked at images of cattle ploughing fields, fields cut into dice by the dirty grills before the screens. He had already gathered vaguely that this feature was about changes in the world today.

". . . are giving way to this . . ." said the commentator above the rumpus in the Dasgupta room. The children lived here like birds. Racks were stacked against the walls, and on these rickety contraptions the many little Dasguptas roosted.

". . . food factories automated against danger of infection . . ." Yak yak yak, then.

"Beef-tissue culture growing straight into plastic distribution packs . . ." Shots of some great interior place somewhere, with meat growing out of pipes, extruding itself into square packs, dripping with liquid, looking rather ugly. Was that the shape of cows now or something? Outside must be a hell of a scaring place, then! ". . . as new factory food at last spells hope for India's future in the . . ." Yak yak yak from the kids. Once, their sleep racks had been built across the screen; but one night the wholy shaky edifice collapsed, and three children were injured. None killed, worse luck!

Patel should have paid more for that girl. Nothing was as good as it had been. Why, once on a time, they used to show sex films on the screens—really filthy stuff that got even Narayan excited. He was younger then. Really filthy stuff, he remembered, and pretty girls doing it. But it must be—oh, a long time since that was stopped. The screens were dull now. People gave up watching. Uneasily, Narayan slept, propped in the corner under his scruffy blanket. Eventually, the whole scruffy room slept.

The documentaries and other features piped into Environment are no longer specially made by UHDRE teams for internal consumption. When the U.N. made a major cut in UHDRE's annual subsidy, eight years ago, the private TV studio was one of the frills that had to be axed. Now we pipe in old programs bought off major networks. The hope is that they will keep the wretched prisoners in Environment in touch with the outside world, but this is clearly not happening. The degree of comprehension between inside and outside grows markedly less on both sides, on an exponential curve. As I see it, a great gulf of isolation is widening between the two environments, just as if they were sailing away from each other into different space-time continua. I wish I could think that the people in charge here—Crawley especially—not only grasped this fact but understood that it should be rectified immediately.

Shamim could not sleep for grief.

Gita could not sleep for apprehension.

Jamsu could not sleep for excitement.

Vazifdar did not sleep.

Vazifdar shut his sacred self away in a cupboard, brought his lids down over his eyes and began to construct, within the vast spaces of his mind, a thought-pattern corresponding to the matrix represented by Narayan Farhad's stolen life-object. When it was fully conceived, Vazifdar began gently to inset a little evil into one edge of the thought-pattern. . . .

Narayan slept. What roused him was the silence. It was the first time total silence had ever come to Total Environment.

At first, he thought he would enjoy total silence. But it took on such weight and substance. . . .

Clutching his blanket, he sat up. The room was empty, the screen dark. Neither thing had ever happened before, could not happen! And the silence! Dear Siva, some terrible monkey god had hammered that silence out in darkness and thrown it out like a shield into the world, rolling over all things! There was a ringing quality in the silence—a gong! No, no, not a gong! Footsteps!

It was footsteps, O Lord Siva, do not let it be footsteps!

Total Environment was empty. The legend was fulfilled that

said Total Environment would empty one day. All had departed except for poor Narayan. And this thing of the footsteps was coming to visit him in his defenseless corner. . . .

It was climbing up through the cellars of his existence. Soon it would emerge.

Trembling convulsively, Narayan stood up, clutching the corner of the blanket to his throat. He did not wish to face the thing. Wildly, he thought, could he bear it best if it looked like a man or if it looked nothing like a man? It was Death for sure—but how would it look? Only Death—his heart fluttered!—only Death could arrive this way. . . .

His helplessness. . . . Nowhere to hide! He opened his mouth, could not scream, clutched the blanket, felt that he was wetting himself as if he were a child again. Swiftly came the image—the infantile, round-bellied, cringing, puny, his mother black with fury, her great white teeth gritting as she smacked his face with all her might, spitting. . . . It was gone, and he faced the gong—like Death again, alone in the great dark tower. In the arid air, vibrations of its presence.

He was shouting to it, demanding that it did not come.

But it came. It came with majestic sloth, like the heartbeats of a foetid slumber, came in the door, pushing darkness before it. It was like a human, but too big to be human.

And it wore Malti's face, that sickeningly innocent smile with which she had run up the steps. No! No, that was not it—oh, he fell down onto the wet floor: it was nothing like that woman, nothing at all. Cease, impossibilities! It was a man, his ebony skull shining, terrible and magnificent, stretching out, grasping, confident. Narayan struck out of his extremity and fell forward. Death was another indelible smack in the face.

One of the roosting Dasguptas blubbered and moaned as the man kicked him, woke for a moment, saw the screen still flickering meaninglessly and reassuringly, saw Narayan tremble under his blanket, tumbled back into sleep.

It was not till morning that they found it had been Narayan's last tremble.

I know I am supposed to be a detached observer. No emotions, no feelings. But scientific detachment is the attitude that has led

to much of the inhumanity inherent in Environment. How do we, for all the bugging devices, hope to know what ghastly secret nightmares they undergo in there? Anyhow, I am relieved to hear you are flying over.

It is tomorrow I am due to go into Environment myself.

IV

The central offices of UHDRE were large and repulsive. At the time when they and the Total Environment tower had been built, the Indian Government would not have stood for anything else. Poured cement and rough edges was what they wanted to see and what they got.

From a window in the office building, Thomas Dixit could see the indeterminate land in one direction, and the gigantic TE tower in the other, together with the shantytown that had grown between the foot of the tower and the other UHDRE buildings.

For a moment, he chose to ignore the Project Organizer behind him and gaze out at what he could see of the table-flat lands of the great Ganges delta.

He thought, It's as good a place as any for man to project his power fantasies. But you are a fool to get mixed up in all this, Thomas!

Even to himself, he was never just Tom.

I am being paid, well paid to do a specific job. Now I am letting wooly humanitarian ideas get in the way of action. Essentially, I am a very empty man. No center. Father Bengali, mother English, and live all my life in the States. I have excuses . . . Other people accept them; why can't I?

Sighing, he dwelt on his own unsatisfactoriness. He did not really belong to the West, despite his long years there, and he certainly did not belong to India; in fact, he thought he rather disliked India. Maybe the best place for him was indeed the inside of the Environment tower.

He turned impatiently and said, "I'm ready to get going now, Peter."

Peter Crawley, the Special Project Organizer of UHDRE, was

a rather austere Bostonian. He removed the horn-rimmed glasses from his nose and said, "Right! Although we have been through the drill many times, Thomas, I have to tell you this once again before we move. The entire—"

"Yes, yes, I know, Peter! You don't have to cover yourself. This entire organization might be closed down if I make a wrong move. Please take it as read."

Without indignation, Crawley said, "I was going to say that we are all rooting for you. We appreciate the risks you are taking. We shall be checking you everywhere you go in there through the bugging system."

"And whatever you see, you can't do a thing."

"Be fair; we have made arrangements to help!"

"I'm sorry, Peter." He liked Crawley and Crawley's decent reserve.

Crawley folded his spectacles with a snap, inserted them in a leather slipcase and stood up.

"The U.N., not to mention subsidiary organizations like the WHO and the Indian government, have their knife into us, Thomas. They want to close us down and empty Environment. They will do so unless you can provide evidence that forms of extra-sensory perception are developing inside the Environment. Don't get yourself killed in there. The previous men we sent in behaved foolishly and never came out again." He raised an eyebrow and added dryly, "That sort of thing gets us a bad name, you know."

"Just as the blue movies did a while ago."

Crawley put his hands behind his back. "My predecessor here decided that immoral movies piped into Environment would help boost the birth rate there. Whether he was right or wrong, world opinion has changed since then as the specter of world famine has faded. We stopped the movies eight years ago, but they have long memories at the U.N., I fear. They allow emotionalism to impede scientific research."

"Do you never feel any sympathy for the thousands of people doomed to live out their brief lives in the tower?"

They looked speculatively at each other.

"You aren't on our side any more, Thomas, are you? You'd like

your findings to be negative, wouldn't you, and have the U.N. close us down?"

Dixit uttered a laugh. "I'm not on anyone's *side*, Peter. I'm neutral. I'm going into Environment to look for the evidence of ESP that only direct contact may turn up. What else direct contact will turn up, neither of us can say as yet."

"But you think it will be misery. And you will emphasize that at the inquiry after your return."

"Peter—let's get on with it, shall we?" Momentarily, Dixit was granted a clear picture of the two of them standing in this room; he saw how their bodily attitudes contrasted. His attitudes were rather slovenly; he held himself rather slump-shouldered, he gesticulated to some extent (too much?); he was dressed in threadbare tunic and shorts, ready to pass muster as an inhabitant of Environment. Crawley, on the other hand, was very upright, stiff and smart in his movements, hardly ever gestured as he spoke; his dress was faultless.

And there was no need to be awed by or envious of Crawley. Crawley was encased in inhibition, afraid to feel, signaling his aridity to anyone who cared to look out from their own self-preoccupation. Crawley, moreover, feared for his job.

"Let's get on with it, as you say." He came from behind his desk. "But I'd be grateful if you would remember, Thomas, that the people in the tower are volunteers, or the descendants of volunteers.

"When UHDRE began, a quarter-century ago, back in the mid-nineteen-seventies, only volunteers were admitted to the Total Environment. Five hundred young married Indian couples were admitted, plus whatever children they had. The tower was a refuge then, free from famine, immune from all disease. They were glad, heartily glad, to get in, glad of all that Environment provided and still provides. Those who didn't qualify rioted. We have to remember that.

"India was a different place in 1975. It had lost hope. One crisis after another, one famine after another, crops dying, people starving, and yet the population spiraling up by a million every month.

"But today, thank God, that picture has largely changed. Synthetic foods have licked the problem; we don't need the grudging

land any more. And at last the Hindus and Muslims have got the birth control idea into their heads. It's only *now,* when a little humanity is seeping back into this death-bowl of a subcontinent, that the UN dares complain about the inhumanity of UHDRE."

Dixit said nothing. He felt that this potted history was simply angled towards Crawley's self-justification; the ideas it represented were real enough, heaven knew, but they had meaning for Crawley only in terms of his own existence. Dixit felt pity and impatience as Crawley went on with his narration.

"Our aim here must be unswervingly the same as it was from the start. We have evidence that nervous disorders of a special kind produce extra-sensory perceptions—telepathy and the rest, and maybe kinds of ESP we do not yet recognize. High-density populations with reasonable nutritional standards develop particular nervous instabilities which may be akin to ESP spectra.

"The Ultra-High Density Research Establishment was set up to intensify the likelihood of ESP developing. Don't forget that. The people in Environment are supposed to have some ESP; that's the whole point of the operation, right? Sure, it is not humanitarian. We know that. But that is not your concern. You have to go in and find evidence of ESP, something that doesn't show over the bugging. Then UHDRE will be able to continue."

Dixit prepared to leave. "If it hasn't shown up in quarter of a century—"

"It's in there! I know it's in there! The failure's in the bugging system. I feel it coming through the screens at me—some mystery we need to get our hands on! If only I could prove it! If only I could get in there myself!"

Interesting, Dixit thought. You'd have to be some sort of a voyeur to hold Crawley's job, forever spying on the wretched people.

"Too bad you have a white skin, eh?" he said lightly. He walked towards the door. It swung open, and he passed into the corridor.

Crawley ran after him and thrust out a hand. "I know how you feel, Thomas. I'm not just a stuffed shirt, you know, not entirely void of sympathy. Sorry if I was needling you. I didn't intend to do so."

Dixit dropped his gaze. "I should be the one to apologize,

Peter. If there's anything unusual going on in the tower, I'll find it, never worry!"

They shook hands, without wholly being able to meet each other's eyes.

V

Leaving the office block, Dixit walked alone through the sunshine toward the looming tower that housed Total Environment. The concrete walk was hot and dusty underfoot. The sun was the one good thing that India had, he thought: that burning beautiful sun, the real ruler of India, whatever petty tyrants came and went.

The sun blazed down on the tower; only inside did it not shine.

The uncompromising outlines of the tower were blurred by pipes, ducts and shafts that ran up and down its exterior. It was a building built for looking into, not out of. Some time ago, in the bad years, the welter of visual records gleaned from Environment used to be edited and beamed out on global networks every evening; but all that had been stopped as conditions inside Environment deteriorated, and public opinion in the democracies, who were subsidizing the grandiose experiment, turned against the exploitation of human material.

A monitoring station stood by the tower walls. From here, a constant survey on the interior was kept. Facing the station were the jumbles of merchants' stalls, springing up to cater for tourists, who persisted even now that the tourist trade was discouraged. Two security guards stepped forward and escorted Dixit to the base of the tower. With ceremony, he entered the shade of the entry elevator. As he closed the door, germicides sprayed him, insuring that he entered Environment without harboring dangerous micro-organisms.

The elevator carried him up to the top deck; this plan had been settled some while ago. The elevator was equipped with double steel doors. As it came to rest, a circuit opened, and a screen showed him what was happening on the other side of the

doors. He emerged from a dummy air-conditioning unit, behind a wide pillar. He was in Patel's domain.

The awful weight of human overcrowding hit Dixit with its full stink and noise. He sat down at the base of the pillar and let his senses adjust. And he thought, I was the wrong one to send; I've always had this inner core of pity for the sufferings of humanity; I could never be impartial; I've got to see that this terrible experiment is stopped.

He was at one end of a long balcony onto which many doors opened; a ramp led down at the other end. All the doorways gaped, although some were covered by rugs. Most of the doors had been taken off their hinges to serve as partitions along the balcony itself, partitioning off overspill families. Children ran everywhere, their tinkling voices and cries the dominant note in the hubbub. Glancing over the balcony, Dixit took in a dreadful scene of swarming multitudes, the anonymity of congestion; to sorrow for humanity was not to love its prodigality. Dixit had seen this panorama many times over the bugging system; he knew all the staggering figures—1500 people in here to begin with, and by now some 75,000 people, a large proportion of them under four years of age. But pictures and figures were pale abstracts beside the reality they were intended to represent.

The kids drove him into action at last by playfully hurling dirt at him. Dixit moved slowly along, carrying himself tight and cringing in the manner of the crowd about him, features rigid, elbows tucked in to the ribs. *Mutatis mutandis*, it was Crawley's inhibited attitude. Even the children ran between the legs of their elders in that guarded way. As soon as he had left the shelter of his pillar, he was caught in a stream of chattering people, all jostling between the rooms and the stalls of the balcony. They moved very slowly.

Among the crowd were hawkers, and salesmen pressed their wares from the pitiful balcony hovels. Dixit tried to conceal his curiosity. Over the bugging he had had only distant views of the merchandise offered for sale. Here were the strange models that had caught his attention when he was first appointed to the UHDRE project. A man with orange goateyes, in fact probably no more than thirteen years of age, but here a hardened veteran,

was at Dixit's elbow. As Dixit stared at him, momentarily suspicious he was being watched, the goat-eyed man merged into the crowd; and, to hide his face, Dixit turned to the nearest salesman.

In only a moment, he was eagerly examining the wares, forgetting how vulnerable was his situation.

All the strange models were extremely small. This Dixit attributed to shortage of materials—wrongly, as it later transpired. The biggest model the salesman possessed stood no more than two inches high. It was made, nevertheless, of a diversity of materials, in which many sorts of plastics featured. Some models were simple, and appeared to be little more than elaborate *tughra* or monogram, which might have been intended for an elaborate piece of costume jewelry; others, as one peered among their interstices, seemed to afford a glimpse of another dimension; all possessed eye-teasing properties.

The merchant was pressing Dixit to buy. He referred to the elaborate models as "life-objects." Noticing that one in particular attracted his potential customer, he lifted it delicately and held it up, a miracle of craftsmanship, perplexing, *outre*, giving Dixit somehow as much pain as pleasure. He named the price.

Although Dixit was primed with money, he automatically shook his head. "Too expensive."

"See, master, I show you how this life-object works!" The man fished beneath his scrap of loincloth and produced a small perforated silver box. Flipping it open, he produced a live woodlouse and slipped it under a hinged part of the model. The insect, in its struggles, activated a tiny wheel; the interior of the model began to rotate, some sets of minute planes turning in counterpoint to others.

"This life-object belonged to a very religious man, master."

In his fascination, Dixit said, "Are they all powered?"

"No, master, only special ones. This was perfect model from Dalcush Bancholi, last generation master all the way from Third Deck, very very fine and masterful workmanship of first quality. I have also still better one worked by a body louse, if you care to see."

By reflex, Dixit said, "Your prices are too high."

He absolved himself from the argument that brewed, slipping

away through the crowd with the merchant calling after him. Other merchants shouted to him, sensing his interest in their wares. He saw some beautiful work, all on the tiniest scale and not only life-objects but amazing little watches with millisecond hands as well as second hands; in some cases, the millisecond was the largest hand; in some, the hour hand was missing or was supplemented by a day hand; and the watches took many extraordinary shapes, tetrakishexahedrons and other elaborate forms, until their format merged with that of the life-objects.

Dixit thought approvingly: the clock and watch industry fulfills a human need for exercising elaborate skill and accuracy, while at the same time requiring a minimum of materials. These people of Total Environment are the world's greatest craftsmen. Bent over one curious watch that involved a color change, he became suddenly aware of danger. Glancing over his shoulder, he saw the man with the unpleasant orange eyes about to strike him. Dixit dodged without being able to avoid the blow. As it caught him on the side of his neck, he stumbled and fell under the milling feet.

VI

Afterwards, Dixit could hardly say that he had been totally unconscious. He was aware of hands dragging him, of being partly carried, of the sound of many voices, of the name "Patel" repeated. . . . And when he came fully to his senses, he was lying in a cramped room, with a guard in a scruffy turban standing by the door. His first hazy thought was that the room was no more than a small ship's cabin; then he realized that, by indigenous standards, this was a large room for only one person.

He was a prisoner in Total Environment.

A kind of self-mocking fear entered him; he had almost expected the blow, he realized; and he looked eagerly about for the bug-eye that would reassure him his UHDRE friends outside were aware of his predicament. There was no sign of the bug-eye. He was not long in working out why; this room had been partitioned out of a larger one, and the bugging system was evi-

dently shut in the other half—whether deliberately or accidentally, he had no way of knowing.

The guard had bobbed out of sight. Sounds of whispering came from beyond the doorway. Dixit felt the pressure of many people there. Then a woman came in and closed the door. She walked cringingly and carried a brass cup of water.

Although her face was lined, it was possible to see that she had once been beautiful and perhaps proud. Now her whole attitude expressed the defeat of her life. And this woman might be no more than eighteen! One of the terrifying features of Environment was the way, right from the start, confinement had speeded life-processes and abridged life.

Involuntarily, Dixit flinched away from the woman.

She almost smiled. "Do not fear me, sir. I am almost as much a prisoner as you are. Equally, do not think that by knocking me down you can escape. I promise you, there are fifty people outside the door, all eager to impress Prahlad Patel by catching you, should you try to get away."

So I'm in Patel's clutches, he thought. Aloud he said, "I will offer you no harm. I want to see Patel. If you are captive, tell me your name, and perhaps I can help you."

As she offered him the cup and he drank, she said, shyly, "I do not complain, for my fate might have been much worse than it is. Please do not agitate Patel about me, or he may throw me out of his household. My name is Malti."

"Perhaps I may be able to help you, and all your tribe, soon. You are all in a form of captivity here, the great Patel included, and it is from that I hope to deliver you."

Then he saw fear in her eyes.

"You really are a spy from outside!" she breathed. "But we do not want our poor little world invaded! You have so much—leave us our little!" She shrank away and slipped through the door, leaving Dixit with a melancholy impression of her eyes, so burdened in their shrunken gaze.

The babel continued outside the door. Although he still felt sick, he propped himself up and let his thoughts run on. "You have so much—leave us our little. . . ." All their values had been perverted. Poor things, they could know neither the small-

ness of their own world nor the magnitude of the world outside. This—this dungheap had become to them all there was of beauty and value.

Two guards came for him, mere boys. He could have knocked their heads together, but compassion moved him. They led him through a room full of excited people; beyond their glaring faces, the screen flickered pallidly behind its mesh; Dixit saw how faint the image of outside was.

He was taken into another partitioned room. Two men were talking.

The scene struck Dixit with peculiar force, and not merely because he was at a disadvantage.

It was an alien scene. The impoverishment of even the richest furnishings, the clipped and bastardized variety of Hindi that was being talked, reinforced the impression of strangeness. And the charge of Patel's character filled the room.

There could be no doubt who was Patel. The plump cringing fellow, wringing his hands and protesting, was not Patel. Patel was the stocky white-haired man with the heavy lower lip and high forehead. Dixit had seen him in this very room over the bugging system. But to stand captive awaiting his attention was an experience of an entirely different order. Dixit tried to analyze the first fresh impact Patel had on him, but it was elusive.

It was difficult to realize that, as the outside measured years, Patel could not be much more than nineteen or twenty years of age. Time was impacted here, jellified under the psychic pressures of Total Environment. Like the hieroglyphics of that new relativity, detailed plans of the Environment hung large on one wall of this room, while figures and names were chalked over the others. The room was the nerve center of Top Deck.

He knew something about Patel from the UHDRE records. Patel had come up here from the Seventh Deck. By guile as well as force, he had become ruler of Top Deck at an early age. He had surprised UHDRE observers by abstaining from the usual forays of conquest into other floors.

Patel was saying to the cringing man, "Be silent! You try to obscure the truth with argument. You have heard the witnesses against you. During your period of watch on the stairs, you

were bribed by a man from Ninth Deck and you let him through here."

"Only for a mere seventeen minutes, Sir Patell!"

"I am aware that such things happen every day, wretched Raital. But this fellow you let through stole the life-object belonging to Narayan Farhad and, in consequence, Narayan Farhad died in his sleep last night. Narayan was no more important than you are, but he was useful to me, and it is in order that he be revenged."

"Anything that you say, Sir Patell"

"Be silent, wretched Raitall" Patel watched Raital with interest as he spoke. And he spoke in a firm reflective voice that impressed Dixit more than shouting would have done.

"You shall revenge Narayan, Raital, because you caused his death. You will leave here now. You will not be punished. You will go, and you will steal the life-object belonging to that fellow from whom you accepted the bribe. You will bring that life-object to me. You have one day to do so. Otherwise, my assassins will find you wherever you hide, be it even down on Deck One."

"Oh, yes, indeed, Sir Patel, all men know—" Raital was bent almost double as he uttered some face-saving formula. He turned and scurried away as Patel dismissed him.

Strength, thought Dixit. Strength, and also cunning. That is what Patel radiates. An elaborate and cutting subtlety. The phrase pleased him, seeming to represent something actual that he had detected in Patel's makeup. An elaborate and cutting subtlety.

Clearly, it was part of Patel's design that Dixit should witness this demonstration of his methods.

Patel turned away, folded his arms, and contemplated a blank piece of wall at close range. He stood motionless. The guards held Dixit still, but not so still as Patel held himself.

This tableau was maintained for several minutes. Dixit found himself losing track of the normal passage of time. Patel's habit of turning to stare at the wall—and it did not belong to Patel alone—was an uncanny one that Dixit had watched several times over the bugging system. It was that habit, he thought, which might

have given Crawley the notion that ESP was rampant in the tower.

It was curious to think of Crawley here. Although Crawley might at this moment be surveying Dixit's face on a monitor, Crawley was now no more than an hypothesis.

Malti broke the tableau. She entered the room with a damp cloth on a tray, to stand waiting patiently for Patel to notice her. He broke away at last from his motionless survey of the wall, gesturing abruptly to the guards to leave. He took no notice of Dixit, sitting in a chair, letting Malti drape the damp cloth round his neck; the cloth had a fragrant smell to it.

"The towel is not cool enough, Malti, or damp enough. You will attend me properly at my morning session, or you will lose this easy job."

He swung his gaze, which was suddenly black and searching, onto Dixit to say, "Well, spy, you know I am Lord here. Do you wonder why I tolerate old women like this about me when I could have girls young and lovely to fawn on me?"

Dixit said nothing, and the self-styled Lord continued, "Young girls would merely remind me by contrast of my advanced years. But this old bag—whom I bought only yesterday—this old bag is only just my junior and makes me look good in contrast. You see, we are masters of philosophy in here, in this prison-universe; we cannot be masters of material wealth like you people outside!"

Again Dixit said nothing, disgusted by the man's implied attitude to women.

A swinging blow caught him unprepared in the stomach. He cried and dropped suddenly to the floor.

"Get up, spy!" Patel said. He had moved extraordinarily fast. He sat back again in his chair, letting Malti massage his neck muscles.

VII

As Dixit staggered to his feet, Patel said, "You don't deny you are from outside?"

"I did not attempt to deny it. I came from outside to speak to you."

"You say nothing here until you are ordered to speak. Your people—you outsiders—you have sent in several spies to us in the last few months. Why?"

Still feeling sick from the blow, Dixit said, "You should realize that we are your friends rather than your enemies, and our men emissaries rather than spies."

"Pah! You are a breed of spies! Don't you sit and spy on us from every room? You live in a funny little dull world out there, don't you? So interested in us that you can think of nothing else! Keep working, Malti! Little spy, you know what happened to all the other spies your spying people sent in?"

"They died," Dixit said.

"Exactly. They died. But you are the first to be sent to Patel's deck. What different thing to death do you expect here?"

"Another death will make my superiors very tired, Patel. You may have the power of life and death over me; they have the same over you, and over all in this world of yours. Do you want a demonstration?"

Rising, flinging the towel off, Patel said, "Give me your demonstration!"

Must do, Dixit thought. Staring in Patel's eyes, he raised his right hand above his head and gestured with his thumb. Pray they are watching—and thank God this bit of partitioned room is the bit with the bugging system!

Tensely, Patel stared, balanced on his toes. Behind his shoulder, Malti also stared. Nothing happened.

Then a sort of shudder ran through Environment. It became slowly audible as a mixture of groan and cry. Its cause became apparent in this less crowded room when the air began to grow hot and foul. So Dixit's signal had got through; Crawley had him under survey, and the air-conditioning plant was pumping in hot carbon-dioxide through the respiratory system.

"You see? We control the very air you breathe!" Dixit said. He dropped his arm, and slowly the air returned to normal, although it was at least an hour before the fright died down in the passages.

Whatever the demonstration had done to Patel, he showed

nothing. Instead, he said, "You control the air. Very well. But you do not control the will to turn it off permanently—and so you do not control the air. Your threat is an empty one, spy! For some reason, you need us to live. We have a mystery, don't we?"

"There is no reason why I should be anything but honest with you, Patel. Your special environment must have bred special talents in you. We are interested in those talents; but no more than interested."

Patel came closer and inspected Dixit's face minutely, rather as he had recently inspected the blank wall. Strange angers churned inside him; his neck and throat turned a dark mottled color. Finally he spoke.

"We are the center of your outside world, aren't we? We know that you watch us all the time. We know that you are much more than 'interested'! For you, we here are somehow a matter of life and death, aren't we?"

This was more than Dixit had expected.

"Four generations, Patel, four generations have been incarcerated in Environment." His voice trembled. "Four generations, and, despite our best intentions, you are losing touch with reality. You live in one relatively small building on a sizeable planet. Clearly, you can only be of limited interest to the world at large."

"Maltil" Patel turned to the slave girl. "Which is the greater, the outer world or ours?"

She looked confused, hesitated by the door as if longing to escape. "The outside world was great, master, but then it gave birth to us, and we have grown and are growing and are gaining strength. The child now is almost the size of the father. So my step-father's son Jamsu says, and he is a clever one."

Patel turned to stare at Dixit, a haughty expression on his face. He made no comment, as if the words of an ignorant girl were sufficient to prove his point.

"All that you and the girl say only emphasizes to me how much you need help, Patel. The world outside is a great and thriving place; you must allow it to give you assistance through me. We are not your enemies."

Again the choleric anger was there, powering Patel's every word.

"What else are you, spy? Your life is so vile and pointless out

there, is it not? You envy us because we are superseding you! Our people—we may be poor, you may think of us as in your power, but we rule our own universe. And that universe is expanding and falling under our control more every day. Why, our explorers have gone into the world of the ultra-small. We discover new environments, new ways of living. By your terms, we are scientific peasants, perhaps, but I fancy we have ways of knowing the trade routes of the blood and the eternities of cell-change that you cannot comprehend. You think of us all as captives, eh? Yet you are captive to the necessity of supplying our air and our food and water; we are free. We are poor, yet you covet our riches. We are spied on all the time, yet we are secret. You need to understand us, yet we have no need to understand you. You are in *our* power, spy!"

"Certainly not in one vital respect, Patel. Both you and we are ruled by historical necessity. This Environment was set up twenty-five of our years ago. Changes have taken place not only in here but outside as well. The nations of the world are no longer prepared to finance this project. It is going to be closed down entirely, and you are going to have to live outside. Or, if you don't want that, you'd better cooperate with us and persuade the leaders of the other decks to cooperate."

Would threats work with Patel? His hooded and oblique gaze bit into Dixit like a hook.

After a deadly pause, he clapped his hands once. Two guards immediately appeared.

"Take the spy away," said Patel. Then he turned his back.

A clever man, Dixit thought. He sat alone in the cell and meditated.

It seemed as if a battle of wits might develop between him and Patel. Well, he was prepared. He trusted to his first impression, that Patel was a man of cutting subtlety. He could not be taken to mean all that he said.

Dixit's mind worked back over their conversation. The mystery of the life-objects had been dangled before him. And Patel had taken care to belittle the outside world: "Funny dull little world," he had called it. He had made Malti advance her primitive view that Environment was growing, and that had fitted in

very well with his brand of boasting. Which led to the deduction that he had known her views beforehand; yet he had bought her only yesterday. Why should a busy man, a leader, bother to question an ignorant slave about her views of the outside world unless he were starved for information of that world, obsessed with it.

Yes, Dixit nodded to himself. Patel was obsessed with outside and tried to hide that obsession; but several small contradictions in his talk had revealed it.

Of course, it might be that Malti was so generally representative of the thousands in Environment that her misinformed ideas could be taken for granted. It was as well, as yet, not to be too certain that he was beginning to understand Patel.

Part of Patel's speech made sense even superficially. These poor devils were exploring the world of the ultra-small. It was the only landscape left for them to map. They were human, and still burning inside them was that unquenchable human urge to open new frontiers.

So they knew some inward things. Quite possibly, as Crawley anticipated, they possessed a system of ESP upon which some reliance might be placed, unlike the wildly fluctuating telepathic radiations which circulated in the outside world.

He felt confident, fully engaged. There was much to understand here. The bugging system, elaborate and over-used, was shown to be a complete failure; the watchers had stayed external to their problem; it remained their problem, not their life. What was needed was a whole team to come and live here, perhaps a team on every deck, anthropologists and so on. Since that was impossible, then clearly the people of Environment must be released from their captivity; those that were unwilling to go far afield should be settled in new villages on the Ganges plain, under the wide sky. And there, as they adapted to the real world, observers could live among them, learning with humility of the gifts that had been acquired at such cost within the thick walls of the Total Environment tower.

As Dixit sat in meditation, a guard brought a meal in to him. He ate thankfully and renewed his thinking.

From the little he had already experienced—the ghastly pressures on living space, the slavery, the aberrant modes of thought into which the people were being forced, the harshness

of the petty rulers—he was confirmed in his view that this experiment in anything like its present form must be closed down at once. The U.N. needed the excuse of his adverse report before they moved; they should have it when he got out. And if he worded the report carefully, stressing that these people had many talents to offer, then he might also satisfy Crawley and his like. He had it in his power to satisfy all parties, when he got out. All he had to do was get out.

The guard came back to collect his empty bowl.

"When is Patel going to speak with me again?"

The guard said, "When he sends for you to have you silenced for ever."

Dixit stopped composing his report and thought about that instead.

VIII

Much time elapsed before Dixit was visited again, and then it was only the self-effacing Malti who appeared, bringing him a cup of water.

"I want to talk to you," Dixit said urgently.

"No, no, I cannot talk! He will beat me. It is the time when we sleep, when the old die. You should sleep now, and Patel will see you in the morning."

He tried to touch her hand, but she withdrew.

"You are a kind girl, Malti. You suffer in Patel's household."

"He has many women, many servants. I am not alone."

"Can you not escape back to your family?"

She looked at the floor evasively. "It would bring trouble to my family. Slavery is the lot of many women. It is the way of the world."

"It is not the way of the world I come from!"

Her eyes flashed. "Your world is of no interest to us!"

Dixit thought after she had gone, She is afraid of our world. Rightly.

He slept little during the night. Even barricaded inside Patel's fortress, he could still hear the noises of Environment: not only

the voices, almost never silent, but the gurgle and sob of pipes in the walls. In the morning, he was taken into a larger room where Patel was issuing commands for the day to a succession of subordinates.

Confined to a corner, Dixit followed everything with interest. His interest grew when the unfortunate guard Raital appeared. He bounded in and waited for Patel to strike him. Instead, Patel kicked him.

"You have performed as I ordered yesterday?"

Raital began at once to cry and wring his hands. "Sir Patel, I have performed as well as and better than you demanded, incurring great suffering and having myself beaten downstairs where the people of Ninth Deck discovered me marauding. You must invade them, Sir, and teach them a lesson that in their insolence they so dare to mock your faithful guards who only do those things—"

"Silence, you dog-devourer! Do you bring back that item which I demanded of you yesterday?"

The wretched guard brought from the pocket of his tattered tunic a small object, which he held out to Patel.

"Of course I obey, Sir Patel. To keep this object safe when the people caught me, I swallow it whole, sir, into the stomach for safe keeping, so that they would not know what I am about. Then my wife gives me sharp medicine so that I vomit it safely again to deliver to you."

"Put the filthy thing down on that shelf there! You think I wish to touch it when it has been in your worm-infested belly, slave?"

The guard did as he was bid and abased himself.

"You are sure it is the life-object of the man who stole Narayan Farhad's life-object, and nobody else's?"

"Oh, indeed, Sir Patel! It belongs to a man called Gita, the very very same who stole Narayan's life-object, and tonight you will see he will die of night-visions!"

"Get out!" Patel managed to catch Raital's buttocks with a swift kick as the guard scampered from the room.

A queue of people stood waiting to speak with him, to supplicate and advise. Patel sat and interviewed them, in the main

showing a better humor than he had shown his luckless guard. For Dixit, this scene had a curious interest; he had watched Patel's morning audience more than once, standing by Crawley's side in the UHDRE monitoring station; now he was a prisoner waiting uncomfortably in the corner of the room, and the whole atmosphere was changed. He felt the extraordinary intensity of these people's lives, the emotions compressed, everything vivid. Patel himself wept several times as some tale of hardship was unfolded to him. There was no privacy. Everyone stood round him, listening to everything. Short the lives might be; but those annihilating spaces that stretch through ordinary lives, the spaces through which one glimpses uncomfortable glooms and larger poverties, if not presences more sour and sinister, seemed here to have been eradicated. The Total Environment had brought its peoples total involvement. Whatever befell them, they were united, as were bees in a hive.

Finally, a break was called. The unfortunates who had not gained Patel's ear were turned away; Malti was summoned and administered the damp-towel treatment to Patel. Later, he sent her off and ate a frugal meal. Only when he had finished it and sat momentarily in meditation, did he turn his brooding attention to Dixit.

He indicated that Dixit was to fetch down the object Raital had placed on a shelf. Dixit did so and put the object before Patel. Staring at it with interest, he saw it was an elaborate little model, similar to the ones for sale on the balcony.

"Observe it well," Patel said. "It is the life-object of a man. You have these"—he gestured vaguely—"outside?"

"No."

"You know what they are?"

"No."

"In this world of ours, Mr. Dixit, we have many holy men. I have a holy man here under my protection. On the deck below is one very famous holy man, Vazifdariji. These men have many powers. Tonight, I shall give my holy man this life-object, and with it he will be able to enter the being of the man to whom it belongs, for good or ill, and in this case for ill, to revenge a death with a death."

Dixit stared at the little object, a three-dimensional maze

constructed of silver and plastic strands, trying to comprehend what Patel was saying.

"This is a sort of key to its owner's mind?"

"No, no, not a key, and not to his mind. It is a—well, we do not have a scientific word for it, and our word would mean nothing to you, so I cannot say what. It is, let us say, a replica, a substitute for the man's being. Not his mind, his being. In this case, a man called Gita. You are very interested, aren't you?"

"Everyone here has one of these?"

"Down to the very poorest and even the older children. A sage works in conjunction with a smith to produce each individual life-object."

"But they can be stolen and then an ill-intentioned holy man can use them to kill the owner. So why make them? I don't understand."

Smiling, Patel made a small movement of impatience. "What you discover of yourself, you record. That is how these things are made. They are not trinkets; they are a man's record of his discovery of himself."

Dixit shook his head. "If they are so personal, why are so many sold by street traders as trinkets?"

"Men die. Then their life-objects have no value, except as trinkets. They are also popularly believed to bestow . . . well, personality-value. There also exist large numbers of forgeries, which people buy because they like to have them, simply as decorations."

After a moment, Dixit said, "So they are innocent things, but you take them and use them for evil ends."

"I use them to keep a power balance. A man of mine called Narayan was silenced by Gita of Ninth Deck. Never mind why. So tonight I silence Gita to keep the balance."

He stopped and looked closely at Dixit, so that the latter received a blast of that enigmatic personality. He opened his hand and said, still observing Dixit, "Death sits in my palm, Mr. Dixit. Tonight I shall have you silenced also, by what you may consider more ordinary methods."

Clenching his hands tightly together, Dixit said, "You tell me about the life-objects, and yet you claim you are going to kill me."

Patel pointed up to one corner of his room. "There are eyes and ears there, while your ever-hungry spying friends suck up the facts of this world. You see, I can tell them—I can tell them so much and they can never comprehend our life. All the important things can never be said, so they can never learn. But they can see you die tonight, and that they will comprehend. Perhaps then they will cease to send spies in here."

He clapped his hands once for the guards. They came forward and led Dixit away. As he went back to his cell, he heard Patel shouting for Malti.

IX

The hours passed in steady gloom. The U.N., the UHDRE, would not rescue him; the Environment charter permitted intervention by only one outsider at a time. Dixit could hear, feel, the vast throbbing life of the place going on about him and was shaken by it.

He tried to think about the life-objects. Presumably Crawley had overheard the last conversation, and would know that the holy men, as Patel called them, had the power to kill at a distance. There was the ESP evidence Crawley sought: telecide, or whatever you called it. And the knowledge helped nobody, as Patel himself observed. It had long been known that African witch doctors possessed similar talents, to lay a spell on a man and kill him at a distance; but how they did it had never been established; nor, indeed, had the fact ever been properly assimilated by the West, eager though the West was for new methods of killing. There were things one civilization could not learn from another; the whole business of life-objects, Dixit perceived, was going to be such a matter: endlessly fascinating, entirely insoluble. . . .

He thought, returning to his cell, and told himself: Patel still puzzles me. But it is no use hanging about here being puzzled. Here I sit, waiting for a knife in the guts. It must be night now. I've got to get out of here.

There was no way out of the room. He paced restlessly up and down. They brought him no meal, which was ominous.

A long while later, the door was unlocked and opened.

It was Malti. She lifted one finger as a caution to silence, and closed the door behind her.

"It's time for me . . . ?" Dixit asked.

She came quickly over to him, not touching him, staring at him.

Though she was an ugly and despondent woman, beauty lay in her time-haunted eyes.

"I can help you escape, Dixit. Patel sleeps now, and I have an understanding with the guards here. Understandings have been reached to smuggle you down to my own deck, where perhaps you can get back to the outside where you belong. This place is full of arrangements. But you must be quick. Are you ready?"

"He'll kill you when he finds out!"

She shrugged. "He may not. I think perhaps he likes me. Prahlad Patel is not inhuman, whatever you think of him."

"No? But he plans to murder someone else tonight. He has acquired some poor fellow's life-object and plans to have his holy man kill him with night-visions, whatever they are."

She said, "People have to die. You are going to be lucky. You will not die, not this night."

"If you take that fatalistic view, why help me?"

He saw a flash of defiance in her eyes. "Because you must take a message outside for me."

"Outside? To whom?"

"To everyone there, everyone who greedily spies on us here and would spoil this world. Tell them to go away and leave us and let us make our own world. Forget us! That is my message! Take it! Deliver it with all the strength you have! This is our world—not yours!"

Her vehemence, her ignorance, silenced him. She led him from the room. There were guards on the outer door. They stood rigid with their eyes closed, seeing no evil, and she slid between them, leading Dixit, and opening the door. They hurried outside, onto the balcony, which was still as crowded as ever, people sprawling everywhere in the disconsolate gestures of public sleep. With

the noise and chaos and animation of daytime fled, Total Environment stood fully revealed for the echoing prison it was.

As Malti turned to go, Dixit grasped her wrist.

"I must return," she said. "Get quickly to the steps down to Ninth Deck, the near steps. That's three flights to go down, the inter-deck flight guarded. They will let you through; they expect you."

"Malti, I must try to help this other man who is to die. Do you happen to know someone called Gita?"

She gasped and clung to him. "Gita?"

"Gita of the Ninth Deck. Patel has Gita's life-object, and he is to die tonight."

"Gita is my step-father, my mother's third husband. A good man! Oh, he must not die, for my mother's sake!"

"He's to die tonight. Malti, I can help you and Gita. I appreciate how you feel about outside, but you are mistaken. You would be free in a way you cannot understand! Take me to Gita, and we'll all three get out together."

Conflicting emotions chased all over her face. "You are sure Gita is to die?"

"Come and check with him to see if his life-object has gone!"

Without waiting for her to make a decision—in fact she looked as if she were just about to bolt back into Patel's quarters—Dixit took hold of her and forced her along the balcony, picking his way through the piles of sleepers.

Ramps ran down from balcony to balcony in long zigzags. For all its multitudes of people—even the ramps had been taken up as dosses by whole swarms of urchins—Total Environment seemed much larger than it had when one looked in from the monitoring room. He kept peering back to see if they were being followed; it seemed to him unlikely that he would be able to get away.

But they had now reached the stairs leading down to Deck Nine. Oh, well, he thought, corruption he could believe in; it was the universal oriental system whereby the small man contrived to live under oppression. As soon as the guards saw him and Malti, they all stood and closed their eyes. Among them was the wretched Raital, who hurriedly clapped palms over eyes as they approached.

"I must go back to Patel," Malti gasped.

"Why? You know he will kill you," Dixit said. He kept tight hold of her thin wrist. "All these witnesses to the way you led me to safety—you can't believe he will not discover what you are doing. Let's get to Gita quickly."

He hustled her down the stairs. There were Deck Nine guards at the bottom. They smiled and saluted Malti and let her by. As if resigned now to doing what Dixit wished, she led him forward, and they picked their way down a ramp to a lower floor. The squalor and confusion were greater here than they had been above, the slumbers more broken. This was a deck without a strong leader, and it showed.

He must have seen just such a picture as this over the bugging, in the air-conditioned comfort of the UHDRE offices, and remained comparatively unmoved. You had to be among it to feel it. Then you caught also the aroma of Environment. It was pungent in the extreme.

As they moved slowly down among the huddled figures abased by fatigue, he saw that a corpse burned slowly on a wood pile. It was the corpse of a child. Smoke rose from it in a leisurely coil until it was sucked into a wall vent. A mother squatted by the body, her face shielded by one skeletal hand. "It is the time when the old die," Malti had said of the previous night; and the young had to answer that same call.

This was the Indian way of facing the inhumanity of Environment: with their age-old acceptance of suffering. Had one of the white races been shut in here to breed to intolerable numbers, they would have met the situation with a general massacre. Dixit, a half-caste, would not permit himself to judge which response he most respected.

Malti kept her gaze fixed on the worn concrete underfoot as they moved down the ramp past the corpse. At the bottom, she led him forward again without a word.

They pushed through the sleazy ways, arriving at last at a battered doorway. With a glance at Dixit, Malti slipped in and rejoined her family. Her mother, not sleeping, crouched over a wash bowl, gave a cry and fell into Malti's arms. Brothers and sisters and half-brothers and half-sisters and cousins and nephews

woke up, squealing. Dixit was utterly brushed aside. He stood nervously, waiting, hoping, in the corridor.

It was many minutes before Malti came out and led him to the crowded little cabin. She introduced him to Shamim, her mother, who curtsied and rapidly disappeared, and to her step-father, Gita.

The little wiry man shooed everyone out of one corner of the room and moved Dixit into it. A cup of wine was produced and offered politely to the visitor. As he sipped it, he said, "If your step-daughter has explained the situation, Gita, I'd like to get you and Malti out of here, because otherwise your lives are worth very little. I can guarantee you will be extremely kindly treated outside."

With dignity, Gita said, "Sir, all this very unpleasant business has been explained to me by my step-daughter. You are most good to take this trouble, but we cannot help you."

"You, or rather Malti, have helped me. Now it is my turn to help you. I want to take you out of here to a safe place. You realize you are both under the threat of death? You hardly need telling that Prahlad Patel is a ruthless man."

"He is very very ruthless, sir," Gita said unhappily. "But we cannot leave here. I cannot leave here—look at all these little people who are dependent on me! Who would look after them if I left?"

"But if your hours are numbered?"

"If I have only one minute to go before I die, still I cannot desert those who depend on me."

Dixit turned to Malti. "You, Malti—you have less responsibility. Patel will have his revenge on you. Come with me and be safe!"

She shook her head. "If I came, I would sicken with worry for what was happening here and so I would die that way."

He looked about him hopelessly. The blind interdependence bred by this crowded environment had beaten him—almost. He still had one card to play.

"When I go out of here, as go I must, I have to report to my superiors. They are the people who—the people who really order everything that happens here. They supply your light, your food, your air. They are like gods to you, with the power of death over every one on every deck—which perhaps is why you can

hardly believe in them. They already feel that Total Environment is wrong, a crime against your humanity. I have to take my verdict to them. My verdict, I can tell you now, is that the lives of all you people are as precious as lives outside these walls. The experiment must be stopped; you all must go free.

"You may not understand entirely what I mean, but perhaps the wall screens have helped you grasp something. You will all be looked after and rehabilitated. Everyone will be released from the decks very soon. So, you can both come with me and save your lives; and then, in perhaps only a week, you will be reunited with your family. Patel will have no power then. Now, think over your decision again, for the good of your dependents, and come with me to life and freedom."

Malti and Gita looked anxiously at each other and went into a huddle. Shamim joined in, and Jamsu, and lame Shirin, and more and more of the tribe, and a great jangle of excited talk swelled up. Dixit fretted nervously.

Finally, silence fell. Gita said, "Sir, your intentions are plainly kind. But you have forgotten that Malti charged you to take a message to outside. Her message was to tell the people there to go away and let us make our own world. Perhaps you do not understand such a message and so cannot deliver it. Then I will give you my message, and you can take it to your superiors."

Dixit bowed his head.

"Tell them, your superiors and everyone outside who insists on watching us and meddling in our affairs, tell them that we are shaping our own lives. We know what is to come, and the many problems of having such a plenty of young people. But we have faith in our next generation. We believe they will have many new talents we do not possess, as we have talents our fathers did not possess.

"We know you will continue to send in food and air, because that is something you cannot escape from. We also know that in your hidden minds you wish to see us all fail and die. You wish to see us break, to see what will happen when we do. You do not have love for us. You have fear and puzzlement and hate. We shall not break. We are building a new sort of world, we are getting clever. We would die if you took us out of here. Go and tell that to your superiors and to everyone who spies on us. Please

leave us to our own lives, over which we have our own commands."

There seemed nothing Dixit could say in answer. He looked at Malti, but could see she was unyielding, frail and pale and unyielding. This was what UHDRE had bred: complete lack of understanding. He turned and went.

He had his key. He knew the secret place on each deck where he could slip away into one of the escape elevators. As he pushed through the grimy crowds, he could hardly see his way for tears.

X

It was all very informal. Dixit made his report to a board of six members of the UHDRE administration, including the Special Project Organizer, Peter Crawley. Two observers were allowed to sit in, a grand lady who represented the Indian Government, and Dixit's old friend, Senator Jacob Byrnes, representing the United Nations.

Dixit delivered his report on what he had found and added a recommendation that a rehabilitation village be set up immediately and the Environment wound down.

Crawley rose to his feet and stood rigid as he said, "By your own words, you admit that these people of Environment cling desperately to what little they have. However terrible, however miserable that little may seem to you. They are acclimatized to what they have. They have turned their backs to the outside world and don't *want* to come out."

Dixit said, "We shall rehabilitate them, re-educate them, find them local homes where the intricate family patterns to which they are used can still be maintained, where they can be helped back to normality."

"But by what you say, they would receive a paralyzing shock if confronted with the outside world and its gigantic scale."

"Not if Patel still led them."

A mutter ran along the board; its members clearly thought this an absurd statement. Crawley gestured despairingly, as if his case were made, and sat down saying, "He's the sort of tyrant who causes the misery in Environment."

"The one thing they need when they emerge to freedom is a strong leader they know. Gentlemen, Patel is our good hope. His great asset is that he is oriented towards outside already."

"Just what does that mean?" one of the board asked.

"It means this. Patel is a clever man. My belief is that he arranged that Malti should help me escape from his cell. He never had any intention of killing me; that was a bluff to get me on my way. Little, oppressed Malti was just not the woman to take any initiative. What Patel probably did not bargain for was that I should mention Gita by name to her, or that Gita should be closely related to her. But because of their fatalism, his plan was in no way upset."

"Why should Patel want you to escape?"

"Implicit in much that he did and said, though he tried to hide it, was a burning curiosity about outside. He exhibited facets of his culture to me to ascertain my reactions—testing for approval or disapproval, I'd guess, like a child. Nor does he attempt to attack other decks—the time-honored sport of Environment tyrants; his attention is directed inwardly on us.

"Patel is intelligent enough to know that we have real power. He has never lost the true picture of reality, unlike his minions. *So he wants to get out.*

"He calculated that if I got back to you, seemingly having escaped death, I would report strongly enough to persuade you to start demolishing Total Environment immediately."

"Which you are doing," Crawley said.

"Which I am doing. Not for Patel's reasons, but for human reasons. And for utilitarian reasons also—which will perhaps appeal more to Mr. Crawley. Gentlemen, you were right. There are mental disciplines in Environment the world could use, of which perhaps the least attractive is telecide. UHDRE has cost the public millions on millions of dollars. We have to recoup by these new advances. We can only use these new advances by studying them in an atmosphere not laden with hatred and envy of us—in other words, by opening that black tower."

The meeting broke up. Of course, he could not expect anything more decisive than that for a day or two.

Senator Byrnes came over.

"Not only did you make out a good case, Thomas; history is with you. The world's emerging from a bad period and that dark tower, as you call it, is a symbol of the bad times, and so it has to go."

Inwardly, Dixit had his qualifications to that remark. But they walked together to the window of the boardroom and looked across at the great rough bulk of the Environment building.

"It's more than a symbol. It's as full of suffering and hope as our own world. But it's a manmade monster—it must go."

Bymes nodded. "Don't worry. It'll go. I feel sure that the historical process, that blind evolutionary thing, has already decided that UHDRE's day is done. Stick around. In a few weeks, you'll be able to help Malti's family rehabilitate. And now I'm off to put in my two cents' worth with the chairman of that board."

He clapped Dixit on the back and walked off. Inside he knew lights would be burning and those thronging feet padding across the only world they knew. Inside there, babies would be born this night and men die of old age and night-visions. . . .

Outside, monsoon rain began to fall on the wide Indian land.

THE SQUARE ROOT OF BRAIN

FRITZ LEIBER

That Fritz Leiber is one of the major literary talents in science fiction is well recognized; less often considered is his sense of humor. He's near the top of his form in this sharply satiric look at human achievements, published here for the first time in the U.S.

(Leiber once worked on the original of the Universal American Encyclopedia, *and he assures us that the quotations from it in his story are absolutely authentic.)*

"So YOU'VE OFTEN gone for rides in flying saucers, Mr. Satanelli," the Modest Young Man

DODGSON, CHARLES LUTWIDGE. *See* Lewis Carroll.—*Universal American Encyclopedia*

stated politely, raising his voice only enough to make himself intelligible through the din of a Hollywood party resonated by a gleaming ceiling twenty feet overhead and by the huge soundboxes of five surrounding rooms, four brightly lit, across which

the party sprawled. The heavy drapes were variedly psychedelic between the vast expanses of glass letting in the night (and letting out the party for an audience of black trees and whatever or whoever else), while the furniture with its chrome and brass and trapeziums of blonde wood and tubular cushions varicolored as barbiturate pills looked more like elegant machines for rapture-treatments or time travel than couches and chairs. Here and there in bright mini-sheaths were stationed like statues, or like receptionists at a thick-factory PR meeting, starlet-looking girls with intelligent, beautiful, blank, faintly worried expressions, as if they had just begun to wonder whether they were still also flesh and blood as well as décor.

The Modest Young Man had that slim, dark, silver-touched Manhattan look which registers as efficient and even aggressive in New York City, but merely a bit drab and sissy in Los Angeles, where gold is the metal. He looked earnestly after his question.

Morpheo Satanelli deftly juggled his martini inside its goblet so that it wasn't spilled by the gentle double bump he'd just got from two beautiful but non-starlet women (*i.e.*, 20-years-plus, not 20-years-minus) clad respectively in blue and gold. He replied smoothly, "Like others, you are interested in the material aspect of my saucer experiences and spacefolk contacts—which you will find well-treated in that compendium of wisdom, the *Universal American Encyclopedia*—but for me the spiritual

> DUAL PERSONALITY, the supposed distinction and potentially independent action of each of the cerebral hemispheres; from one of which, the left, arise all the good and ennobling aims of life, while from the other come all the malevolent influences.—*Universal American Encyclopedia*

has the great significance. 'Morpheo, lift yourself to a higher plane,' my ruby-auraed Guide called to me. 'We have granted you this infinite glimpse so you may open the eyes of the purblind earthlings around you. Morpheo, do you remember the moonlight on Venus? The rippling seas of Mercury splashed by soft rains? Morpheo, Morpheo—'"

A dark raptorial hand gleaming with pearls gripped the Mod-

est Young Man's arm. "This is Friday, Morphy," the Hostess interrupted, swinging him towards a white dress stiff with rhinestones and in it a platinum-haired girl with Hispano-Hibernian features. "Friday remembers all her past lives. We're getting them on my little old tape recorder—spools and spools."

Friday smiled gravely. "Ay haf lift ant re-lift many lifes. Yoost now, Sway-dish, Seventeenth Century," she said in a musical monotone.

"That sounds a bit like time travel—

> MANLIUS, MARCUS CAPITOLINUS, the savior of Rome during the invasion of the Gauls in 309 B.C. He incurred the displeasure of the patricians and was put to death in 384 B.C. by being thrown down the Tarpeian rock.—*Universal American Encyclopedia*

you know, science fiction," remarked an Undistinguished Old Man, turning towards them as he spoke. He was fat and seemed unobtrusively cheerful.

"Yoost so," said Friday.

The Modest Young Man threw a quick friendly smile at the newcomer and then asked Friday courteously, "You speak Swedish, I suppose? Seventeenth Century, that is."

Friday shook her head sadly. "Ay nefer remember lang-wages. Yoost accents."

"The universal intelligibility tropism," Morpheo Satanelli explained. "Every message trends towards an audience-understood language, almost always English. Else the fruits of mediumship would be dissipated in translation, aside from the expense of the latter."

"I declare," the Hostess remarked shrilly with little bells, "there's more secret wisdom on the fly in these rooms than in that big underground library Helena—Helena Blavatsky—visited in Tibet."

Simultaneously the Undistinguished Old Man murmured privately to the Modest Young Man, "Really, you do meet some pretty queer fish

> GOOSEBERRY, the fruit of *Ribes grosularia*, also the bush itself. The fruit is a succulent berry, very wholesome and agree-

> able, of various colors—whitish, yellow, green and red. An American species has fine white flowers and is cultivated as an ornamental shrub, species of Lophius, grows to a length of 4 to 5 feet and weighs from 15 to 170 pounds. It is dark brown above and dirty white below, is hideous in appearance (being also known as "wide gab" and "devilfish"), and has a most voracious appetite, preying indifferently on all kinds of fish, and eating occasional fowls, such as gulls and ducks. The goosefish is practically useless for any purpose.—*Universal American Encyclopedia*

here."

Although the Modest Young Man seemed momentarily cheered by this remark, which showed he had a companion in suffering, there was still some strain in his voice as he ploughed on dutifully, "Miss Morphy—and sir—Mr. Morpheo here has been telling me about his flying saucer trips. I was about to ask him what makes the saucers go."

"Morpheo *Satanelli.* To many planets," the man addressed amended.

"That's right, Satanelli. Any relative of the chap who runs the First Church of Christ Satanist up in San Francisco?" asked the Modest Young Man, made bold by the sympathetic presence of the Undistinguished Old Man at his side.

"None whatever," Morpheo answered sharply. "Anton follows another path." He went on, "As for the saucer-drive, it works by the color of the rays: green for attraction, red for repulsion, yellow sunward, blue starward, violet—"

"So Ya-cob Boeh-me tell New-ton," Friday confirmed, "as Quayne Christina's secret po-lis discover."

Morpheo nodded curtly. "But I am not interested in technics. That is more the area of Gloriana Grant." He indicated the non-starlet-looking woman in gold, then dropped his voice to inform them, "She has offered the Air Force the plans for the spaceship sent her by her man on Saturn, asking only two million—"

"Three million, but I'd consider two and a half," Gloriana Grant corrected gayly, as waving she came towards them. Either her hearing was extraordinary, or it was true what they said about her clairaudience, especially for money-words. "And that two and a

half million's already earmarked for a Survival Center when the weight of the ice-caps tumbles the world in 1985."

"Your . . . man?—if I understood correctly . . . on Saturn—yes?—sent the spaceship plans by spaceship?" the Modest Young Man inquired with a mildness his taut lips and corded neck denied.

She answered briskly, "No, by telepathy—it's far surer, swifter, surveillance-free, and also in its telekinetic mode the master secret weapon of the universe." Then her voice went low in turn as she revealed (squeezing the arm of the non-starlet-woman in blue, who lowered her eyes in pretty confusion): "Linda Lee's Psionic Assault Group of the Jack Hemlock Society has during the past month disintegrated by beamed thought-power

> NEURASTHENIA, a functional nervous disorder resulting from debility or exhaustion of the nerve centers. Among the common symptoms are lack of energy, weakness, irritability, insomnia, marked pessimism, headaches, pressure on the top of the head, pain in the back, impaired memory, menstrual disturbances in women, sexual disturbances in men and gastro-intestinal disturbances. The chief predisposing factor is masturbation.—*Universal American Encyclopedia*

seven Russian spy-satellites. Their destruction is certain because the tracking stations keep getting *ghost* blips of them on their screens."

"Good old Linda!" a strong maudlin voice called from halfway across the room.

"Really?" the Modest Young Man questioned a bit stridently while the Undistinguished Old Man tugged surreptitiously at his sleeve. Footsteps clumped behind. He continued, "In that case—"

A big uniformed arm came curling around his shoulder from one side and a stream of alcohol-saturated breath from the other. Turning, he found his face inches from a craggy, dewlapped, genial one with silver thatch above and a collar with three stars below.

"Linda baby," this one said, "you'd already have seventeen Congressional medals of honor if I bossed the Army. Gloriana darling, when are you going to get realistic about your price?"

Then he swung the Modest Young Man about face with him and said with gruff confidingness, "Been watching you, son, and I can tell you don't know your way around here yet. Would you excuse a friendly hint? Never question the word of interesting people

> ANNENBERG, MOSES LOUIS, was born in Germany and came to the United States at an early age. He began his career as a newsboy in Chicago, was later employed in the circulation department of the Chicago *Examiner* and in 1904 had risen to the office of circulation manager of that paper. In 1926 he resigned from the Hearst organization so that he might devote his entire time to his publishing enterprises, which included the *Daily Racing Form* and the *Nation-Wide News Service,* as well as his extensive realty holdings and many other forms of investment. Some time later Annenberg established the *Miami Tribune, Radio Guide, Screen Guide* and *Official Detective Stories.* In 1936 he surprised the newspaper world by paying the reported sum of $15,000,000 in cash to Mme. Eleanor Elverson Patenotre for the *Philadelphia Inquirer.* This great publishing venture reflected the able and progressive policy and management of Moe Annenberg, as he is popularly known. The self-educated Annenberg, who passed his 59th birthday on February 11, 1937, is indeed an inspiration to the youth of America. Annenberg has for many years been interested in art, has a fine collection of old masterpieces, and is also an ardent fisherman. His estate at Great Neck, Long Island, is a popular showplace, and he has in addition a winter home at Miami Beach, a ranch in Wyoming and maintains residences in New York and Philadelphia. Somewhat later he passed away quietly in a federal penitentiary, whither he had been sent for income tax evasions.—*Universal American Encyclopedia.*

who say they're working for the good of America. No matter how whacky the things they say, they might be true. Do the Space People have observers among us? Envoys in the White House? Liaison officers in the

SHANTAR ISLANDS, an archipelago in the Aegean Sea, separated from the mainland of Siberia by a narrow channel; area, about 1,100 sq. miles. The largest of the ten big islands is Shantar. These islands are not inhabited, but are visited by regular traders.—*Universal American Encyclopedia*

Pentagon? Even I couldn't tell you for sure—and wouldn't if I could. But I do know this" (his gaze rocked back and forth between the Modest Young Man and the Undistinguished Old Man, who had also about-faced to lap up military wisdom), "wipe skepticism out of your minds and faintness from your hearts. All the way from Foggy Bottom to Smog Angeles we got research and development groups working on all the problems in the universe—and if there were big breakthroughs on all of them tomorrow, I wouldn't be surprised. Spacewarp-drive, antigravity power, Dean drive, ionic-shmionic, even Morpheo's color-drive—we got brain boys workin' on 'em all."

"General, if you expect your brain boys to accomplish anything, you better tell them to turn off their heads and tune in their guts," interrupted a haggard man against whose solar plexus, in lieu of a necktie, a cluster of gold-looking bells hung, and whose glittering eyes had their whites and irises glazed respectively with ruby threads and golden flecks. "The genetic ladder which I teach my acolytes to climb, firm-footing the infinite rungs of the DNA code, leads from gut-level to God, both ways. As of today, we've only climbed down to the proton explosion that begins this universe and up to the head-death—I mean heat-death—that ends it, but who knows how far we may have gone tomorrow? Only to stay safe from Kali's daughters and the death by fire,

COMBUSTION, the act of burning, the state of being burned. Spontaneous Combustion is Combustion occurring without any means taken on the part of man to produce it. A Combustion of the human body produced by occult internal causes, which is alleged to have occurred several times, most of the cases being females given to indulging largely in alcohol, and either very fat or very lean. Set on fire accidentally by a coal or candle, or even a spark, their trunk is stated

to have burnt with great rapidity, leaving behind a residuum of fat, oily, fetid ashes, smelling unpleasantly, and containing a very penetrating soot. The alcohol with which it is assumed their organs were saturated, electricity, phosphuretted hydrogen, or other inflammable gas set free by the decomposition of the structures have been assigned as possible causes, but the subject requires well-ascertained modern facts and fresh scientific elucidation. Most chemists believe the Combustion of the human body in the way described an impossibility.—*Universal American Encyclopedia*

you've got to keep centering." He peered down crosseyed and touched the golden bells so that they chinked mutedly against his torso's center. "Gold's best for centering. Next to diamonds," he added as he wove off rhythmically.

"Y'know, O'Leary may have something there, I'll memo my boys on it," the General observed with wise-eyed tolerance.

"In Haight-Ashbury . . ." a voice drifted past shoulders.

"All the Hashbury's moved to Topanga Canyon," another voice counter-drifted.

"Very interesting," the Undistinguished Old Man observed.

The Modest Young Man nodded with considerable tension in his neck.

A small, intense, karate-muscled man, Playboy-clad, marched in like a meteor, absently running interference for his retinue of one wolf-faced and two Frankenstein-visaged monsters and four micro-skirted slenderly-lovelies fresh from some sound stage by the testimony of their panchromatic makeup.

"That secrets-of-the-universe crap may be the ass-fundamental nitty-gritty," he machine-gunned in staccato pronouncement, "but it stays crap until you pitchfork it across the globe by film or tape." He flashed his dark eyes around under his thick, black, side-swept forehead fringe. "They call me the Infant Prodigy

BONAPART, JEROME, born in 1784, became a naval officer and while cruising at the beginning of the war with England was forced to take refuge in New York, where he married an American girl, Elizabeth Patterson, and lived for two years (1785-1789).

BOYER, JEAN PIERRE, President of the Republic of Haiti, was a mulatto, born in Port-au-Prince in 1776. He was educated in France and in 1796 entered the military service.—*Universal American Encyclopedia*

of Sunset Strip, so listen hard to my prophetic da-da for tonight: When it comes, the Great American Movie will be a three-hour commercial that's taken creative hold of its makers and driven them out of their skulls. All our modern Shakespeares are ad-writers. When that golden shit

ELECTRIC DEATH, death resulting from electricity discharged through the animal system. When electricity is applied to the execution of criminals (electrocution), the victim is seated in a chair and strapped thereto. One electrode with wet padded surface is placed against his head or some adjacent part. Another electrode is placed against some of the lower parts, and a current from an alternating dynamo passed for fifteen seconds or more. The potential difference applied to the electrodes is usually about 2200 volts, this high voltage being necessary to overcome the resistance of the body, which varies from 20,000 to 60,000 ohms. A current of three-hundredths (.03) of an ampere is usually fatal, although not always.—*Universal American Encyclopedia*

hits the fan, there'll be cosmic wisdom spattered over the walls of the Kremlin and the Forbidden City." With a massive facial tic instantly mastered, he marched off at right-angle left, his cinematic retinue wheeling.

"He comes only to steal for films our best ideas," Morpheo commented waspishly, then instantly corrected himself, his voice becoming bland with the fine freemasonry of all occultists as he said, "yet if our ideas are spread, what matter the vessel?"

"Left hand helps right hand. The orgiastic Tantric, the meditative Tantric," the Hostess approved, moving sideways a bepearled dark claw in underplayed benediction.

"Quayne Christina would hap-proof," Friday agreed. "Reincarnation . . . Gina Cerminara . . ."

"The Satanic Passion . . . Stations of

EVIL, the subject of an appalling quantity of barren speculation.—*Universal American Encyclopedia*

the Inverted Cross . . . Anton LaVey . . ." floated a voice.

"Wilhem Reich . . . The radiant orgon substance of sex, blue like a boy baby. Or is that pink?" "Ron Hubbard . . . Have you paid your $1,500 for *Excalibur*?" "Roger Babson . . . The Foundation rejected Gloriana's essay because she proved gravity was an illusion." "Symmes, Teed, Burroughs . . . our hollow earth." "Ignatius Donnelly, Hans Hoerbiger, Hans Schindler Bellamy, Immanuel Velikovsky . . . our world many times battered by comets, moons, planets—you'd think if it were hollow it couldn't take it, but I suppose—"

While these other vices floated, the Modest Young Man and the Undistinguished Old Man wandered off into the unlighted room.

The Hostess said, briefly gazing after them, "I must say, those two seem out of place here."

"Two," Gloriana Grant said, "the number of discord. Numbers are mysterious."

LOUISIANA, a state in the south central division of the United States; bounded by Arkansas, Mississippi, the Gulf of Mexico and Texas; admitted to the Union, April 30, 1812. In the entire state in 1936 were 1,318 whites, 4,552 Mexicans, 776,326 Negroes, 1,536 Indians, 522 Chinese and 52 Japanese.—*Universal American Encyclopedia*

"Skeptics!" Morpheo pronounced. "You can always tell by the soothing way they agree with you."

"Obvious as if they were whiteheads, that it's their first day in Bootcamp Pacifico," the General observed.

"Oh well, they're nobodies," Linda Lee summed up.

Among glinting shadowy furniture, the Modest Young Man seated himself in a complexly tubular chair facing the open glass view-door and a faintly reddish star gleaming steadily close to the horizon. He searched the gloom rather carefully, but there were no quiet meditants, no lovers hiding in corners. To seek

the shadows, for any reason, is not the Hollywood custom. Everything is done under bright lights, for maximum impact.

He explained, "It's a very irritating place. Often to hear them talk, you'd swear they couldn't belong to a race having spaceflight

> ARMADILLO, the Spanish-American name, now imported into English, of various mammalia belonging to the order *Edentata,* the family *Dasypodidae,* and its typical genus *Dasypus.* The name implies that they are in armor. The animal, when it sees danger, can extemporize a hole and vanish into it with wonderful rapidity.—*Universal American Encyclopedia*

and atomic power."

"But they do," observed the Undistinguished Old Man. "And they are on the verge of sub-space and the stardrive." He seated himself in a chair of padded curves that clasped him snugly.

"I'll write an honest report, but they'll have me on the carpet for it," the first said dolefully. "They did the first time. And as for my article for the *Galactic Encyclopedia . . .*"

"My masters are as exasperatingly incredulous too," the other agreed with a chuckle, "and *Galactic's* editors only more so. Good that our paths crossed. Perhaps another *time . . .*"

"Yes, good—" the first began, turning towards the other. With only a muted *pop,* the chair of padded curves and its occupant had vanished, leaving behind nothing but a momentary chilly draught as air rushed in to fill the vacuum.

The Modest Young Man smiled wryly and murmured to himself, ". . . *space.*" The tubes of his chair began

> CARROLL, LEWIS. *See* Dodgson, Charles Lutwidge.—*Universal American Encyclopedia*

to glow faintly. Rising only a fraction of an inch a second, but swiftly gathering speed, the chair sped noiselessly through the doorway, aimed straight at Mars.

STARSONG

FRED SABERHAGEN

Fred Saberhagen's stories of mankind's ages-long war with the "berserker" war-machines are among the most popular in recent science fiction. Here he employs that war as the background for a recounting of a very old but still powerful tale.

FORCING THE passage through the dark nebula Taynarus cost the humans three fighting ships, and after that they took the casualties of a three-day battle as their boarding parties fought their way into Hell.

The Battle Commander of the task force feared from the beginning to the end of the action that the computer in command on the berserker side would destroy the place and the living invaders with it, in a last *Gotterdammerung* of destructor charges. But he could hope that the damped-field projectors his men took with them into the fight would prevent any nuclear explosion. He sent living men to board because it was believed that Hell held living human prisoners. His hopes were justified; or at least for whatever reason, no nuclear explosion came.

The beliefs about prisoners were not easily confirmed. Ercul, the cybernetic psychologist who came when the fighting was over to investigate, certainly found humans there. In a way. In part. Odd organs that functioned in a sort-of-way, interconnected with the non-human and the non-alive. The organs were most of them human brains, which had been grown in culture through use of the techniques that berserkers must have captured with some of our hospital ships.

Our human laboratories grow the culture-brains from seedlings of human embryo-tissue, grow them to adult size and then dissect them as needed. A doctor slices off a prefrontal lobe, say, and puts it into the skull of a man whose own corresponding brain-part has been destroyed by some disease or violence. The culture-brain material serves as a matrix for regrowth, raw material on which the old personality can re-impress itself. The culture-brains, raised in glass jars, are not human except in potential. Even a layman can readily distinguish one of them from a normally developed brain by the visible absence of the finer surface convolutions. The culture-brains cannot be human in the sense of maintaining sentient human minds. Certain hormones and other subtle chemicals of the body-environments are necessary for the development of a brain with personality—not to mention the need for the stimuli of experience, the continual impact of the senses. Indeed some sensory input is needed if the culture-brain is to develop even to the stage of a template usable by the surgeon. For this input music is commonly employed.

The berserkers had doubtless learned to culture livers and hearts and gonads as well as brains, but it was only man's thinking ability that interested them deeply. The berserkers must have stood in their computer-analogue of awe as they regarded the memory-capacity and the decision-making power that nature had managed to pack into the few hundred cubic centimeters of the human nervous system.

Off and on through their long war with men the berserkers had tried to incorporate human brains into their own circuitry. Never had they succeeded to their own satisfaction, but they kept trying.

The berserkers themselves of course named nothing. But men were not far wrong in calling this center of their research Hell.

This Hell lay hidden in the center of the dark Taynarus nebula, which in turn was roughly centered in a triangle formed by the Zitz and Toxx and Yaty systems. Men had known for years what Hell was and approximately where it was, before they could muster armed strength enough in this part of their sector of the galaxy to go in and find it and root it out.

"I certify that in this container there is no human life," said the cybernetic psychologist, Ercul, under his breath, at the same time stamping the words on the glassite case before him. Ercul's assistant gestured, and the able-bodied spaceman working with them pulled the power-connectors loose and let the thing in the tank begin to die.

This one was not a culture-brain but had once been the nervous system of a living prisoner. It had been greatly damaged not only by removal of most of its human body, but by being connected to a mass of electronic and micro-mechanical gear. Through some training program, probably a combination of punishment and reward, the berserker had then taught this brain to perform certain computing operations at great speed and with low probability of error. It seemed that every time the computations had been finished the mechanism in the case with the brain had immediately reset all the counters to zero and once more presented the same inputs, whereupon the brain's task had started over. The brain now seemed incapable of anything but going on with the job; and if that was really a kind of human life, which was not a possibility that Ercul was going to admit out loud, it was in his opinion a kind that was better terminated as soon as possible.

"Next case?" he asked the spacemen. Then he realized he had just made a horrible pun upon his judge's role. But none of his fellow harrowers of Hell seemed to have noticed it. *But just give us a few more days on the job,* he thought, *and we will start finding things to laugh at.*

Anyway, he had to get on with his task of trying to distinguish rescued prisoners—two of these had been confirmed so far and might some day again look human—from a collection of bottled though more or less functioning organs.

When they brought the next case before him, he had a bad

moment, bad even for this day, recognizing some of his own work.

The story of it had started more than a standard year before, on the not-far-off planet of Zitz, in a huge hall that had been decorated and thronged for one of the merriest of occasions.

"Happy, honey?" Ordell Callison asked his bride, having a moment to take her hand and speak to her under the tumult of the wedding feast. It was not that he had any doubt of her happiness; it was just that the banal two-word question was the best utterance that he could find—unless, of course, he were to sing.

"Ohhh, happy, yes!" At the moment Eury was no more articulate than he. But the truth of her words was in her voice and in her eyes, marvelous as some song that Ordell might have made and sung.

Of course he was not going to be allowed to get away, even for his honeymoon, without singing one song at least.

"Sing something, Ordell!" That was Hyman Bolf, calling from across the vast banquet table, where he stood filling his cup at the crystal punch-fountain. The famed multi-faith revivalist had come from Yaty system to perform the wedding ceremony. On landing, his private ship had misbehaved oddly, the hydrogen power lamp flaring so that the smoke of burnt insulation had caused the reverend to emerge from his cabin with irritated eyes; but after that bad omen, everything had gone well for the rest of the day.

Other voices took it up at once. "Sing, Ordell!"

"Yes, you've got to. Sing!"

"But it's m'own wedding, and I don't feel quite right—"

His objections were overwhelmingly shouted down.

The man was music, and indeed his happiness today was such that he felt he might burst if he could not express it. He got to his feet, and one of his most trusted manservants, who had foreseen that Ordell would sing, was ready to bring him his self-invented instrument. Crammed into a small box that Ordell could hang from his neck like an accordion was a speaker system from woofer to tweeter, plus a good bit of electronics and audionics; on the box's plain surface there were ten spots for Ordell's ten fingers to play upon. His "music box," he called it, having to call

it something. Ordell's imitators had had bigger and flashier and better music boxes made for them; but surprisingly few people, even among girls between twelve and twenty, cared to listen to Ordell's imitators.

So Ordell Callison sang at his own wedding, and his audience was enthralled by him as people always were; as people had been by no other performer in all the ancient records of Man. The highbrowed music critics sat rapt in their places of honor at the head table; the cultured and not-so-cultured moneyed folk of Zitz and Toxx and Yaty, some of whom had come in their private racing ships, and the more ordinary guests, all were made happy by his song as no wine could have made them. And the adolescent girls, the Ordell fans who crowded and huddled inevitably outside the doors, they yielded themselves to his music to the point of fainting and beyond.

A couple of weeks later Ordell and Eury and his new friends of the last fast years, the years of success and staggering wealth, were out in space in their sporty one-seater ships playing the game they called Tag. This time Ordell was playing the game in a sort of reversed way, dodging about in one corner of the reserved volume of space, really trying to avoid the girl-ships that fluttered past instead of going after them.

He had been keeping an eye out for Eury's ship and getting a little anxious about not being able to find it, when from out of nowhere there came shooting toward Ordell another boy-ship, the signals of emergency blazing from it across the spectrum. In another minute everyone had ceased to play. The screens of all the little ships imaged the face of Arty, the young man whose racer had just braked to a halt beside Ordell's.

Arty was babbling: "I tried, Ordell—I mean I didn't try to—I didn't mean her any harm—they'll get her back—it wasn't my fault she—"

With what seemed great slowness, the truth of what had happened became clear. Arty had chased and overtaken Eury's ship, as was the way of the game. He had clamped his ship to hers and boarded and then thought to claim the usual prize. But Eury of course was married now; and being married meant much to her, as it did to Ordell, who today had only played at catching

girls. Somehow both of them had thought that everyone else must see how the world had changed since they were married, how the rules of the game of Tag would have to be amended for them from now on.

Unable to convince Arty by argument of how things stood, Eury had had to struggle to make her point. She had somehow injured her foot, trying to evade him in the little cabin. He kept on stubbornly trying to claim his prize. It came out later that he had only agreed to go back to his own ship for a first-aid kit (she swore that her ship's kit was missing) after her seeming promise that he could have what he wanted when he returned.

But when he had gone back to his ship, she broke her own racer free and fled. And he pursued. Drove her into a corner, against the boundary of the safety zone, which was guarded by automated warships against the possibility of berserker incursions.

To get away from Arty she crossed that border in a great speeding curve, no doubt meaning to come back to safety within ten thousand miles or so.

She never made it. As her little racer sped close to an outlying wisp of dark Taynarus, the berserker machine that had been lurking there pounced out.

Of course Ordell did not hear the story in such coherent form, but what he heard was enough. On the screens of the other little ships his face at first seemed to be turned to stone by what he heard; but then his look became suddenly wild and mad. Arty cringed away, but Ordell did not stop for a moment for him. Instead he drove at racer's speed out where his wife had gone. He shot through the zone of the protective patrols (which were set to keep intruders out, not to hold the mad or reckless in) and plunged between outlying dustclouds to enter one of the vast crevices that led into the heart of Taynarus, into the maze where ships and machines must all go slow and from which no living human had emerged since the establishment of Hell.

Some hours later, the outer sentries of the berserker came around his little ship, demanding in their well learned human speech that he halt and submit to capture. He only slowed his little ship still further and began to sing to the berserker over

the radio, taking his hands from his racer's controls to put his fingers on the keys of his music box. Unsteered, his ship drifted away from the center of the navigable passage, grazing into the nebular wall and suffering the pocking blasts of microcollisions with its gas and dust.

But before his ship was wrecked, the berserker's sentry-devices gave up shouting radio commands and sent a boarding party of machines.

Through the memory banks of Hell they had some experience of insanity, of the more bizarre forms of human behavior. They searched the racer for weapons, searched Ordell—allowed him to keep his music box when it too had been examined and he kept on struggling for it—and passed him on as a prisoner to the jurisdiction of the inner guards.

Hell, a mass of fortified metal miles in diameter, received him and his racer through its main entrance. He got out of his ship and found himself able to breathe and walk and see where he was going; the physical environment in Hell was for the most part mild and pleasant, because prisoners did not as a rule survive very long, and the computer-brains of the berserker did not want to impose unnecessary stresses upon them.

The berserker devices having immediate control over the routine operations in Hell were themselves in large part organic, containing culture-brains grown for the purpose and some re-educated captured brains as well. These were all examples of the berserker's highest achievements in its attempt at reverse cybernation.

Before Ordell had taken a dozen steps away from his ship, he was stopped and questioned by one of these monsters. Half steel and circuitry, half culture-flesh, it carried in three crystal globes its three potentially-human brains, their too-smooth surfaces bathed in nutrient and woven with hair-fine wires.

"Why have you come here?" the monster asked him, speaking through a diaphragm in its midsection.

Only now did Ordell begin at all to make a conscious plan. At the core of his thought was the knowledge that in the human laboratories music was used to tune and tone the culture-brains and that his own music was as superior for that purpose as it was by all other standards.

To the three-headed monster he sang very simply that he had come here only to seek his young wife: pure accident had brought her, ahead of time, to the end of her life. In one of the old formal languages in which he sang so well of deep things, he implored the power in charge of this domain of terror, this kingdom of silence and unborn creatures, to tie fast again the thread of Eury's life. If you deny me this, he sang, I cannot return to the world of the living alone, and you here will have us both.

The music that had conveyed nothing but its mathematical elements to the cold computer-brains outside, melted the trained purpose of the inner, half-fleshy guardians. The three-brained monster passed him on to others, and each in turn found its set aim yielding to the hitherto unknown touch of beauty, found harmony and melody calling up the buried human things that transcended logic.

He walked steadily deeper into Hell, and they could not resist. His music was leaked into a hundred experiments through audio-inputs, vibrated faintly through the mountings of glassite cases, was sensed by tortured nerve-cells through the changes in inductance and capacities that emanated rhythmically from Ordell's music box. Brains that had known nothing but to be forced to the limit of their powers in useless calculation—brains that had been hammered into madness with the leakage of a millimicrovolt from an inserted probe—these heard his music, felt it, sensed it, each with its own unique perception, and reacted.

A hundred experiments were interrupted, became unreliable, were totally ruined. The overseers, half flesh themselves, failed and fumbled in their programmed purpose, coming to the decision that the asked-for prisoner must be brought forth and released.

The ultimate-controlling, pure berserker computer—pure metallic cold, totally immune to this strange jamming that was wreaking havoc in its laboratory—descended at last from its concentration on high strategic planning to investigate. And then it turned its full energy at once to regaining control over what was going on within the heart of Hell. But it tried in vain, for the moment at least. It had given too much power to its half-alive creations; it had trusted too much to fickle protoplasm to be true to its conditioning.

Ordell was standing before the two linked, potentially-human brains which were under the berserker itself, the lords and superintendents of Hell. These two like all their lesser kind had been melted and deflected by Ordell's music; and now they were fighting back with all the electric speed at their command against their cold master's attempt to reaffirm its rule. They held magnetic relays like fortresses against the berserker; they maintained their grip on the outposts that were ferrite cores; they fought to hold a frontier that wavered through the territory of control.

"Then take her away," said the voice of these rebellious overseers to Ordell Callison. "But do not stop singing, do not pause for breath for more than a second, until you are in your ship and away, clear of Hell's outermost gate."

Ordell sang on, sang of his new joy at the wonderful hope that they were giving him.

A door hissed open behind him, and he turned to see Eury coming through it. She was limping on her injured foot, which had never been taken care of, but he could see that she was really all right. The machines had not started to open her head.

"Do not pause!" barked the voder at him. "Go!"

Eury moaned at the sight of her husband and stretched out her arms to him, but he dared do no more than motion with his head for her to follow him, even as his song swelled to a paean of triumphant joy. He walked out along the narrow passage through which he had come, moving now in a direction that no one else had ever traveled. The way was so narrow that he had to keep on going ahead while Eury followed. He had to keep from even turning his head to look at her, to concentrate the power of his music on each new guardian that rose before him, half-alive and questioning; once more each one in turn opened a door. Always he could hear behind him the sobbing of his wife and the dragging stepping of her wounded foot.

"Ordell? Ordell, honey, is that really you? I can't believe 'tis."

Ahead, the last danger, the three-brained sentry of the outer gate, rose to block their way, under orders to prevent escape. Ordell sang of the freedom in living in a human body, of running over unfenced grass through sunlit air. The gatekeeper bowed aside again, to let them pass.

"Honey? Turn an' look at me, tell me this is not some trick they're playin'. Honey, if y'love me, turn?"

Turning, he saw her clearly for the first time since he had entered Hell. To Ordell her beauty was such that it stopped time, stopped even the song in his throat and his fingers on the keys of music. A moment free of the strange influence that had perverted all its creatures was all the time that the berserker needed to re-establish something close to complete control. The three-headed shape seized Eury and bore her away from her husband, carried her back through doorway after doorway of darkness, so fast that her last scream of farewell could scarcely reach the ears of her man. "Goodbye . . . love . . ."

He cried out and ran after her, beating uselessly on a massive door that slammed in his face. He hung there on the door for a long time, screaming and pleading for one more chance to get his wife away. He sang again, but the berserker had re-established its icy control too firmly—it had not entirely regained power, however, for though the half-living overseers no longer obeyed Ordell, neither did they molest him. They left the way open for him to depart.

He lingered for about seven days there at the gate, in his small ship and out of it, without food or sleep, singing uselessly until no voice was left him. Then he collapsed inside his ship. Then he, or more likely his autopilot, drove the racer away from the berserker and back toward freedom.

The berserker defenses did not, any more than the human, question a small ship coming out. Probably they assumed it to be one of their own scouts or raiders. There were never any escapes from Hell.

Back on the planet Zitz his managers greeted him as one risen from the dead. In a few days' time he was to give a live concert, which had long been scheduled and sold out. In another day the managers and promoters would have had to begin returning money.

He did not really cooperate with the doctors who worked to restore his strength, but neither did he oppose them. As soon as his voice came back he began to sing again; he sang most of the time, except when they drugged him to sleep. And it did not

matter to him whether they sent him onto a stage to do his singing again.

The live performance was billed as one of his pop concerts, which in practice meant a hall overflowing with ten thousand adolescent girls, who were elevated even beyond their usual level of excitement by the miracles of Ordell's bereavement, resurrection and ghastly appearance.

During the first song or two the girls were awed and relatively silent, quiet enough so that Ordell's voice could be heard. Then —well, one girl in ten thousand would scream it aloud: "You're *ours* again!" There was a sense in which his marriage had been resented.

Casually and indifferently looking out over them all, he smiled out of habit and began to sing how much he hated them and scorned them, seeing in them nothing but hopeless ugliness.

For a few moments the currents of emotion in the great hall balanced against one another to produce the illusion of calm. Ordell's deadly voice was clear. But then the storm of reaction broke, and he could no longer be heard. The powers of hate and lust, rage and demand bore all before them. The ushers who always labored to form a barricade at a Callison concert were swept away at once by ten thousand girls.

The riot was over in a minute, ended by the police.

Ordell himself was nearly dead. Medical help arrived only just in time to save the life in the tissues of his brain.

Next day the leading cybernetic-psychologist on Zitz was called in by Ordell Callison's doctors. They were saving what remained of Ordell's life, but they had not been able to open any bridge of communication with him.

Ercul, the psychologist, sank probes directly into Ordell's brain, so that this information could be given him. Next he connected the speech centers to a voder device loaded with recordings of Ordell's own voice, so that the tones that issued were the same as had once come from his throat. And—in response to the crippled man's first request—to the motor-centers that had controlled Ordell's fingers went probes connected to a music box.

After that he at once began to sing.

They took him to the spaceport. With his life-support system of tubes and nourishment and electricity, they put him aboard

his racer. And with the autopilot programmed as he commanded, they sent him out, fired along the course that he had chosen.

Ercul knew Ordell and Eury when he found them, together in the same experimental case. Recognizing his own work on Ordell he felt certain even before the electroencephalogram patterns matched with his old records.

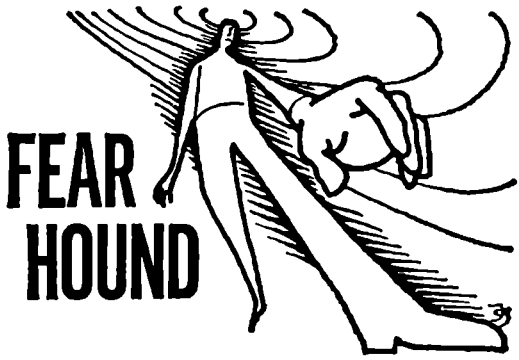
There was little left of either of them.

"Dols only two points above normal bias level," chanted the psychologist's assistant, taking routine readings, not guessing whose pain it was he was attempting to judge. "Neither of them seems to be hurting. At the moment, anyway."

In a heavy hand, Ercul lifted his stamp and marked the case. *I certify that in this container there is no human life.*

The assistant looked up in mild surprise at this quick decision. "There is some mutual awareness here, I would say, between the two subjects." He spoke in a businesslike, almost cheerful voice. He had been enough hours on the job now to start getting used to it.

But Ercul never would.



FEAR HOUND

KATHERINE MAC LEAN

A few years ago the sf field suffered a rash of psi stories—too often shallow and gimmicky—with the result that most of the conscientious writers in the field abandoned the theme as overworked. But another way of dealing with a familiar idea is to dig more deeply and thoughtfully into it—as Katherine MacLean does in this gripping story of a future Rescue Squad.

HUNGER IS NOT a bad thing. Some guys who knew Zen and jaine yogi had told me they could go without food thirty days. They showed me how. The only trouble is, when you skip meals, you shake. When I touched a building it felt like the world was trembling.

If I told the employment board that my student support money had run out, they'd give me an adult support pension and a ticket to leave New York and never come back. I wasn't planning on telling them.

Ahmed the Arab came along the sidewalk, going fast, his legs

rangy and swinging. Ahmed used to be king of our block gang when we were smaller, and he used to ask me to help him sometimes. This year Ahmed had a job working for the Rescue Squad. Maybe he would let me help him; maybe he could swing a job for me.

I signaled him as he came close. "Ahmed."

He went on by, hurrying. "OK, George, come on."

I fell into stride beside him. "What's the rush?"

"Look at the clouds, man. Something's getting ready to happen. We've got to stop it."

I looked at the clouds. The way I felt was smeared all over the sky. Dangerous dark dirty clouds bulged down over the city, looking ready to burst and spill out fire and dirt. In high school Psychology-A they said that people usually match their mood. My mood was bad, I could see that, but I still did not know what the sky really looked like—dark, probably, but harmless.

"What is it?" I asked. "Is it smog?"

Ahmed stopped walking, and looked at my face. "No. It's fear."

He was right. Fear lay like a fog across the air. Fear was in the threatening clouds and in the darkness across the faces of the people. People went by under the heavy sky, hunched as if there were a cold rain falling. Buildings above us seemed to be swaying outward.

I shut my eyes, but the buildings seemed to sway out farther.

Last year when Ahmed had been training for the Rescue Squad he'd opened up a textbook and tried to explain something to me about the difference between inner reality and outer reality, and how mobs can panic when they all see the same idea. I opened my eyes and studied the people running at me, past me, and away from me as the crowds rushed by. Crowds always rush in New York. Did they all see the buildings as leaning and ready to fall? Were they afraid to mention it?

"Ahmed, you Rescue Squad fink," I said, "what would happen if we yelled Earthquake good and loud? Would they all panic?"

"Probably so." Ahmed was looking at me with interest, his lean face and black eyes intent. "How do you feel, George? You look sick."

"I feel lousy. Something wrong in my head. Dizzy." Talking made it worse. I braced my hand against a wall. The walls

rocked, and I felt as if I were down flat while I was still standing up.

"What in creation is wrong with me?" I asked. "I can't get sick from skipping a meal or so, can I?" Mentioning food made my stomach feel strange and hollow and dry. I was thinking about death suddenly. "I'm not even hungry," I told Ahmed. "Am I sick?"

Ahmed, who had been king of our block gang when we were kids, was the one who knew the answers.

"Man, you've got good pickup." Ahmed studied my face. "Someone near here is in trouble and you're tuned in to it." He glanced at the sky east and west. "Which way is worst? We've got to find him fast."

I looked up Fifth Avenue. The giant glass office buildings loomed and glittered insecurely, showing clouds through in dark green, and reflecting clouds in gray as if dissolving into the sky. I looked along Forty-second Street to the giant arches of the transport Center. I looked down Fifth Avenue, past the stone lions of the library, and then west to the neon signs and excitement. The darkness came at me with teeth, like a giant mouth. Hard to describe.

"Man, it's bad." I was shaken. "It's bad in every direction. It's the whole city!"

"It can't be," Ahmed said. "It's loud; we must be near where the victim is."

He put his wrist radio up to his mouth and pushed the signal button. "Statistics, please." A voice answered. "Statistics." Ahmed articulated carefully. "Priority call. Rescue Badge 54B. Give me today's trends in hospital admissions, all rises above sigma reciprocal 30. Point the center of any area with a sharp rise in"—he looked at me analytically—"dizziness, fatigue, and acute depression." He considered me further. "Run a check on general anxiety syndromes and hypochondria." He waited for the Statistics Department to collect data.

I wondered if I should be proud or ashamed of feeling sick.

He waited—lean, efficient, impatient, with black eyebrows and black intense eyes. He'd looked almost the same when he was ten and I was nine. His family were immigrants, speaking some unAmerican language, but they were the proud kind. Another

person would burn with hate or love for girls, but Ahmed would burn about Ideas. His ideas about adventure made him king of our block gang. He'd lead us into strange adventures and grown-up no-trespassing places just to look at things, and when we were trapped he'd consult a little pack of cards, or some dice, and lead us out of trouble at high speed—like he had a map. He had an idea that the look and feel of a place told you its fate; a bad-luck place looked bad. When he consulted me, or asked me how a place looked to me, I'd feel proud.

He'd left us behind. We all dropped out in high school, but Ahmed the Arab got good marks, graduated and qualified for advanced training. All the members of our gang had taken their adult retirement pensions and left the city, except me and Ahmed the Arab—and I heard Ahmed was the best detector in the Rescue Squad.

The wrist radio whistled and he put it to his ear. The little voice crackled off figures and statistical terms. Ahmed looked around at the people passing, surprised, then looked at me more respectfully. "It's all over Manhattan. Women coming in with psychosomatic pregnancy. Pregnant women are coming in with nightmares. Men are coming in with imaginary ulcers and cancers. Lots of suicides and lots of hospital commitments for acute suicidal melancholy. You are right. The whole city is in trouble."

He started along Forty-second Street toward Sixth Avenue, walking fast. "Need more help. Try different techniques." A hanging sign announced, *Gypsy Tea Room, Oriental Teas, Exotic Pastries, Readings of Your Personality and Future.* Ahmed pushed through a swinging door and went up a moving escalator two steps at a time, with me right after him. We came out into the middle of a wide, low-ceiling restaurant, with little tables and spindly chairs.

Four old ladies were clustered around one table nibbling at cupcakes and talking. A businessman sat at a table near the window reading the *Wall Street Journal.* Two teener students sat leaning against the glass wall window looking down into Forty-second Street and its swirling crowds. A fat woman sat at a table in a corner, holding a magazine up before her face. She lowered it and looked at us over the top. The four old ladies stopped talking and the businessman folded his *Wall Street Journal* and

put it aside as if Ahmed and I were messengers of bad news. They were all in a miserable, nervous mood like the one I was in —expecting the worst from a doomed world.

Ahmed threaded his way among the tables toward the corner table where the fat woman sat. She put her magazine aside on another table as we approached. Her face was round and pleasant, with smile creases all over it. She nodded and smiled at me and then did not smile at Ahmed at all, but instead stared straight back into his eyes as he sat down in front of her.

He leaned across the table. "All right, Bessie, you feel it, too. Have you located who it is?"

She spoke in a low, intense voice, as if afraid to speak loudly: "I felt it first thing I woke up this morning, Ahmed. I tried to trace it for the Rescue Squad, but she's feeling, not thinking. And it's echoing off too many other people because they keep thinking up reasons why they feel so—" She paused and I knew what she was trying to describe. Trying to describe it made it worse.

She spoke in a lower voice and her round face was worried. "The bad dream feeling is hanging on, Ahmed. I wonder if I'm—"

She didn't want to talk about it, and Ahmed had his mouth open for a question, so I was sorry for her and butted in.

"What do you mean about people making echoes? How come all this crowd—" I waved my hand in a vague way, indicating the city and the people. The Rescue Squad was supposed to rescue lost people. The city was not lost.

Ahmed looked at me impatiently. "Adults don't like to use telepathy. They pretend they can't. But say a man falls down an elevator shaft and breaks a leg. No one finds him, and he can't reach a phone so he'll get desperate and pray and start using mind power. He'll try to send his thoughts as loud as he can. He doesn't know how loud he can send. But the dope doesn't broadcast his name and where he is, he just broadcasts: 'Help, I've got a broken leg!' They come limping into the emergency clinics and get X rays of good legs. The doctors tell them to go home. But they are picking up the thought, 'Help! I'm going to die unless I get help!' so they hang around the clinics and bother the doctors. They are scared. The Rescue Squad uses them as tracers. Whenever there is an abnormal wave of people

applying for help in one district, we try to find the center of the wave and locate someone in real trouble."

The more he talked the better I felt. It untuned me from the bad mood of the day, and Rescue Squad work was beginning to sound like something I could do. I know how people feel just by standing close to them. Maybe the Rescue Squad would let me join if I showed that I could detect people.

"Great," I said. "What about preventing murders? How do you do that?"

Ahmed took out his silver badge and looked at it. "I'll give you an example. Imagine an intelligent sensitive kid with a vivid imagination. He is being bullied by a stupid father. He doesn't say anything back; he just imagines what he will do to the big man when he grows up. Whenever the big man gets him mad the kid clenches his fists and smiles and puts everything he's got into a blast of mental energy, thinking of himself splitting the big man's skull with an ax. He thinks loud. A lot of people in the district have nothing much to do, nothing much to think about. They never plan or imagine much and they act on the few thoughts that come to them. Get it?"

"The dopes act out what he is thinking," I grinned.

Ahmed looked at my grin with a disgusted expression and turned back to the fat woman. "Bessie, we've got to locate this victim. What do the tea leaves say about where she is?"

"I haven't asked." Bessie reached over to the other table and picked up an empty cup. It had a few soggy tea leaves in the bottom. "I was hoping that you would find her." She heaved herself to her feet and waddled into the kitchen.

I was still standing. Ahmed looked at me with a disgusted expression. "Quit changing the subject. Do you want to help rescue someone or don't you?"

Bessie came back with a round pot of tea and a fresh cup on a tray. She put the tray on the table, and filled the cup, then poured half of the steaming tea back into the pot. I remembered that a way to get information from the group-mind is by seeing how people interpret peculiar shapes like ink blots and tea leaves, and I stood quietly, trying not to bother her.

She lowered herself slowly into her chair, swirled the tea in the cup, and looked in. We waited. She rocked the cup, look-

ing; then shut her eyes and put the cup down. She sat still, eyes closed, the eyelids squeezed tight in wrinkles.

"What was it?" Ahmed asked in a low voice.

"Nothing, nothing, just a—" She stopped and choked. "Just a damned, lousy maggotty skull."

That had to be a worse sign than getting the ace of spades in a card cut. Death. I began to get that sick feeling again. Death for Bessie?

"I'm sorry," Ahmed said. "But push on, Bessie. Try another angle. We need the name and address."

"She was not thinking about her name and address," Bessie's eyes were still tightly shut.

Suddenly Ahmed spoke in a strange voice. I'd heard that voice years ago when he was head of our gang—when he hypnotized another kid. It was a deep smooth voice and it penetrated inside of you.

"You need help and no one has come to help you. What are you thinking?"

The question got inside my head. An answer opened up and I started to answer, but Bessie answered first. "When I don't think, just shut my eyes and hold still, I don't feel anything, everything goes far away. When the bad things begin to happen I can stay far away and refuse to come back." Bessie's voice was dreamy.

The same dark sleepy ideas had formed in my own head. She was saying them for me. Suddenly I was afraid that the darkness would swallow me. It was like a night cloud, or a pillow, floating deep down and inviting you to come and put your head on it, but it moved a little and turned and showed a flash of shark teeth, so you knew it was a shark waiting to eat anyone who came close.

Bessie's eyes snapped open and she straightened herself upright, her eyes so wide open that white showed around the rims. She was scared of sleeping. I was glad she had snapped out of it. She had been drifting down into the inviting dark toward that black monster.

"If you went in too deep, you could wake up dead," I said and put a hand on Ahmed's shoulder to warn him to slow down.

"I don't care which one of you speaks for her," he said, without

turning around. "But you have to learn to separate your thoughts from hers. You're not thinking of dying—the victim is. She's in danger of death, somewhere." He leaned across the table to Bessie again. "Where is she?"

I tightened my grip on Ahmed's shoulder, but Bessie obediently picked up the teacup in fat fingers and looked in again. Her face was round and innocent, but I judged she was braver than I was.

I went around Bessie's side of the table to look into the teacup over her shoulder. A few tea leaves were at the bottom of the cup, drifting in an obscure pattern. She tapped the side of the cup delicately with a fat finger. The pattern shifted. The leaves made some sort of a picture, but I could not make out exactly what it was. It looked like it meant something, but I could not see it clearly.

Bessie spoke sympathetically. "You're thirsty, aren't you? There, there, Honeybunch. We'll find you. We haven't forgotten you. Just think where you are and we will—" Her voice died down to a low, fading mumble, like a windup doll running down. She put the cup down and put her head down into her spread hands.

I heard a whisper. "Tired of trying, tired of smiling. Let die. Let death be born. Death will come out to destroy the world, the worthless dry, rotten—"

Ahmed reached across and grasped her shoulders and shook them. "Bessie, snap out of it. That's not you. It's the *other* one."

Bessie lifted a changed face from her hands. The round smiling look was gone into sagging sorrowful folds like an old bloodhound. She mumbled, "It's true. Why wait for someone to help you and love you? We are born and die. No one can help that. No reason to hope. Hope hurts. Hope hurt *her*." It bothered me to hear Bessie talk. It was like she were dead. It was a corpse talking.

Bessie seemed to try to pull herself together and focus on Ahmed to report, but one eye went off focus and she did not seem to see him.

She said, "Hope hurts. She hates hope. She tries to kill it. She felt my thinking and she thought my feelings of life and hope were hers. I was remembering how Harry always helped me, and

she blasted in blackness and hate—" She put her face down in her hands again. "Ahmed, he's dead. She killed Harry's ghost in my heart. He won't ever come back anymore, even in dreams." Her face was dead, like a mask.

He reached over and shook her shoulder again. "Bessie, shame on you, snap out of it."

She straightened and glared. "It's true. All men are beasts. No one is going to help a woman. You want me to help you at your job and win you another medal for finding that girl, don't you? You don't care about her." Her face was darkening, changing to something worse, that reminded me of the black shapes of the clouds.

I had to pull her out of it, but I didn't know what to do.

Ahmed clattered the spoon against the teacup with a loud clash and spoke in a loud casual voice: "How's the restaurant business, Bessie? Are the new girls working out?"

She looked down at the teacup, surprised, and then looked vaguely around the restaurant. "Not many customers right now. It must be an off hour. The girls are in the kitchen." Her face began to pull back into its own shape, a pleasant restaurant-service mask, round and ready to smile. "Can I have the girls get you anything, Ahmed?"

She turned to me with a habit of kindness, and her words were less mechanical. "Would you like anything, young man? You look so energetic standing there! Most young people like our Turkish honey rolls." She still wasn't focused on me, didn't see me, really, but—I smiled back at her, glad to see her feeling better.

"No thank you, Ma'am," I said and glanced at Ahmed to see what he would want to do next.

"Bessie's honey rolls are famous," Ahmed said. "They are dripping with honey and have so much almond flavor they burn your mouth." He rose easily, looking lazy. "I guess I'll have a dozen to take along."

The fat woman sat blinking her eyes up at him. Her round face did not look sick and sagging anymore, just sort of rumpled and meaningless, like your own face looks in the mirror in the morning. "Turkish honey-and-almond rolls," she repeated. "One dozen." She rang a little bell in the middle of the table and rose.

"Wait for me, downstairs," Ahmed told me. He turned to Bessie.

"Remember the time a Shriners Convention came in and they all wanted lobster and palm reading at once? Where did you get all those hot lobsters?" They moved off together to the counter which displayed cookies and rolls. A pretty girl in a frilled apron trotted out of the kitchen and stood behind the counter.

Bessie laughed, starting with a nervous high-pitched giggle and ending up in a deep ho-ho sound like Santa Claus. "Do I remember? What a hassle! Imagine me on the phone trying to locate twenty palm readers in ten minutes! I certainly was grateful when you sent over those twenty young fellows and girls to read palms for my Shriners. I was really nervous until I saw they had their marks really listening, panting for the next word. I thought you must have gotten a circus tribe of gypsies from the cooler. *Ho-ho.* I didn't know you had sent over the whole police class in Suspect Personality Analysis."

I went out the door, down to the sidewalk. A few minutes later Ahmed came down the escalator two steps at a time and arrived at the sidewalk like a rocket. "Here, carry these." He thrust the paper bag of Turkish honey rolls at me. The warm, sweet smell was good. I took the bag and plunged my hand in.

"Just carry them. Don't eat any." Ahmed led the way down the subway stairs to the first underground walkway.

I pulled my hand out of the bag and followed. I was feeling so shaky I went down the stairs slowly one at a time instead of two at a time. When I got there Ahmed was looking at the signs that pointed in different directions, announcing what set of tracks led to each part of the city. For the first time I saw that he was uncertain and worried. He didn't know which way to go. It was a strange thought for me, that Ahmed did not know which way to go. It meant he had been running without knowing which way to run.

He was thinking aloud: "We know that the victim is female, adult, younger than Bessie, probably pregnant, and is trapped someplace where there is no food or water for her. She expected help from the people she loves, and was disappointed, and now is angry with the thought of love and hates the thought of people giving help."

I remembered Bessie's suddenly sick and flabby face, after the victim had struck out at Bessie's thought of giving help. *Angry* seemed to be the understatement of the year. I remembered the wild threatening sky, and I watched the people hurrying by, pale and anxious. Two chicks passed in bad shape. One was holding her stomach and muttering about Alka-Seltzer, and the other had red-rimmed eyes as if she had just been weeping. Can one person in trouble do that to a whole city full of people?

"Who is she, Ahmed?" I asked. "I mean, *what* is she anyhow?"

"I don't understand it myself," Ahmed said. Suddenly he attacked me again with his question, using that deep hypnotic voice to push me backward into the black whirlpools of the fear of death. *"If you were thirsty, very thirsty, and there was only one place in the city you could go to buy a thirst quencher where—"*

"I'm not thirsty." I tried to swallow, and my tongue felt swollen, my mouth seemed dry and filled with sand, and my throat was coated with dry gravel. The world tilted over sideways. I braced my feet to stand up. "I *am* thirsty. How did you do that? I want to go to the White Horse Tavern on Bleeker Street and drink a gallon of ginger ale and a bottle of brown beer."

"You're my compass. Let's go there. I'll buy for you."

Ahmed ran down the Eighth Avenue subway stairs to the chair tracks. I followed, clutching the bag of sweet smelling rolls as if it were a heavy suitcase full of rocks. The smell made me hungry and weak. I could still walk, but I was pretty sure that, if Ahmed pushed me deep into that black mood just once more, they'd have to send me back on a stretcher.

On the tracks we linked our chairs and Ahmed shifted the linked chairs from belt to belt until we were traveling at a good speed. The chairs moved along the tunnels, passing under bright store windows with beautiful mannequins dancing and displaying things to buy. I usually looked up when we got near the forest fire and waterfall three-dimensional pics, but today I did not look up. I sat with my elbows braced on my knees and my head hanging. Ahmed looked at me alertly, his black eyebrows furrowed and dark eyes scanning me up and down like I was a medical diagram.

"Man, I'd like to see the suicide statistics right now. One look at you and I know it's bad."

I had enough life left to be annoyed. "I have my own feelings, not just some chick's feelings. I've been sick all day. A virus or something."

"Damnit, will you never understand? We've got to rescue this girl because she's broadcasting. She's broadcasting feeling sick!"

I looked at the floor between my feet. "That's a lousy reason. Why can't you rescue her just because she's in trouble? Let her broadcast. High School Psych-A said that everybody broadcasts."

"Listen—" Ahmed leaned forward ready to tell me an idea. His eyes began to glitter as the idea took him. "Maybe she broadcasts too loud. Statistics has been running data on trends and surges in popular action. They think that people who broadcast too loud might be causing some of the mass action."

"I don't get you, Ahmed."

"I mean like they get a big surge of people going to Coney Island on a cloudy day, and they don't have subway cars ready for it, and traffic ties up. They compare that day with other cloudy days, the same temperature and the same time of year other years, and try to figure out what caused it. Sometimes it's a factory vacation; but sometimes it's one man, given the day off, who goes to the beach, and an extra crowd of a thousand or so people from all over the city, people that don't know him, suddenly make excuses, clear schedules and go to the beach, sometimes arriving at almost the same time, jamming up the subways for an hour, and making it hard for the Traffic Flow Control people."

"Is it a club?" I was trying to make out what he meant, but I couldn't see what it had to do with anything.

"No," he said. "They didn't know each other. It's been checked. The Traffic Flow experts have to know what to expect. They started collecting names from the crowds. They found that most of the people in each surge are workers with an IQ below one hundred, but somehow doing all right with their lives. They seemed to be controlled by one man in the middle of the rush who had a reason to be going in that direction. The Statistics people call the man in the middle the *Archetype*. That's an old

Greek word. The original that other people are copied from—one real man and a thousand echoes."

The idea of some people being echoes made me uneasy. It seemed insulting to call anyone an echo. "They must be wrong," I said.

"Listen—" Ahmed leaned forward, his eyes brightening. "They think they are right—one man and a thousand echoes. They checked into the lives of the ones that seemed to be in the middle. The Archetypes are energetic ordinary people living average lives. When things go as usual for the Archetype, he acts normal and everybody controlled by him acts normal, get it?"

I didn't get it, and I didn't like it. "An average healthy person is a good joe. He wouldn't want to control anyone," I said, but I knew I was sugaring the picture. Humans can be bad. People love power over people. "Listen," I said, "some people like taking advice. Maybe it's like advice?"

Ahmed leaned back and pulled his chin. "It fits. Advice by ESP is what you mean. Maybe the Archetype doesn't know he is broadcasting. He does just what the average man wants to do. Solves the same problems—and does it better. He broadcasts loud, pleasant, simple thoughts and they are easy to listen to if you have the same kind of life and problems. Maybe more than half the population below an IQ of 100 have learned to use telepathic pickup and let the Archetypes do their thinking for them."

Ahmed grew more excited, his eyes fixed on the picture he saw in his head. "Maybe the people who are letting Archetypes run their lives don't even know they are following anyone else's ideas. They just find these healthy, problem-solving thoughts going on in a corner of their mind. Notice how the average person believes that thinking means sitting quietly and looking far away, resting your chin in your hand like someone listening to distant music? Sometimes they say, 'When there's too much noise I *can't hear myself think.*' But when an intellectual, a real thinker is thinking—" He had been talking louder with more excitement as the subject got hold of him. He was leaning forward, his eyes glittering.

I laughed, interrupting. "When an intellectual is thinking he goes into high gear, leans forward, bugs his eyes at you and

practically climbs the wall with each word, like you, Ahmed. Are you an Archetype?"

He shook his head. "Only for my kind of person. If an average kind of person started picking up my kind of thinking, it wouldn't solve his problems—so he would ignore it."

He quit talking because I was laughing so hard. Laughing drove away the ghosts of despair that were eating at my heart. "Your kind of person! Ho ho. Show me one. Ha ha. Ignore it? Hell, if a man found your thoughts in his head he'd go to a psychiatrist. He'd think he was going off his rails."

Ahead we saw the big "14" signs signaling Fourteenth Street. I shifted gears on the linked seats and we began to slide sideways from moving cables to slower cables, slowing and going uphill.

We stopped. On the slow strip coming along a girl was kneeling sideways in one of the seats. I thought she was tying a shoelace, but when I looked back I saw she was lying curled up, her knees under her chin, her thumb in her mouth. Regression. Retreat into infancy. Defeat.

Somehow it sent a shiver of fear through me. Defeat should not come so easily. Ahmed had leaped out of his chair and was halfway toward the stairs.

"Ahmed!" I shouted.

He looked back and saw the girl. The seat carried her slowly by in the low-speed lane.

He waved for me to follow him and bounded up the moving stairs. "Come on," he yelled back, "before it gets worse."

When I got up top I saw Ahmed disappearing into the White Horse Tavern. I ran down the block and went in after him, into the cool shadows and paneled wood—nothing seemed to move. My eyes adjusted slowly and I saw Ahmed with his elbows on the counter, sipping a beer, and discussing the weather with the bartender.

It was too much for me. The world was out of its mind in one way and Ahmed was out of his mind in a different way. I could not figure it out, and I was ready to knock Ahmed's block off.

I was thirsty, but there was no use trying to drink or eat anything around that nut. I put my elbows on the bar a long way from Ahmed and called over to the bartender. "A quart of bock to go." I tilted my head at Ahmed. "He'll pay for it."

I sounded normal enough, but the bartender jumped and moved fast. He plunked a bottle in a brown paper bag in front of me and rubbed the bar in front of me with wood polish.

"Nice weather," he said, and looked around his place with his shoulders hunched, looking over his shoulders. "I wish I was outside walking in the fresh air. Have you been here before?"

"Once," I said, picking up the bag. "I liked it." I remembered the people who had shown me the place. Jean Fitzpatrick—she had shown me some of her poetry at a party—and a nice guy, her husband. Mort Fitzpatrick had played a slide whistle in his own tunes when we were walking along over to the tavern, and some bearded friends of theirs walked with us and talked odd philosophy and strange shared trips. The girl told me that she and her husband had a house in the neighborhood, and invited me to a party there, which I turned down, and she asked me to drop in anytime.

I knew she meant the "anytime" invitation. They were villagers, Bohemians, the kind who collect art, and strange books, and farout people. Villagers always have the door open for people with strange stories and they always have a pot of coffee ready to share with you.

"Do Jean Fitzpatrick and Mort Fitzpatrick still live around here?" I asked the bartender.

"I see them around. They haven't been in recently." He began to wipe and polish the bar away from me, moving toward Ahmed. "For all I know they might of moved."

Ahmed sipped his beer and glanced at us sidelong, like a stranger.

I walked out into the gray day with a paper bag under my arm with its hard weight of bock beer inside. I could quit this crazy, sick-making business of being a detector. I could go look up somebody in the Village like Jean Fitzpatrick and tell how sick the day had been, and how I couldn't take it and had chickened out, until the story began to seem funny and the world became some place I could stand.

Ahmed caught up with me and put a hand on my arm. I stopped myself from spinning around to hit him and just stood—staring straight ahead.

"You angry?" he asked, walking around me to get a look at my face. "How do you feel?"

"Ahmed, my feelings are my own business. OK? There is a girl around here I want to look up. I want to make sure she is all right. OK? Don't let me hold you up on Rescue Squad business. Don't wait for me. OK?" I started walking again, but the pest was walking right behind me. I had spelled it out clear and loud that I didn't want company. I did not want to flatten him, because at other times he had been my friend.

"May I come along?" he asked politely. "Maybe I can help."

I shrugged, walking along toward the river. What difference did it make? I was tired and there was too much going on in New York City. Ahmed would go away soon on his business. The picture of talking to the girl was warm, dark, relaxing. We'd share coffee and tell each other crazy little jokes and let the world go forgotten.

The house of the Fitzpatricks was one of those little tilted houses left over from a hundred years ago when the city was a town, lovingly restored by hand labor and brightened under many coats of paint by groups of volunteer decorators. It shone with white paint and red doors and red shutters with windowboxes under each window growing green vines and weeds and wildflowers. The entire house was overhung by the gigantic girders of the Hudson River Drive with its hissing flow of traffic making a faint rumble through the air and shaking the ground underfoot.

I knocked on the bright red door. No one answered. I found an unused doorbutton at the side and pushed it. Chimes sounded, but nothing stirred inside.

Village places usually are lived in by guests. Day or night someone is there: broke artists, travelers, hitchhikers, stunned inefficient looking refugees from the student or research worlds staving off a nervous breakdown by a vacation far away from pressure. It was considered legitimate to put your head inside and holler for attention if you couldn't raise anyone by knocking and ringing. I turned the knob to go in. It would not turn. It was locked.

I felt like they had locked the door when they saw me com-

ing. The big dope, musclehead George is coming, lock the door. This was a bad day, but I couldn't go any farther. There was no place to go but here.

I stood shaking the knob dumbly, trying to turn it. It began to make a rattling noise like chains, and like an alarm clock in a hospital. The sound went through my blood and almost froze my hand. I thought something was behind the door, and I thought it was opening and a monster with a skull face was standing there waiting.

I turned my back to the door and carefully, silently went down the two steps to the sidewalk. I had gone so far off my rails that I thought I heard the door creaking open, and I thought I felt the cold wind of someone reaching out to grab me.

I did not look back, just strode away, walking along the same direction I had been going, pretending I had not meant to touch that door.

Ahmed trotted beside me, sidling to get a view of my face, scuttling sideways and ahead of me like a big crab.

"What's the matter? What is it?"

"She's not— Nobody was—" It was a lie. Somebody or something was in that house. Ignore it, walk away faster.

"Where are we going now?" Ahmed asked.

"Straight into the river," I said and laughed. It sounded strange and hurt my chest like coughing. "The water is a mirage in the desert and you walk out on the dry sand looking for water to drown in. The sand is covered with all the lost dried things that sank out of sight. You die on the dry sand, crawling, looking for water. Nobody sees you. People sail overhead and see the reflection of the sky in the fake waves. Divers come and find your dried mummy on the bottom and make notes, wondering because they think there is water in the river. But it is all a lie."

I stopped. The giant docks were ahead, and between them the ancient, small wharfs. There was no use going in that direction, or in any direction. The world was shriveled and old, with thousands of years of dust settling on it—a mummy case. As I stood there the world grew smaller, closing in on me like a lid shutting me into a box. I was dead, lying down, yet standing upright on the sidewalk. I could not move.

"Ahmed," I said, hearing my voice from a great distance, "get me out of this. What's a friend for?"

He danced around me like some evil goblin. "Why can't you help yourself?"

"I can't move," I answered, being remarkably reasonable.

He circled me, looking at my face and the way I stood. He was moving with stops and starts, like a bug looking for a place to bite. I imagined myself shooting a spray can of insecticide at him.

Suddenly he used the *voice,* the clear deep hypnotic voice that penetrates into the dark private world where I live when I'm asleep and dreaming.

"Why can't you move?"

The gulf opened up beneath my feet. "Because I'd fall," I answered.

He used the voice again, and it penetrated to an interior world where the dreams lived and were real all the time. I was shriveled and weak, lying on dust and bits of old cloth. A foul and dusty smell was in my nostrils and I was looking down over an edge where the air came up from below. The air from below smelled better. I had been there a long time. Ahmed's voice reached me; it asked—

"How far would you fall?"

I measured the distance with my eye. I was tired and the effort to think was very hard. Drop ten or twelve feet to the landing, then tangle your feet in the ladder lying there and pitch down the next flight of steep stairs. . . . Death waited at the bottom.

"A long way," I answered. "I'm too heavy. Stairs are steep."

"Your mouth is dry," he said.

I could feel the thirst like flames, drying up my throat, thickening my tongue as he asked the question, the jackpot question.

"Tell me, what is your name?"

I tried to answer with my right name, George Sanford. I heard a voice croak. "Jean Dalais."

"Where do you live?" he asked in the penetrating voice that rang inside my skull and rang into the evil other world where I, or someone, was on the floor smelling dust for the duration of eternity.

"Downstairs," I heard myself answer.

"*Where are you now?*" he asked in the same penetrating voice.

"In hell," the voice answered from my head.

I struck out with careful aim to flatten him with the single blow. He was dangerous. I had to stop him, and leave him stopped. I struck carefully, with hatred. He fell backward and I started to run. I ran freely, one block, two blocks. My legs were my own, my body was my own, my mind was my own. I was George Sanford and I could move without fear of falling. No one was behind me. No one was in front of me. The sun shone through clouds, the fresh wind blew along the empty sidewalks. I was alone. I had left that capsule world of dead horror standing behind me like an abandoned phone booth.

This time I knew what to do to stay out of it. Don't think back. Don't remember what Ahmed was trying to do. Don't bother about rescuing anyone. Take a walk along the edge of the piers in the foggy sunshine and think cheerful thoughts, or no thoughts at all.

I looked back and Ahmed was sitting on the sidewalk far back. I remembered that I was exceptionally strong and the coach had warned me to hold myself back when I hit. Even Ahmed? But he had been thinking, listening, off guard.

What had I said? *Jean Dalais.* Jean Fitzpatrick had showed me some of her poetry, and that had been the name signed to it. Was Jean Dalais really Jean Fitzpatrick? It was probably her name before she married Mort Fitzpatrick.

I had run by the white house with the red shutters. I looked back. It was only a half a block back. I went back, striding before fear could grip me again, and rattled the knob and pulled at the red door and looked at the lock.

Ahmed caught up with me.

"You know how to pick locks?" I asked him.

"It's too slow," he answered in a low voice. "Let's try the windows."

He was right. The first window we tried was only stuck by New York soot. With our hands black and grimy with soot we climbed into the kitchen. The kitchen was neat except for a dried-up salad in a bowl. The sink was dry, the air was stuffy.

It was good manners to yell announcement of our trespassing.

"Jean!" I called. I got back echoes and silence, and something small falling off a shelf upstairs. The ghosts rose in my mind again and stood behind me, their claws outstretched. I looked over my shoulder and saw only the empty kitchen. My skin prickled. I was afraid of making a noise. Afraid death would hear me. Had to yell; afraid to yell. Had to move; afraid to move. Dying from cowardice. Someone else's thoughts, with the odor of illness, the burning of thirst, the energy of anger. I was shriveling up inside.

I braced a hand on the kitchen table. "Upstairs in the attic," I said. I knew what was wrong with me now. Jean Dalais was an Archetype. She was delirious and dreaming that she was I. Or I was really Jean Dalais suffering through another dream of rescue, and I was dreaming that strange people were downstairs in my kitchen looking for me. I, Jean, hated these hallucinations. I struck at the dream images of men with the true feeling of weakness and illness, with the memory of the time that had passed with no one helping me and the hatred of a world that trapped you and made hope a lie, trying to blast the lies into vanishing.

The George Sanford hallucination slid down to a sitting position on the floor of the kitchen. The bottle of bock in its paper bag hit the floor beside him with a heavy clunk, sounding almost real. "You go look, Ahmed," said the George Sanford mouth.

The other figure in the dream bent over and placed a phone on the floor. It hit the linoleum with another clunk and a musical chiming sound that seemed to be heard upstairs. "Hallucinations getting more real. Can hear 'em now," muttered the Sanford self—or was it Jean Dalais who was thinking?

"When I yell, dial O and ask for the Rescue Squad to come over." Ahmed picked up the paper bag of bock. "OK, George?" He started looking through the kitchen drawers. "Great stuff, beer, nothing better for extreme dehydration. Has salt in it. Keeps the system from liquid shock."

He found the beer opener and slipped it into his hip pocket. "Liquid shock is from sudden changes in the water-versus-salt balance," he remarked, going up the stairs softly, two at a time.

He went out of sight and I heard his footsteps, very soft and inquiring. Even Ahmed was afraid of stirring up ghosts.

What had Bessie said about the victim? "Hope hurts." She had tried to give the victim hope and the victim had struck her to the heart with a dagger of hatred and shared despair.

That was why I was sitting on the floor!

Danger George *don't think!* I shut my eyes and blanked my mind.

The dream of rescue and the man images were gone. I was Jean Dalais sinking down into the dark, a warm velvet darkness, no sensation, no thought, only distantly the pressure of the attic floor against my face.

A strange thump shook the floor and a scraping sound pulled at my curiosity. I began to wake again. It was a familiar sound, familiar from the other world and the other life, six days ago, an eternity ago, almost forgotten. The attic floor pushed against my face with a smell of dust. The thump and the scraping sound came again, metal against wood. I was curious. I opened dry, sand-filled eyes and raised my head, and the motion awakened my body to the hell of thirst and the ache of weakness.

I saw the two ends of the aluminum ladder sticking up through the attic trapdoor. The ladder was back now. It had fallen long ago, and now it was back, looking at me, expecting me to climb down it. I cursed the ladder with a mental bolt of hatred. What good is a ladder if you can't move? Long ago I had found that moving around brought on labor pains. Not good to have a baby here. Better to hold still.

I heard a voice. "She's here. George. Call the Rescue Squad." I hated the voice. Another imaginary voice in the long nightmare of imaginary rescues. Who was "George"? I was Jean Dalais.

George. Someone had called "George." Downstairs in the small imagined kitchen I imagined a small image of a man grope for a phone beside him on the floor. He dialed "O" clumsily. A female voice asked a question. The man image said "Rescue Squad," hesitantly.

The phone clicked and buzzed and then a deep voice said, "Rescue Squad."

In the attic I knew how a dream of the Rescue Squad should go. I had dreamed it before. I spoke through the small man-image.

"My name is Jean Fitzpatrick. I am at 29 Washington Street. I am trapped in my attic without water. If you people weren't fools, you would have found me long ago. Hurry. I'm pregnant." She made the man-image drop the receiver. The dream of downstairs faded again as the man-image put his face in his hands.

My dry eyes were closed, the attic floor again pressed against my face. Near me was the creak of ladder rungs taking weight, and then the creaks of the attic floor, something heavy moving on it gently, then the rustle of clothing as somebody moved; the click of a bottle opener against a cap; the clink of the cap hitting the floor; the bubbling and hissing of a fizzing cool liquid. A hand lifted my head carefully and a cold bottle lip pushed against my mouth. I opened my mouth and the cold touch of liquid pressed within it and down the dry throat. I began to swallow.

George Sanford, me, took his hands away from his eyes and looked down at the phone. I was not lying down; I was not drinking; I was not thirsty. Had I dialed the Rescue Squad when Ahmed called me? A small mannequin of a man in Jean Fitzpatrick's mind had called and hung up, but the mannequin was me, George Sanford—six feet one and a half inches. I am no woman's puppet. The strength of telepathy is powered by emotion and need, and the woman upstairs had enough emotion and need, but no one could have done that to me if I did not want to help. No one.

A musical, two-toned note of a siren approaching, growing louder. It stopped before the door. Loud knocks came at the door. I was feeling all right but still dizzy and not ready to move.

"Come in," I croaked. They rattled the knob. I got up and let them in, then stood hanging on to the back of a chair.

Emergency squad orderlies in blue and white. "You sick?"

"Not me, the woman upstairs." I pointed and they rushed up the stairs, carrying their stretcher and medical kits.

There was no thirst or need driving her mind to intensity any more, but our minds were still connected somehow, for I felt the prick of a needle in one thigh, and then the last dizziness and fear dimmed and vanished, the world steadied out in a good upright position, the kitchen was not a dusty attic but only a

clean empty kitchen and all the sunshine of the world was coming in the windows.

I took a deep breath and stretched, feeling the muscles strong and steady in my arms and legs. I went up to the second floor and steadied the ladder for the Rescue Squad men while they carried the unconscious body of a young woman down from the attic.

She was curly-haired with a dirt-and-tear streaked face and skinny arms and legs. She was bulging in the middle, as pregnant as a pumpkin.

I watched the blue and white Rescue truck drive away.

"Want to come along and watch me make out my report?" Ahmed asked.

On the way out of the kitchen I looked around for the Turkish honey rolls, but the bag was gone. I must have dropped it somewhere.

We walked south a few blocks to the nearest police station, Ahmed settled down at a desk they weren't using to fill out his report, and I found a stack of comic magazines in the waiting room and chose the one with the best action on the cover. My hands shook a little because I was hungry, but I felt happy and important.

Ahmed filled out the top, wrote a few lines, and then started working the calculator on the desk. He stopped, stared off into space, glanced at me and started writing again, glancing at me every second. I wondered what he was writing about me. I wanted the Rescue Squad brass to read good things about me so they would hire me for a job.

"I hunch good, don't I, Ahmed?"

"Yes." He filled something into a space, read the directions for the next question and began biting the end of his pen and staring at the ceiling.

"Would I make a good detector?" I asked.

"What kind of mark did you get in Analysis of Variance in high school?"

"I never took it, I flunked probability in algebra, in six B—"

"The Rescue Squad wants you to fill out reports that they can run into the statistics machines. Look"—I went over and he

showed me a space where he had filled out some numbers and a funny symbol like a fallen down *d*—"can you read it, George?"

"What's it say?"

"It says probability .005. That means the odds were two hundred to one against you finding the White Horse Tavern just by accident, when it was the place the Fitzpatrick woman usually went to. I got the number by taking a rough count of the number of bars in the phone book. More than two hundred wrong bars, and there was only one bar you actually went to. Two hundred divided by one, or two hundred. If you had tried two bars before finding the right one your chance of being wrong would have been two hundred divided by two. That's one hundred. Your score for being right was your chance of being wrong, or the reciprocal of your chance of being right by luck. Your score is two hundred. Understand? Around here they think forty is a good score."

I stared at him, looking stupid. The school had tried relays of teachers and tutors on me for two terms before they gave up trying to teach me. It didn't seem to mean anything. It didn't seem to have anything to do with people. Without probability algebra and graphs I found out they weren't going to let me take Psychology B, History, Social Dynamics, Systems Analysis, Business Management, Programming or Social Work. They wouldn't even let me study to be a Traffic Flow cop. I could have taken Electronics Repair but I wanted to work with people, not TV sets, so I dropped out. I couldn't do school work, but the kind of thing the Rescue Squad wanted done, I could do.

"Ahmed, I'd be good in the Rescue Squad. I don't need statistics. Remember I told you you were pushing Bessie in too deep. I was right, wasn't I? And you were wrong. That shows I don't need training."

Ahmed looked sorry for me. "George, you don't get any score for that. Every soft-hearted slob is afraid when he sees someone going into a traumatic area in the subjective world. He always tries to make them stop. You would have said I was pushing her too deep anyhow, even if you were wrong."

"But I was right."

Ahmed half rose out of his chair, then made himself calm down.

He settled back, his lips pale and tight against his teeth. "It doesn't matter if you were right, unless you are right against odds. You get credit for picking the White Horse Tavern out of all the taverns you could have picked, and you get credit for picking the girl's house out of all the addresses you could have picked. I'm going to multiply the two figures by each other. It will run your score over eighty thousand probably. That's plenty of credit."

"But I only went to the tavern because I was thirsty. You can't credit me with that. You made me thirsty somehow. And I went to the girl's house because I wanted to see her. Maybe she was pulling at me."

"I don't care what your reasons were! You went to the right place, didn't you? You found her, didn't you?" Ahmed stood up and shouted. "You're talking like a square. What do you think this is, 1950, or some time your grandmother was running a store? I don't care what your reasons are, nobody cares anymore what the reasons are. We only care about results, understand? We don't know why things happen, but if everyone makes out good reports about them, with clear statistics, we can run the reports into the machines, and the machines will tell us exactly what is happening, and we can work with that, because they're facts, and it's the real world. I know you can find people. Your reasons don't matter. Scientific theories about the causes don't matter!"

He was red in the face and shouting, like I'd said something against his religion or something. "I wish we could get theories for some of it. But, if the statistics say that if something funny happens here and something else funny always happens over there, next, we don't have to know how the two connect; all we have to do is expect the second thing every time we see the first thing happen. See?"

I didn't know what he was talking about. My tutors had said things like that to me, but Ahmed felt miserable enough about it to shout. Ahmed was a friend.

"Ahmed," I said, "would I make a good detector?"

"You'd make a great detector, you dope!" He looked down at his report. "But you can't get into the Rescue Squad. The rules say that you've got to have brains in your head instead of

rocks. I'll help you figure out someplace else you can get a job. Stick around. I'll loan you fifty bucks as soon as I finish this report. Go read something."

I felt lousy, but I stood there fighting it, because this was my last chance at a real job, and there was something right about what I was trying to do. The Rescue Squad needed me. Lost people were going to need me.

"Ahmed," I said, trying to make my meaning very clear to him. "I *should* be in your department. You gotta figure out a way to get me in."

It's hard watching a strong, confident guy go through a change. Generally Ahmed always knows what he is doing, he never wonders. He stared down at his report, holding his breath, he was thinking so hard. Then he got away from his desk and began to pace up and down. "What the hell is wrong with me? I must be going chicken. Desk work is softening me up." He grabbed up his report off the desk. "Come on, let's go buck the rules. Let's fight City Hall."

"We can't hire your friend." The head of the Rescue Squad shook his head. "He couldn't pass the tests. You said so yourself."

"The *rules* say that George has to pass the pen and paper tests." Ahmed leaned forward on the desk and tapped his hand down on the desk top, emphasizing words. "The rules are *trash* rules made up by trash bureaucrats so that nobody can get a job but people with picky little old-maid minds like them! Rules are something we used to deal with people we don't know and don't care about. We know George and we know we want him! How do we fake the tests?"

The chief held out one hand, palm down. "Slow down, Ahmed. I appreciate enthusiasm, but maybe we can get George in legitimately. I know he cut short an epidemic of hysteria and psychosomatics at the hospitals and saved the hospitals a lot of time and expense. I want him in the department if he can keep that up. But let's not go breaking up the system to get him in. We can use the system."

The chief opened the intercom switch and spoke into the humming box. "Get me Accounting, will you?" The box answered after a short while and the chief spoke again. He was a

big, square built man, going slightly flabby. His skin was loose and slightly gray. "Jack, listen, we need the services of a certain expert. We can't hire him. He doesn't fit the height and weight regulations, or something like that. How do we pay him?"

The man at the other end spoke briefly in accounting technicalities: ". . . Contingencies, services, fees. Consultant. File separate services rendered, time and results, with statistics of probability rundown on departmental expenses saved by outside help and city expenses saved by the Rescue Squad action, et cetera, et cetera. Get it?"

"OK, thanks." He shut off the chatterbox and spoke to Ahmed. "We're in. Your friend is hired."

My feet were tired standing there. My hands were shaking slightly so I had stuffed them into my pockets, like a nonchalant pose. I was passing the time thinking of restaurants, all the good ones that served the biggest plates for the least money. "When do I get paid?" I asked.

"Next month," Ahmed said. "You get paid at the end of every month for the work you did on each separate case. Don't look so disappointed. You are a consultant expert now. You are on my expense account. I'm supposed to buy your meals and pay your transportation to the scene of the crime whenever I consult you."

"Consult me now," I said.

We had a great Italian meal at an old-fashioned Italian restaurant: lasagna, antipasto, French bread in thick, tough slices, lots of butter, four cups of hot black coffee and spumoni for dessert, rich and sweet. Everything tasted fresh and cooked just right, and they served big helpings. I stopped shaking after the second cup of coffee.

There was something funny about that restaurant. Somebody was planning a murder, but I wasn't going to mention it to Ahmed until after dessert.

He'd probably want me to rescue somebody instead of eating.

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