

DESTINIES

OF SCIENCE FICTION & SPECULATIVE FACT プロプラスス

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PREMIER ISSUE!

9 Shirts

Edited by JAMES BAEN

THE PAPERBACK MAGAZINE
OF SCIENCE FICTION AND SPECULATIVE FACT

All NEW stories and articles by

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And just wait till you see what the January/February issue has to offer...

The Editor

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DESTINIES

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by Roger Zelazny

Love as a game for three players...



When it was agreed that we would marry, the three of us went to Old Voyet of the Long Legs to select a stone signifying the betrothal. This was to be our choice alone, as was the custom.

Kwib favored one the color of passion itself, bright blue, looking as if it were a solid drop of the great ocean. I preferred a jewel the color of fire, representing peace and stability in the home. Since our beloved agreed with me, the ruby stone, a more expensive gem, was selected and Old Voyet of the Long Legs made the incision in our beloved's brow, set the stone there and bandaged it in place. Our beloved, thenceforth to be known as Ruby Stone, was very brave. He held us and stared at the ground, unmoving, throughout that terrible little ritual.

"Never hurts me a bit," Old Voyet of the Long Legs remarked, "and I've done the Woods know how many over the returnings."

We did not reply to the crude humor, but made arrangements to see her paid before the ceremony.

"Will there be a Bottom-Top settlement for all to see?" she asked.

"No, we believe in privacy in these matters," I answered, perhaps too quickly, for the look I received in reply showed that it had been taken as a sign of weakness. No matter. The walker with the mitteltoth knows its wilpering best.

We bade one another farewell and departed in the three directions, to remain at station houses until Ruby Stone should heal sufficiently to be fit for the ceremony.

I rested and practiced thorn-throwing while I

waited for the joggler. On the tenth day it came flapping to my door. Before I slew it, I took its message and learned that we would be wed two days hence. The joggler's innards augured a mixed destiny but its flesh was tender.

Alone at the station house, I bathed and flagellated myself in preparation for the rites. I slept beneath a sacred tree. I watched the stars through its branches. I made offering of the joggler's bones at its mossy base. I listened to the singers who flew through the Wood — moist, coarse tongues hanging vinelike — collecting relatives, the little singers, to serve the belly-filling role in the great songshow of life.

One singer shrieked horribly in mid-swoop and was dragged downward by the tongue to disappear within the pot of a korkanus — a noisy piece of blackness torn from the night.

Before morning, I was at the plant's side, waiting for it to evert its stomach. It made a gurgling, slopping noise just as light was beginning to come into the world, ridding itself of the previous day's dross in a little steaming pool. I sprang back so as not to be splashed by the burning fluid. With a stick, I rummaged through the korkanus's wastes as it sucked itself back into shape, probing among the bones and scales it had dumped.

They were present, two sets of talons — six, altogether — amid the pulpy remains. I fished them out with my stick and bore them off to the river on a mat of leaves, where I would clean and polish them. I took this as a good omen.

That day I also sharpened the talons and mounted them along the lengths of two sticks I

could hold, as they were far better equipment than any I possessed. I wore them as part of a belt I then wove, looking much like hardroot rings to a wooden clasp.

The rest of the day I purified myself and thought often of my mates to be, and of our wedding. I ate the prescribed meal that evening and repaired early to the sacred tree, where I had some difficulty in turning to sleep.

The following morning, I made my way back along the route I had taken to the station house. I met with Kwib and Ruby Stone at the place where we had parted. We did not touch one another, but exchanged formal greetings:

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"Root of life."
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"Are you ready to take your way to the Tree of Life?"

"I am ready to take my way to the Tree of Life."

"Are you ready to hang the emblem of your troth upon it?"

"I am ready to hang the emblem of my troth upon it."

"I am ready to accept you both as mate."

"I am ready to accept you both as mate."

"I am ready to accept you both as mate."

"Then let us go to the Tree of Life."

We leaped into the air and danced and spun

[&]quot;Guardian of the egg."

[&]quot;Bringer of sustenance."

[&]quot;Reaper of the Wood."

[&]quot;Walkers in the prelife."

[&]quot;Hail."

[&]quot;Hail."

[&]quot;Hail."

and darted, soaring high above the Wood in the sparkling light of day. We turned and curved and circled about one another until we could barely stay aloft. Then we made our way to the great Tree, hung with its countless emblems, there to add our own with the appropriate words and acts. When we touched the ground at its base, Kwib and I each seized one of Ruby Stone's wings and tore it away.

Old Voyet of the Long Legs, Yglin the Purple-Streaked and Young Dendlit Lopleg were present, among others, to observe, congratulate and offer advice. We listened with some impatience, for we were anxious to be on our way. Observers take great delight in delaying newlyweds who wish to be about their business.

The three of us embraced in various ways and bade the others farewell. There was a murmur of disappointment that things would go no further at that point. But we raised Ruby Stone and together bore him back to the dwelling we had selected, bright nuptial stone glistening in his proud and polished brow. All of us made a fine appearance as we proceeded through the Wood to the Home. The others followed slowly behind us, humming.

When we reached the threshold we patted Ruby Stone's wingstumps and placed him within but did not ourselves enter.

"Beloved, you will wait," we said together.

"I will wait, Beloveds."

Kwib and I faced one another. The humming ceased. We ignored the onlookers.

"Beloved, let us walk together," Kwib said.

"Yes, Beloved. We shall walk."

We turned and made our way past those who had accompanied us, moving into the solitude of the Wood. For a long while we went in silence, taking care not to touch one another. We came at length upon a small glade, pleasantly shaded.

"Beloved, shall it be here?" Kwib asked me.

"No, Beloved," I said.

"Very well, Dear One."

We continued on, watching one another, moving in a leisurely fashion. The sun reached the overhead position and began its descent.

After a time, "Beloved, do you wish to rest?" Kwib asked.

"Not yet, Beloved. Thank you."

"It occurs to me, Partner in Love, that we are heading toward the place of Trader Hawkins. Would you wish to stop by there?"

"For what purpose, Fire of my Life?"

"A drink of the heating beverage, Love."

I thought about it. The effects of the heating beverage might well serve to hasten things.

"Yes, Co-Walker in the Path of Bliss," I replied. "Let us visit Trader Hawkins first."

We went on toward the foothills.

"Light of Love," I asked, "is it true that there is a mate in a hole behind the Earthman's dwelling?"

"I have heard this, Love, and I have seen the place, but I do not know. I have heard that the mate is dead."

"Strange, Dearest."

"Yes, Beloved."

We sat across from one another when we finally rested, watching. Kwib's dear form was sharp and supple in the deepening shadows, and larger than my own. A moon climbed into the sky. Another, far smaller, followed it later. I had grown hungry as the day progressed, but I said nothing. It is better not to eat, and so it is better not to speak of it.

We arrived at the foothills around dusk. Small lights from the trading post were visible among the trees. Night sounds had already begun about us. I smelled strange odors on the breeze that came down from the mountains.

As we passed through the brush, I said, "Dearest Kwib, I would like to see first the place where the dead mate is kept."

"I will show it to you, Partner in Life."

Kwib led me around to the rear of the building. As we went, it seemed that I caught a glimpse of Trader Hawkins sitting on the darkened front porch of the dwelling, gigantic in the moonlight, drinking.

Kwib led me to a huge plot of earth on which nothing grew. At one end of it was set a stone with peculiar markings. A bunch of dead flowers lay at its base.

"The dead mate is under the ground, dear Kwib, under the stone?"

"So I have heard, Light."

"And why are there dead plants, Love?"

"I do not know. Life."

"It is very strange. I do not understand. I —"

"Hey! What are you bugs doing out there?"

A light far greater than that of the moons had occurred atop a pole near the dwelling. The Earthman stood at the door, one of the long fire weapons in his hands. We turned toward him and advanced.

"We came to drink the heating beverage," Kwib said in trader talk. "We stopped first to see the place of the mate who is under the ground."

"I don't like anyone back here when I'm not around."

"We apologize. We did not know. You have the heating beverage?"

"Yes. Come on in."

The Earthman held the giant door open and stood beside it. We entered and followed the hulking form through to the front of the dwelling.

"You have the metal?"

"Yes," I said, taking a bar of it from my pouch and passing it over.

Two bowls of the beverage were prepared and I was given more than three smaller bits of the metal in return. I left them beside my bowl on the mat.

"I will buy the next one, Beloved," Kwib said.

I did not reply but drank of the sweet-and-sour liquid which moved like fire through my limbs. The Earthman poured another beverage and perched with it atop a wooden tower. The room smelled strongly though not unpleasantly of odors which I could not identify. Tiny fragments of wood were strewn upon the floor. The chamber was illuminated by a glowing jewel set high on the wall.

"You bugs hunting, or'd you just come up this way to get drunk?"

"Neither," Kwib said. "We were married this morning."

"Oh." Trader Hawkins's eyes widened, then narrowed. "I have heard of your ceremony. Only two go forth, and one remains behind..."

"Yes."

"... And you have stopped here on your way, for a few drinks before continuing on?"

"Yes."

"I am more than a little interested in this. None of my people ever witnessed your nuptials."

"We know this."

"I would like to see the fulfillment of this part of the ceremony."

"No."

"No."

"It is forbidden?"

"No. It is simply that we consider it a private matter."

"Well, with all respect for your feelings, there are many people where I come from who would give a lot to see such a thing. Since you say it is not forbidden, but rather a matter of personal decision on your part, I wonder whether I might persuade you to let me film it?"

"No."

"No, it is private."

"But hear me out. First, let me refill those bowls, though. — No, I don't want any more metal. If — now, just supposing — you were to let me film it, I would stand to make considerable money. I could reward you for this with many gifts — anything you want from the post here — and all the heating beverage you care to drink, whenever you want it."

Kwib looked at me strangely.

"No," I said. "It is private and personal. I do not want you to capture it in your picture box."

I began to rise from my bowl.

"We had best be going."

"Sit down. Don't go. I apologize. I'd have been a fool not to ask, though. I did not take offense at your looking at my wife's grave, did I? Don't be so touchy."

"That is true, Beloved," Kwib said in our own tongue. "We may have done offense in viewing the mate's grave. Let us not take offense ourselves from this request now that we have answered it, and so do ourselves shame."

"Soundly said, Beloved," I replied, and I returned to my heating beverage. "This drink is very good."

"Yes."

"I love you."

"I love you."

"Consider the ways of our dear Ruby Stone. How delicate he is!"

"Yes. And how graceful his movements ..."

"How proud I was when we bore him to the Home."

"I, too. And the sky-dance was so fine . . . You were right about the stone. It shone gloriously in the sunlight."

"And in the evening its pale fires will be soft and subtle."

"True. It will be good."

"Yes."

We finished our drinks and were preparing to depart when the Earthman refilled the bowls.

"On the house. A wedding present."

I looked at Kwib. Kwib looked at Trader Hawkins and then looked at me. We returned to the mats to

sip the fine drinks.

"Thank you," I said.

"Yes, thank you," said Kwib.

When we had finished, we again rose to go. My movements were unsteady.

"Let me freshen your drinks."

"No, that would be too much. We must be on our way now."

"Would you wish to spend the night here? You may."

"No. We may not sleep until it is over."

We headed toward the front door. The floor seemed to be moving beneath me, but I plodded across it and out onto the porch. The cool night air felt good after the closeness of the trading post. I stumbled on the stair. Kwib reached to assist me but quickly drew back.

"Sorry, Beloved."

"It is all right, Love."

"Good night to both of you — and good luck."

"Thank you."

"Good night."

We moved off through the hills, striking downward once again. After a time, I smelled fresh water and we came to a Wood through which a stream flowed. The moons were falling out of the sky, and there was a heaviness of stars within it. The smaller moon seemed to double itself as I watched, and I realized that this must be something of the heating beverage's doing. When I turned away, I saw that Kwib had moved nearer and was regarding me closely.

"Let us rest here for a time," I said. "I choose

that spot." I indicated a place beneath a small tree.

"And I will rest here," Kwib said, moving to a position across from me beside a large rock.

"I miss my Ruby Stone, Dear One," I said.

"As do I, Love."

"I wish to bear the eggs that he will tend, Love."

"As do I, Slim One."

"What was that noise?"

"I heard nothing."

I listened again, but there were no sounds.

"It is said that one who is larger — such as myself — can drink more of the heating beverage with less effect," Kwib said, after staring into the shadows for a long while and nodding suddenly.

"I have heard this, also. Are you choosing this place. Dear One?"

Kwib rose.

"I would be a fool not to, Beloved. May there always be peace between our spirits."

I remained where I was.

"Could it ever be otherwise, my Kwib?"

I sought the two sticks at my belt, where the talons resembled hardroot rings.

"Truly you are the kindest, the finest ..." Kwib began.

... And then she lunged, her mandibles wide for the major cut.

I struck low on her thorax with one set of talons, rolling to the side as I did so. Recovering, I raked the other across the great facets of her eyes in which images of the moons and stars had glittered and danced. She whistled and drew back. I brought both sets of talons around and across and

down, driving them with all of my strength behind the high chitin plate below her dear head. Her whistling grew more shrill and the talons were torn from my grasp as she fell back. The odor of body fluid came to me, and the odor of fear...

I struck her with my full weight. I extended my mandibles and seized her head. She struggled for but a moment, then lay still.

"Be kind to our Ruby Stone," she told me. "He is so gentle, so fragile . . ."

"Always, Beloved," I told her, and then I completed the stroke.

I lay there atop her hard and supple form, covering her body with warm leptors.

"Farewell, Reaper of the Wood. Dear One..." I said.

Finally, I rose and used my mandibles to cut through the hard corners of her armor. She was so soft inside. I had to bear all of her back within me to our Ruby Stone. I began the Feast of Love.

It was full daylight when I had cleaned Kwib's armor to a slick, shining hardness and assembled it carefully, working with the toughest grass fibers. When I hung her on the tree she made gentle

clicking noises in the passing air.

From somewhere, I heard another sound—steady, buzzing, unnatural. No! It could not be that the Earthman would have dared to follow us and use his capturing box—

I looked about. Was that a giant shadow retreating beyond the hill? My movements were sluggish.

I could not pursue. I could not have certainty, knew that I could never have it. I had to have rest, now...

Heavily, slowly, I moved to a place near the rock and settled there. I listened to the spirit voice of my darling, borne by the wind from her shell...

... Sleep, she was saying, sleep. I am with you, now and ever. Yours is the privilege and the pleasure, Love. May there always be peace between our spirits...

... And sleep I must before I take feet to the trail. Ruby, Ruby Stone, my Ruby Stone, waiting with the color of fire on your brow, glorious in the sunlight, soft and subtle in the evening ... Your waiting is almost ended. It is only yours to wait, to stand and to witness our returning. But now we have finished the trial of love and are coming back to you ... I can see the Home, so clearly, where we placed you ... Soon you will bring your brightness near to us. We will give you eggs. We will feed you. Soon, soon... The shadow is there again, but I cannot tell... This part does not concern you. I bury the shame within me - if shame it should be - and I will never speak of it ... Our beloved Kwib is still singing, on the tree and within me. The poem is peace; peace, troth, and the eternal return of the egg. What else can matter, my Dear One? What else can temper the flight or star the brow of solitude but the jeweled badge of our love, Ruby Stone?

Sleep, sings Kwib. Wait, sings Kwib. Soon, sings Kwib. Our parts in the great song-show of life, Love.

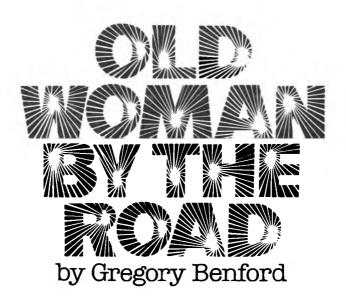
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Up to now, most
examinations of space colonies
have been rather starry-eyed,
if not downright fatuous:
power for the powerless,
that sort of thing. Well,
power doesn't flow that way...



An old woman in a formless, wrinkled dress and worn shoes sat at the side of the road. A soft wind sighed through the pines crowding the white strip of road and I was panting from the fast pace I was keeping. The old woman was sitting there, silent and unmoving. I nearly walked by before I saw her.

"You're resting?" I said.

"Waiting." Her voice was dry and when she breathed out there was a sound in her throat like rustling leaves. She was sitting on a brown cardboard suitcase with copper latches. It was cracked along the side and white cloth stuck out.

"For the bus?"

"For Buck."

"The copter said the bus will stop up around the bend," I said. "On the main road."

"I know."

"It won't come down this side road."

I was late myself and I figured she had picked the wrong spot to wait.

"Buck will be along." Her voice was high and had the back country twang in it. My own voice had some of the same sound but I was keeping my vowels flat right now and her accent reminded me of how far I had come.

I looked down the long curve of the sandy road. A pickup truck growled out of a side road and into the deep ruts of white sand. People were riding in the back along with some boxes and trunks and a 3D. They were taking everything valuable they could, but the Outskirters hadn't given us much time

"Who's Buck?"

"My dog." She looked at me directly, as though it was obvious who Buck was.

"Look, the bus — "

"You're the Bishop boy, aren't you?"

I looked off up the road again. That set of words the Bishop boy was like a grain of sand caught between my back teeth. My mother's friends had used that phrase when they came over for an evening of bridge, before I went away to the university. There never seemed to be any way to avoid admit-

ting it and then putting myself in a little slot in other people's heads. There hadn't been any way then and there wasn't one now. I said, "Yes, I am." The words came out precisely.

"Thought so."

"You're — ?"

"Elizabeth McKenzie."

"Ah."

We had done the ritual so now we could talk.

"I knew your grandmother real well."

"Mrs. McKenzie — "

"I 'strictly believe I saw you once, long time ago. Out at one of your grandmother's fish fries. You and some little boys were playing with the nets down by the water. My husband went to shoo you away from the boats. I was cleaning flounders and your grandfather was tending the fire. It was down at Point Clear."

"I think I remember that. Mrs. McKenzie, there's not long before the last bus."

"I'm waiting for Buck."

"Where is he?"

"He ran off in the woods."

I worked my backpack straps around on my shoulders. They creaked in the quiet.

There wasn't a lot of time left. Pretty soon now it would start. One of the big reflecting mirrors up in synchronous Outskirter orbit would focus its light on a rechargable tube of gas. The gas would pass through its molecular phases and be excited by the incident light. Then the lasing process would begin in the long tube, excited molecules cascading down together from one preferentially occupied quantum state to another lower state, the

traveling wave jarring more photons loose as it swept down the tube. The photons would add in phase, summing in an intense wave, growing in amplitude. The beam that came out of the hundred meter long tube would slice down through the atmosphere and through the cloud cover above us. And instead of striking an array of layered solid state collectors outside Mobile, the beam would cut a swath twenty meters wide through the trees and fields around us.

"The bus is coming," I said.

She looked at me.

"I'll carry that suitcase for you."

"I can manage it." She squinted off into the distance and I saw she was tired, tired beyond knowing it.

"I'll go along with you, Mrs. McKenzie."

"I'm not going until Buck comes on back."

"The bus . . . Leave that dog, Mrs. McKenzie."

"I don't need that blessed bus."

"Why not?"

"My children drove off to Mobile a few hours back with their families. They said they'd be coming to pick me up."

"My insteted radio —" I gestured at my temple — "says the roads to Mobile are jammed up. You can't count on them getting back."

She moved her thin legs on the suitcase. "My children left early."

"Well — "

"They're dropping off a lot of the things they had from that new house of theirs. Then they'll come back and get me. They said so."

"How'll they know where you are?"

"I tole 'em I'd try to walk to the main road. Got tired, is all." She blinked at the sun. "They'll know I'm back in here."

"Just the same, the deadline — "

"I'm all right, don't you mind. They're good children, grateful for all I've gone and done for them."

"I think it's better if you get on the bus, Mrs. McKenzie."

"I'm not going without Buck. Buck has been with me since he was a ..." She didn't finish and I looked around at the pine woods, blinking back sweat. In among the pines were some oak, their roots bulging up out of the sandy soil and knotted. There were a lot of places for a dog to be. The land around here was flat and barely above sea level. I had come down to Baldwin County to camp and rest. I'd been here five days, taking skiffs down the Fish River, looking for the places I'd been when I was a boy and my grandmother had rented boats on the river and lived in an old rambling fisherman's house. The big mysterious island I remembered and called Treasure Island, smack in the middle of Fish River, was now a soggy stand of trees in a bog. The steady currents had swept it away. There was thick mud there now and the black water tasted like a weak leaf tea. But it was all fine, the inlets and the deep river currents that pulled on the skiff. I'd been camping down on the point where the Fish River snaked around before running down in a straight line into the bay. The helicopter that came over in the morning blaring out the alert woke me up. The Outskirters had given four hours warning, the recording said. This

forty-klick square in southern Alabama, and two others in Asia, had been picked out at random for a reprisal. The big cylinder communities circling Earth would use their laser systems, designed for power transfer from orbit, to slash and burn. The carving would go on until Earth granted the cylinder worlds real independence. But there was no real balance of power there. Once the Outskirters had a free hand they could hold the leash on Earth. They had the economic and now the military power. And maybe that wasn't so bad; they were the best people Earth could produce.

I had been thinking about that a lot while I was down on the point. It was hard to figure which side you should be on. There were fine people up in orbit and they were a lot like me. A lot more than the people in Baldwin County, anyway, even though I'd grown up here. I'd worked on laser tech systems for a while now and I knew the real future was up in orbit. The Outskirters were smart and they knew when to act.

"Where's Buck?" I said decisively.

"He . . . that way." A weak wave of the hand.

I wrestled my backpack into the shoulder of the road where the creeper grass took hold. A car wheezed its way out of a rutted side road. Pale, crowded faces with big eyes looked out at us and then the driver hit the hydrogen and they got out of there.

I went into the short pines near the road. Sand flies jumped where my boots struck. The white sand made that soft *skree* sound as my boots skated over it. I remembered how I'd first heard that sound down here as a kid, wearing tennis shoes, and how I'd finally figured out what caused it.

"Buck!"

There was a flash of brown over to the left and I went after it. I ran through a thick stand of pine and the dog yelped and took off, dodging under a blackleaf bush. I called it again. The dog didn't even slow down. I skirted to the left. He went into some oak scrub and I could hear him getting tangled in it and then getting free and out the other side. By that time he was fifty meters away and moving fast.

When I got back to the old woman she didn't seem to notice me. "I can't catch Buck, Mrs. McKenzie."

"Knew you wouldn't." She grinned at me, a grin with real mirth in it. "Buck is a fast one."

"Call him."

She smiled vacantly and raised her hands to her mouth. "Buck! Here boy!"

The low pine trees swallowed the sound.

"Must of run off."

"Now, Mrs. —"

"You scared him. He doesn't come when there are some around he don't know."

"There isn't time to wait for him."

"I'm not leaving without ole Buck. Times I was alone down on the river at the old McAllister place and the water would come up under the house. Buck was the only company I had. Only soul I saw for five weeks in that big blow we had."

A low whine. "I think that's the bus."

She cocked her head. "I hear something all right."

"Come on. I'll carry your suitcase."

She curled her lip up and crossed her arms. "My children will be by for me. I told them to look for me along in here."

"Your children might not make it back in time."

"They're loyal children."

"Mrs. McKenzie, I can't wait for you to be reasonable." I picked up my backpack and brushed off some red ants crawling on the straps. "You walked this far from the McAllister place?" I swung the pack onto one arm and then the other.

"I did."

The old McAllister place was a good five klicks away. So she had gotten exhausted and sat down here to rest.

"Reasonable. You Bishops was always the reasonable ones." She narrowed her eyes. There were a lot of memories in her face.

"That's why I want you to go now."

"Your grandma was always talking about you." She glanced skyward. "You been up there, hadn't you?"

"Yes. Yes, I have."

"An' you're goin' back. You were down here on vacation."

I looked down the road, deserted now.

"It's your people, up there."

"The wrong group seems to be in control."

"Same people as always." She sniffed.

"Mrs. McKenzie, there's the bus." The turbo made its high whirr as it wheeled off the blacktop highway around the bend. "It's the last one."

"You go along." She sat back heavily on the suitcase. I reached out to take her arm and her face changed. "Don't touch me, boy."

I saw that she wouldn't let me coax or force her down that last bend. She had gone as far as she was going to and the world would have to come the rest of the distance itself.

Up ahead the bus driver was probably behind schedule for this last pickup. He was going to be irritated and more than a little scared. The Outskirters would come in right on time, he knew that.

I ran. The sand gave way under me. I saw I was more tired than I thought by the running and walking I had done to get here. I ploughed through the deep ruts. The whole damned planet was dragging at my feet, holding me down. I went about two hundred meters along the bend, nearly within view of the bus, when I heard it start up with a rumble. I ran faster and tasted sweat. The driver raced the engine, in a hurry. He had to come toward me as he swung out onto Route 80 on the way back to Mobile. Maybe I could make it to the highway in time for him to see me and slow down. I knew everything depended now on how fast I could move so I put my head down and ran.

Ran.

But there was the old woman back there. To get her the driver would have to take the bus down that rutted road in the sand and risk getting stuck. All that to get the old woman with the grateful children. She didn't seem to understand that there were ungrateful children in the skies now, she didn't seem to understand much of what was going on, and suddenly I wasn't so sure I did either.





FICTION

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If only we could start over...

by Jerry Pournelle

Have you ever wished your house would burn down? I have. Not really, of course; but there could be advantages. We'd get to start over. All that furniture: it's okay, but it isn't what we really want, and we can't change over to a new style because of all the older stuff that wouldn't match. The machinery, adequate but obsolete: not old enough to scrap, but you can get appliances that are so much better now.

It would be tough going for a while if we had to start over, but it might be worth it . . .

In previous columns in another magazine I've dealt with a number of national problems. Trash and sewage: our waste management systems were designed to dispose of them, not treat them as valuable resources, and now we've this huge investment in the wrong philosophy. City plans, where they exist at all, were framed when energy (particularly gasoline for cars) was cheap. Office buildings and factories were designed with the assumption of cheap and inexhaustible energy supply. Now there's so much sunk investment involved that we can't start over, although we have a much better idea of the crucial factors we ought to consider.

So: in one of our interminable phone calls, Editor Baen suggested a look at what might be done if the investments hadn't been made: how might we design America if we had a clean slate, given what we know now. After all, it's obvious that the United States has better technology than industry. One of the less obvious advantages of World War II was that it smashed up Europe's obsolete industries, forcing them to rebuild from scratch—thus making them vastly more efficient.

Suppose we in the United States had such an opportunity. We would begin by designing collection systems to make use of "wastes" so that sewage and garbage and much of the cellulose could be fermented into methanes and fertilizers. Metals could be collected for re-refining, while the low-grade combustibles would become an energy source for processing these "urban mineral resources". The result would be to reduce the volumes to a manageable size, cut down on the transportation costs, and very greatly reduce the land costs involved in creating "sanitary land fills".

All this would save something like 5% of our national energy budget; not the Earth, but certainly

worth striving for, and make waste management a source of profit to cities, rather than another burden on the taxpayers.

We could revise building codes and tax assessment rules to require that residences be built with sufficient insulation and elementary solar heating. The combination could save as much as 40% of the energy now used in space heating — and space heating is one of the major components of our energy budget. We'd avoid taking high-grade energy, such as coal and natural gas and electricity, and turning it into low-grade energy (warm air in habitations) as we presently do.

Sure, that's possible for new structures now. But consider the vast number of present dwellings and office buildings and factories; they were designed in such a way that just altering the piping to shunt the hot-water intake across a simple flat plate collector on the roof would generally cost more than the total hot water bills for many years. If we could just start over, though — redesign — solar preheaters and solar room heaters could be put in at break-even prices for the buyer, with consequent benefits to the national balance of payments.

We could design cities with industries around the power plants, thus making use of high-grade steam as steam, rather than turning much of it into electricity (with losses in generation), transporting it across country (more losses in the transmission lines), and finally turning it back into steam and heat at the other end. With proper design of industrial parks and residential areas would come real rapid transit — not something

forced on people against their will, (the major problem with present-day transit schemes), but a system actually more convenient than automobiles — again with consequent savings in energy.

Doing that would have enormous effects; after all, space heating and transportation are two of the largest chunks of our energy budget, and transportation consumes a very great part of the imported oil. (I know, I know: usually I give the exact numbers in these columns, rather than speaking in broad generalities. Give me time, and have a care for the newcomers who don't know how painlessly I can insert numbers into these discussions).

Anyway, the more Jim and I discussed this, the better it sounded as a column topic, and "New Beginnings" has a nice ring for the first column in a new kind of magazine, and ...

And when it came to cases I couldn't get interested in it. In desperation Jim suggested another gimmick: suppose that the Earth were struck by a giant comet (with any luck there's no one out there who hasn't at least heard of Lucifer's Hammer by Larry Niven and Jerry Pournelle, Fawcett, 1978); the results were described in our book, and it could be fascinating to assume you have nothing left but electricity while facing the depleted resource base of Earth: a sort of Challenge of Man's Future (Harrison Brown, circa 1950) from the 1978 viewpoint.

Brown's Challenge, for those not familiar with it, made the point that the easily exploited resources

are gone: the near-surface oil, the shallow-mine coal, even the forests; thus, if once we lost technology (Brown was concerned about war, but a natural disaster would do the job as well) we can never regain it. It takes a high-technology society to exploit deeply-buried energy and mineral resources; without high technology, you can't get at enough high-energy sources to construct your power supplies.

However, Brown wrote in the 50's; could things have changed since then? Not really; you do need a high-energy technology in order to construct a high-energy technology when starting with a depleted resource base. However, given electricity—in Hammer there is at least a chance that a 2000 megaWatt nuclear plant could survive, giving the survivors somewhat more electrical energy than had the entire United States prior to 1940—something might be done after all. The how of it could be fascinating, and certainly would make a column.

Except that I can't get interested in that one either.

No: I am not going to go on for five thousand words on what I can't do I'm about done with that. But I do want to say something about why I have trouble playing the "new beginnings" game.

It's too deadly serious. In some ways it is terrifying. Not in the obvious one. I have spent a good part of my professional life "thinking about the unthinkable", and I have no real difficulty with intellectual exercises that assume 50 to 70% of the Earth's population is dead, most of the industry

destroyed, etc., etc. Nor am I concerned about "becoming callous to disaster", or any of those other old saws; in my judgment the cruellest people are those who take no thought for the morrow, and who act without a shred of prudence and forethought, no matter how noble their intentions.

No, the frightening part about universal diaster is its attractiveness.

It would make things so easy. Clear off the deadwood, chop down the surplus population in one sweeping tragedy. The result would be horrible, but a billion dead is not a billion times more tragic than a single death: and we could build such a beautiful world on the ashes!

Think of it: a world with few comforts and luxuries, to be sure, but one in which all work is meaningful; a world without rat-races and monkey-motions, a world of hard work simply for the sake of survival, but one close to nature, with really magnificent goals for the future; a world with few regulations and rules and paperwork and all the other frustrations that make us psychoneurotic.

Look at the other effects. The genetic pool would be (by definition) composed of survivors. If there's any truth to the cliche that what's good for individuals en masse is bad for the species, then the bigger the disaster (up to the point of extinction of the race) the better. And if the disaster were a war which largely employed neutron bombs so that the destruction of physical resources were minimal...

It is morbidly attractive. Not that we'd choose it, of course (well, a few who are really far into "ecol-

ogy" might) but still, we could live with it, and it does have advantages over the present, and we could be so kind to the Earth while rebuilding...

That's what's terrifying: when I find myself thinking that way; because if I, with all my commitment to technology and man's vast future, can get into a mood in which the only way out seems to be through destruction of some large fraction of the human race, then there must be very many more out there who see no hope for the future at all

And that's senseless.

Anything we can do after a disaster can be done now. Can't it? If we can accomplish all those magnificent feats I haven't described because I'm not writing that column, but which certainly could be accomplished given the left-over resources from an unprecedented disaster wiping out a very large part of humanity, then we can certainly accomplish more given our total resource base—and yet it is easier in many ways to imagine starting from scratch.

Why is this? How have we got ourselves into such a box that disaster looks attractive?

Well, we haven't. We've got the resources and capabilities for not mere survival, but "survival with style" as I put it in a previous column: to build a world in which Western civilization is not an island of wealth in the midst of a vast sea of poverty; in which all the world has access to at

least the wealth we enjoyed in the 50's; and to sustain that level of wealth practically forever. We need only exploit what's available to us; to abandon the notion of "Only One Earth" and realize that we live in a system of nine planets, 36 moons, a million asteroids, a billion comets, and a very large and benign thermonuclear generator we call "the sun".

Yet — we aren't doing it. As I write this, the Shuttle program is being pared again; we started with five orbiters, and I doubt that three will get to space. Certainly the Shuttle was not an optimum design; certainly it was justified on the basis of missions which could be performed more cheaply by unmanned boosters (we'll never recover the cost of the Shuttle program through salvage and repair of satellites, or even through the "cheap" launch of dozens, yea hundreds, of "black box" satellites). But the Shuttle is the only game in town: it is our access to the space environment, the truck we can use to begin real exploitation of space — and without it, we have nothing.

Instead of an energy program, we have a taxation system; instead of research and development, we have a myriad of rules and regulations, while the R&D budgets are pared to the bone. We play about with windmills, but neglect solar power satellites; we dither about conservation, learn that everyone is in favor of it so long as somebody else does the conserving — and neglect new energy sources.

We have an aging work force and a bankrupt social security system. Social security always depended on growth: the younger workers taxed to support the retired. Now, with low birth rates, the work force decreases relative to the number of retired people, and therefore we must increase productivity per worker to avoid disaster. (You can't much increase the work force for the next 20 years even if you begin breeding the workers now — and expanding population is probably not an optimum method anyway.) We can only get increased productivity by providing more energy per worker; to do that requires more power plants; and we aren't building them.

Two options open: coal and nuclear; and neither can be constructed. The US nuclear energy industry is dismantling itself; it turned out to be a marvelous way to produce power (during the Great Freezes, the only power sources operating in much of the nation were nuclear) but a better way to subsidize lawyers. As to coal, it's just great. There are only two things you can't do with coal: mine it or burn it.

Item: the "Natural Resource Defense Council" has "won" a judgment against the US Department of the Interior that provides, among other things, for no new coal leases for about 3 years; and restricts the United States to release of lands approved by the NRDC. The NRDC is a private organization of "concerned" people.

The interesting part is that the Carter administration chose as US attorneys to defend the Department of the Interior: John Leshly, who until last year was employed by NRDC to prepare NRDC's case against the government; and Deputy

Asst. Attorney General J. Moorman, whose previous employment was as Executive Director of the Sierra Club's Legal Defense Fund.

And after (surprise!) the United States lost the case came an even more remarkable development: on 25 February 1978 the US Dept. of Interior signed away its right to appeal the case.

You may draw from that any conclusions you want, but surely we will have some difficulties developing new coal resources.

Item: as I write this, they're laving off scientists and engineers from the fusion research program; delaying construction of electron-beam fusion research devices; stretching out studies of the ocean-thermal system; chopping more out of the space budget; ignoring the potential of geopressurized zones (superheated water deposits supersaturated with methane, about 3 kilometers below Louisiana and Texas, with estimated energy potential greater than the entire known US coal reserves); refusing to deregulate the price of natural gas despite Carter's pre-election promise to do so; encouraging Lovins and the "soft-energy" advocates while refusing even to consider alternatives; and doing nothing about simplifying the present tangle of 64 different permits required to build nuclear fission power plants.

The US of A, home of "knowhow" and "Yankee ingenuity", inventor of most of the technology being deployed in the Soviet Union and the rest of the world, has firmly backed away from government-sponsored research and development, while keeping a tax structure that makes it nigh impos-

sible for private R&D to work on big projects such as space and fusion.

Why?

The usual answer is that we can't afford big R&D programs. That, of course, is nonsense. When your energy system is to pay \$50 billion a year to the Arabs; when you rack up in a single year a trade deficit larger than the cumulative deficit balance of payments from George Washington through and including Richard Nixon; when you're selling the nation on the installment plan to the Shah of Iran and the Sheik of Araby — when that's your system, you can afford any alternative.

You don't even have to worry about whether the alternatives have a high chance of payoff: given what we're doing now, it makes sense to pursue a number of alternatives simultaneously.

Moreover—we have the money. Item: the Occupation Health and Safety Administration (OSHA) has consumed about \$4 billion in direct costs since its inception, and the total cost of OSHA has been in excess of \$14 billion. Maybe that would be worth it, but in fact the accident rates at present are not measurably different from what they were before OSHA began. There's a large part of a new Apollo program right there.

At its largest, NASA took about two cents from each tax dollar. Few would argue that we haven't been repaid many times over for the investment. Not in Teflon frying pans, but in new technology:

carbon-filament materials, weather forecasting, communications, Landsat and Earthsat data for prospecting, crop management, ecological and environmental data available only from space; management techniques, fire-fighting techniques, medical technology, food processing, automated checkout procedures, quality control systems—the list of benefits from space research is nearly endless.

It would only take about 2% of the national budget to bring about what Harry Stine has called "The Third Industrial Revolution": to usher in an era of plenty; to make it possible to be really concerned about pollution and damage to the environment; to put the really messy industrial processes into space; and to ensure plenty of raw materials for ourselves and our posterity for at least 50,000 years.

The argument that we can't afford space and energy research just won't hold water. We can't afford not to have vigorous research in those areas.

Item: On November 11, 1977, prominent physicists from the USA, USSR, Canada, France, and Japan issued a statement from their meeting in Fort Lauderdale, Florida, noting that the world's living standards and the size of "disadvantaged populations" would continue to rise throughout this century. Thus, they said, demand for resources would continue to increase, and "failure to meet this demand will result in extensive evils

such as poverty, starvation, unrest, epidemics, riots, and wars." What's the cost of a small war compared to a decent R&D program? A lot more than 2% of the national budget, anyway.

·At that same conference Nicholai Basov, Soviet Nobel Prize winner, announced several breakthroughs in laser-stimulated fusion, and gave the technical details in an unclassified briefing.

The US promptly classified his data. From whom is the government keeping it secret? Nor was this the first time: when Leonid Rudakov (Soviet electron beam expert) came over to the US to tell of his experiments in fusion, US officers put a blanket over his blackboard! (See Science, Oct. 8 1976, p. 166)

What is going on here? The US is acting as if we are deliberately rejecting technology; it almost seems as if we are determined to try Rousseau's return to nature — a suicidal policy indeed.

The Soviets offer cooperation—they need energy resources as much as we do - and we turn them down. The British, French. Japanese use US-developed technology to build breeder reactors, while we stubbornly dismantle our nuclear industry.

No wonder that a "new beginning" can be superficially attractive.

There is another type of new beginning: one that starts with our present situation and moves ahead.

It should begin with a revolution in our social

science. Nearly every major political philosophy was generated at a time when our "understanding" of the universe was scarcely worth the name, and at a time when scarcity was seen to be an inevitable fact of life. The latest of the most influential political philosophies was Marxism, which attempted to integrate the industrial revolution into political thought; and Marx wrote before the airplane and automobile, before electronics or radio or the telephone; before the real effects of the First Industrial Revolution (steam) could be seen.

There has been at least one major industrial revolution since Marx: call it electronics, or servomechanisms, or feedback, or cybernetics. The effects have been at least as profound as was the steam engine.

But Marxism, outdated as it is, is the *latest* of the political philosophies. Most political theories were familiar to Aristotle; indeed, graduate students in political "science" literally read Aristotle — as primary source material!

True, there have been a few attempts to deal intellectually with the modern world. Peter Drucker, Herman Kahn, Galbraith, Prehoda, Possony and myself, a few others, have tried to investigate the effects of modern technology on political and social theory; but there has been little real impact. In the grade and high schools, in undergraduate colleges, indeed in graduate schools, the academic community still teaches social theory based on a very false picture of the physical world—theories derived from a world without

electricity, a world in which agriculture was primitive, transportation was limited by the speed of the horse and wind-driven ships, law was an arcane science because most of the population would never learn to read—and most importantly—in which the "goods of fortune" (Aristotle's phrase) were necessarily limited; a world in which wealth-for-all was not possible even in theory.

We don't live in such a universe any longer.

The United States annually produces about 400 million tons of metals each year: 1.7 x 10¹⁵ grams of metal. Assume ore at 3% and a density of 3.5 gm/cm³, and we find that in 1977 the USA processed ores equivalent to a sphere a little over 3 kilometers in diameter.

That's the United States. Suppose, though, that we want the *world* to be wealthy; one measure of wealth is usable metal. US population, about 250 million; world population, about 4 billion. Thus the US had some 6.8 million grams of metal *per capita* to play with; multiply by the 4 billion world population and we need a total of 2.7 x 10^{16} grams of metal to make everyone as rich as we are.

Once again assume 3% ore and that's a sphere some 8 kilometers in diameter.

There are 40,000 or more asteroids larger than 5 kilometers in diameter, and 3.5% ore is probably a severe underestimate of their useful metal content: the random samples from the Moon ran 8%. Asteroids are now thought to be fragments of larger bodies, many of them large enough to have been differentiated (heavier elements such as metals sinking to the core) after which they were bat-

tered over the eons, with the rocky outer layers knocked off to leave the metal-rich core exposed. It is thus possible that many asteroids will run 50% and above useful ore.

In future columns I'll get to just how we can bring metals from the asteroid belt to Earth orbit; for now, note the potential. Even with a population of 30 billion on Earth there is enough raw material to keep everyone rich for millennia.

About that population: is it not obvious that through history there has been one and only one effective means of limiting population? Not war, of course; birth rates rise in wartime. But wealth has always lowered birth rates. Catholic or Protestant or Shinto or Buddhist, it makes no difference: when nations get wealthy, their populations stabilize.

Wealth requires only raw materials and energy. Raw materials are available in plenty.

So is energy. Solar Power Satellites, as an example, could furnish the world far more energy per capita than is presently consumed in the USA—and do it forever. Now it may be that SPS is not the best way to go. It may be that fusion will do it cheaper and more conveniently. Who cares? My point is that the energy is there, that we know how to get it, that we have the technology to do it, and we have the investment resources right now. If fusion doesn't work, SPS will.

Isn't that expensive? Not compared to \$50 billion paid for Arab oil, it isn't. A full SPS program couldn't possibly cost what we're already paying for energy.

Given energy, we can take care of pollution; if need be we can take pollution products apart to their constitutent elements. Given energy, we have solved the food production problem: on Abu Dhabi, a desert island, they grow in greenhouses a fantastic crop per acre, and all they have to work with is sand and seawater—and energy, of course. Given energy we can move icebergs for fresh water. Given energy we can make the world wealthy.

Given energy and space mining we could, if that became desirable, turn the Earth into a park; vastly increase the wilderness areas; put all the contaminating industries out there where, were we to devote the Gross World Product and vaporize the Earth in the bargain we couldn't manage to "pollute outer space" for more than a few decades.

That's my idea of a New Beginning: a political philosophy that recognizes the vast potential of mankind; that recognizes that if there are limits to growth, they are so far beyond our comprehension that they may as well be infinite; that recognizes Gödel's theorem (the number of mathematical theorems is essentially infinite: i.e. there is no limit to the potential growth of knowledge).

The major political and social philosophies were generated in a time when mankind didn't even know how many stars there are.

It is time for such a New Beginning. Aye. And past time.



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Birth is by its nature a painful process for all concerned...

T'RANSITION TEAM

by Charles Sheffield



Thomas Pringle,
Department of Internal Security,
L-5 Colony.

Dear Tom,

I'm sending you under separate transmission a bunch of references on the question of critical phenomena in biological systems. Without more details from you, they are the best answer I can offer to your question about the relevance of 'critical mass' in group-behavioral patterns. A better term, by the way, would be critical times — there are lots of examples of those in complex organisms. Major changes of state often occur abruptly in a particular, well-defined period (examples: birth, death, metamorphosis).

Now, stop screwing around and tell me what's happening up there. All the reports back here tell us everything is going marvellously. Are we getting a snow job?

I can't tell you how pleased I was to hear from you. It's been a long time.

Love,

Beth.

Professor Elizabeth S. Lockwood, Department of Behavioral Sciences, Stanford University, Stanford, California.



Dear Beth,

José Vilas promised to get this package to you without opening it or telling anybody about it. He wouldn't even tell me how he'd get in through Decontamination and Customs.

You aren't getting a snow job. So far as all the usual indicators go, this colony is operating exactly as planned. Better than planned — we've had twenty percent fewer fatalities than we projected, and the mortality rate for new-borns is down to less than one in three. The first spaceborns are reaching puberty a little ahead of schedule. What we didn't anticipate — a pleasant surprise — was the earlier maturity in intelligence. The space-borns are running out at an average IQ of over 140, Earthnorm. We think that's due to the general speeding-up of development, and the adult IQ's should level off at an average of about 120 (we started with good stock).

Anyway, by any of the standard measures, including all those that we send back to Earth in the colony progress descriptions, we are in great shape here. What alarms me is a couple of non-standard indicators. Take a look at this batch of school reports, and tell me what you think. I've arranged for you to receive the originals, rather than data-stream copies, because I assume that you are still a nut on handwriting analysis. Should I be worried, or am I just getting paranoid?

You are quite right, ten years is far too long. I look in the mirror now, and wonder what happened to the hair you used to run your fingers through.

Love.

Tom.

Dear Tom,

You do have a problem — a big one. Send me all the information you have on the physical description of the space-borns, as up-to-date as possible. Also send me details on the dating/mating habits of all children on L-5 between ages of nine and fourteen. Also, tell me how I can get medical records for Skylab, Shuttle and Space Tug crews. Send soon. Love, Beth.

ELIZABAETH S LOCKWOOD. I AM ARRIVING SPACE TUG FLIGHT 14—D. DON'T GO ANYWHERE NEXT FOUR DAYS. NEED UPDATE YOU ON FACTS, HEAR YOUR IDEAS. THOMAS PRINGLE. 6 JUNE '16.

"This is just a sample, Tom. Are many of the others like this?"

I waved down at the sheaf of papers sitting in my lap, and looked again at the sprawling, unformed calligraphy of the top sheet.

"Mostly," said Tom. "I sent you one report from each grade. A lot of the others read like that. I picked out the most literate and easiest to follow. Do you need more, Beth?"

He was sprawled on my redwood-frame settee, briefcase and travel case open beside him. Outside, the Portola Valley sunset was a glare of fuming brown and red — the hydrocarbons were bad tonight. Tom was looking out there in horror and disgust. I had grown used to it, but I couldn't deny it had grown worse in the past ten years. When had I last dared to sit out on the porch?

Tom looked tired, handsome as ever but bowed down by the unfamiliar weight. Even though I

knew it was the effects of the L-5 environment, I couldn't get over his appearance. He still had the lean, lightly-muscled body of a twenty-two year old (he was right, though, about his hair—it was receding off the temples and creating a sandy widow's peak). I was suddenly super-conscious of my own encroaching wrinkles and crows-feet, the sagging (real or imagined?) of my breasts, and the slow betrayal of my knees. Not for the first time, I took a complete survey of myself, from the top of my head (signs of grey at the crown) to my feet (still doing fine). Odd behavior from a behavioral scientist? Unfortunately, no—physician, heal thyself

"I don't need any more than you sent me to tell that things aren't right," I said. "When a first-grader answers the question 'What do you want to be when you grow up?' with 'I want to be a real person', my hair starts to stand on end. Did you read that sixth grader's end-of-term project for yourself? 'The History Of The L-5 Colony'—it came across as a dirge of mistrust and betrayal."

"Why do you think that I sent it to you, Beth? Look, there are other things that I didn't want to say until I saw you in person. There have been six deaths in the post-puberty group. They were up near the Colony Hub and they might — just conceivably — have all been accidents. But I doubt it, that would be too much of a coincidence. Beth, all this seems to have happened so quickly."

"It looks that way — but I want to see some of the older school reports. There may be patterns that can only be seen with hindsight."

"I'll have the old stuff pulled and take a look as soon as I get back. What on earth made you ask about the dating patterns of the space-borns? When I saw that in your last message, I decided I'd better get down here quickly."

"I'd hoped you wanted to see my baby blue eyes again," I said coyly. Then I winced, inside. I hadn't carried that off at all well. It was supposed to sound light and humorous, instead it came across as a statement of fact.

"Tom," I hurried on. "When kids are self-hating or self-doubting, their loving goes off-balance, too. I didn't believe that the children who wrote those reports could have normal dating patterns. What are they doing up there?"

He rubbed his eyes wearily. I wondered what crazy diurnal rhythm he was on. As I recalled it, the L-5 Colony kept Greenwich Civil Time.

"The space-borns don't date," he said at last. "At least, if they do, it's nowhere where we can observe it. They've developed past puberty, physically, but they aren't going in for any of the usual 'courtship rituals' — is that the right phrase? They just don't do it."

"What do they do instead? They must do something with their free time."

Tom knuckled at his eyes again. It must be well past midnight for his biological clock.

"They spend lots of time in the low gravity sections, in by the Hub," he said. "We don't monitor them there. Privacy is very important in the Colony. But I'm sure they never flirt or make passes when they're with the rest of us, in the outer sections."

He leaned forward and put his hand on my knee. "Look, Beth, that's the real reason I came to see you. Will you go back with me, and take a look at what's going on? I'm sure we've missed something basic."

"To the Colony? Tom, I'm flattered. Tremendously flattered. But don't you have your own specialists up there?"

"Quite a few. But none of them is Elizabeth Lockwood." He looked at me sadly, and I suddenly thought back to the first time we had met. "Beth, we need a head start," he said desperately. "People down here will find out eventually, but we don't want to say we're in trouble until we have a solution. There are enough jackasses in the Government talking about the 'waste of funds' for the Colony. What better use can they suggest for money? More war, or more welfare?"

"Tom, what time is it?"

The non-sequitur knocked him off balance. He looked at his watch. "Three a.m., according to me. Why do you ask?"

"You're running down. Time change, plus the higher gravity. You need rest."

"The tyranny of the clock. You're right, I'm wilting." He grimaced at me, then winked. "'Fair Nature's eye, rise, rise again, and make perpetual day'. We have that perpetual day, Beth, up in L-5 — apart from an occasional eclipse."

I flew back again over fourteen years. Tom had been reminded of our first meeting, too. We had been at the University Dramatic Society, for a rehearsal of 'The Tragical History of Doctor Faustus'. Through the next four years, our inside language had drawn from Marlowe and Shakespeare.

I suddenly felt awkward and uncomfortable. Our reunion had been wonderful, so far, but the next step wouldn't be easy. There was no way to unmake the past, or step back through a ten-year gulf. In the old days, I would have said something like 'Lovers, to bed, tis almost fairy time,' and Tom would have replied, 'Sweet Helen, make me immortal with a kiss.' That wouldn't work any more. We had changed, and although Tom still looked the same, things wouldn't be easy. I felt the joy of an old wound waking.

Tom saved the day. He passed out — not completely, but near enough so that the only question I had to answer was whether or not I should try and remove his shoes. I did, dimmed the lights and went for a blanket to cover him.

I had already answered Tom's question. He had devoted his working life to the Colony. There was no way I could refuse to help him in the struggle. I would tell him when he awoke — which would be quite a while, by the look of him.

I would have liked to spend the time to the L-5 Colony studying the children's reports in more detail, but the distractions were too great. First there was Tom, sitting beside me, thin and etiolated as dahlia tubers that germinated too early in my cellar. I guessed that he had lost fifty percent or more of his muscle structure through living so long in low-gee. Then there was the space tug itself, spiralling lazily away from parking orbit and lofting us out to the Libration Point colony.

At the halfway mark, I had the chance to look out of the viewing port for the first time. Earth was a giant blue-white half-moon, occulting four or five degrees of the bright star-field. I tried to imagine myself as a space-born child, never knowing anything more of Earth than that abstraction of a mot-



tled ball in the sky. I couldn't make the switch in viewpoint. I understood now why the education schedule for space-born children included a couple of years of 'finishing school' back on Earth.

The Colony itself remained invisible for the whole trip. By the time we were near enough to see it, the angle ahead was too narrow for it to be visible through the side-facing ports. My first sighting was of the central hub, moving past the port just a few yards from my eyes as the tug moved to a docking with the stationary spindle of the big cylinder. It was a disappointment. I had imagined us swimming slowly up to the Colony, seeing it steadily growing through the viewports. It occur-

red to me that the frequent television shots of such a docking must either be a simulation or a view from a non-standard tug with extra (and functionally unnecessary) forward-looking ports.

"We're here," said Tom, as there was a final bump of the docking. "Let's get you cleared through disease control, then I expect you're ready for a rest."

"I'm all right." I suddenly realized I really was all right, and smiled. "You know, I think I actually like free fall. I thought it was supposed to make me feel all sick."

"It varies with the individual. I've known people who were sick the whole time they were in low-gee. We even had to ship a few of them back, or they would have died. You seem to be one of the lucky ones. Anyway, you'll have your sleeping quarters on the outer rim. Gravity there is almost a fifth of a gee."

"Gravity?"

"Oh, don't be a pedant. Centrifugal force, if you prefer to call it that. Work it out for yourself. The Colony has a radius of three hundred meters, and it turns once every eighty seconds. You'll feel almost as light on the outer rim as you would on the Moon. It's less now than it used to be—I can remember when we had one revolution a minute. Mind you, if the space-borns had their way we'd be slowing the spin a lot further than that."

There it was again, nagging away at the edge of my attention. This time I caught it. Tom always seemed to refer to the 'space-borns'. Never to the 'kids' or 'children'. But all the children on the L-5 Colony had been born in space. There had been neither incentive nor equipment to ship infants up from Earth. I tucked the odd fact away in my men-

tal files — the files that Tom had joshed me on so much in our student days. Was it my fault if I didn't forget things? People who envied me never knew how much misery it had caused me.

Tom was looking at me alertly. He hadn't lost his old knack of reading a lot of my thoughts from my face.

"Anything you want to do before the sleepperiod?" he asked. "I'd like to show you around here, then get in my session in the exercise room."

"Today? Surely you don't need to exercise now."

"Every day, sick or healthy. You ought to do it, too, while you're here. It's voluntary, of course. But didn't you read the Skylab and Spacelab reports that you asked for — the medical records?"

"I read bits of them. I wanted to see how accurately your student had reported the reality in her term paper. She did a good job."

"If you read past the cover, you know that there's a rapid calcium loss unless you exercise hard and have adequate gravity. About a seventh of a gee seems to be enough—lucky thing, or we'd have real problems with the lunar bases. You don't need to worry about the exercise much, because you won't be here more than a week or two. But I daren't skip my own conditioning."

As we spoke, the final docking had been completed and the hatches opened. The air smelled odd, as though there were clumps of rotting seaweed not too far away. It was tolerable enough, but I suspected that the hydroponics systems needed a little fine tuning.

The decontamination process turned out to be long and tedious. We were sprayed and irradiated, stark naked in zero gee, with a fine variety of liquids and colored lights. There was no time to complain about loss of dignity when we emerged. We were whisked out, pronounced suitably sterile, and issued Colony clothing. I looked at mine with distaste.

"You don't dress for sex appeal here, do you, Tom?"

He shrugged. "Dress is optional. Quite a few people prefer to go without. Most of the rest make their own. We've had a devil of a time getting the space-borns to wear anything at all when they're not in formal training sessions. We have good temperature control all over the Colony, so clothing is all a matter of taste, anyway."

We set off along a long corridor, a gentle spiral that turned steadily out from the central hub towards the outer living quarters. We proceeded by a combination of walking, drifting, and 'falling'—it was slightly downhill all the way. After a few minutes I began to feel a bit disoriented. I stopped, and the feeling left me. Tom looked at me and laughed.

"Sorry, Beth. I should have warned you. There's a slight gravity gradient — a change in effective gravity — as we move out. If you don't like it we can slow down."

"It's all right," I said. "Now that I know what it is. Tom, why does the corridor spiral round like this, instead of going straight out like a spoke?"

"Some of the corridors are straight," he said. "I picked this one to help you get your space-legs."

I stood still, turned and looked at him.

"Oh, all right," he said. "Damn it, Beth, I forgot about your built-in lie detector. We always bring people this way, the first time on the Colony. We try and impress them with the size of it. I did it out of habit. It's a four kilometer trip this way, before we get to the outer rim."

"I am impressed. No wonder it took fifteen years to build this."

"It would have taken twice that long, if Bjorling hadn't discovered the surficial metal deposits on the Moon. The whole project is ten years ahead of schedule. We could start work on the second Colony, the big one, tomorrow if we had the funds."

There was a defensive tone in his voice. Inevitable, perhaps, for one who had spent so many years of his life developing and defending a colony whose existence came up for constant questioning in government budget circles.

"Think you'll get money for that second colony, Tom?" I said. I was sorry I had asked, before the words were all spoken.

His shrug was loose-jointed, a rippling movement that he could never have managed back on Earth.

"We have to get it, Beth," he said. "This is the future, out here. There's no way that we'll go back to the mess down there. Nine billion in the madhouse, and more every second. That's one reason I came and asked your help. We've made space our home. No matter what the problem is here with the space-borns, we have to lick it and keep the momentum going for the second Colony."

"You won't have much time, Tom, if there are any more deaths—particularly if you get one that's definitely a suicide."

"I know." His voice was bleak.

Ahead of us, the white fluorescent lights that ran

the length of the corridor broke to a blue, rectangular pattern. Tom pointed to it.

"There's the exit to the outer rim. How are you feeling? If you still have enough energy for a couple of quick introductions I'd like you to meet the head of the Education Department, Theo Hendon. Are you up to it?"

"Let's not waste any time. I'm ready to meet people now."

Tom sounded more tired than I did but if he could take it, I could. I squeezed his arm (thinner now than my own) and we went on into the living-quarters, set around the perimeter of the cylinder.

I had expected to see some of the space-born children in the quarters when we emerged. After all, they made up more than half of the Colony's three thousand people. There were many people in the corridors, but no sign of any children.

"They prefer their own choice of recreation habitat," said Tom, in answer to my question. "We try to get them to stay here, but we don't have time or people to keep track of them all the time. They have their own life-style preferences, and we only apply the discipline for key things, like diet and education."

We might have been inside a large office building back on Earth, except for the low gravity and the inevitable slight curve of all the floors and ceilings. The latter were white, about eight feet high, and the walls were pleasant shades of buff, green and ivory. There was none of the sterile or metallic impression that some Earth people had spoken of as the main ingredient of L-5 decor. Naturally, there was no wood, but the color and shaping of

the metals and plastics had been done skillfully, to give a feeling of grain and variable texture. I liked it, and Tom was obviously pleased by my reaction.

Theo Hendon, head of Education, was reviewing course material when we reached his quarters. One look at him told me how lucky Tom had been. Naturally lean and angular, Tom had become even thinner from loss of muscle in the L-5 environment. That had countered the natural tendency to fill out with increasing years, and made him look youthful and attractive by Earth standards. Theo Hendon was much more an endomorph. He had swelled in bulk while losing both muscle and bone structure, and looked like a big, fat blob. There, I felt, was one man who skimped badly on his exercise sessions. I resolutely tried to leave Earth ideals of beauty behind me as we entered.

"Fourth grade history and geography," Hendon said after the introductions were over. "Lena Bartels teaches it, and you'll meet her tomorrow. But maybe you'd like to have a look at the course material now, unless you are feeling too tired."

His manner was friendly, but he couldn't disguise his worry and nervousness. I already knew that he was one of the people that I'd have to be extra nice to, since it was his area of responsibility that had first triggered Tom's worries and brought me up to L-5. I think I managed to put him fully at ease in about five minutes (a behavioral scientist who can't make people accept her is, like an insolvent economist, inexcusable).

"I'd like to see the courses," I said to Hendon.
"But more than that, I'd like to see a few of the children. Where are their living quarters and play areas? I'd like to see those, before I see the chil-

dren in school tomorrow. That may be more important than looking at the written material—I already saw a fair amount before I came here."

The two men looked at each other.

"I'll take her," said Tom after a moment. He turned to me. "We set up the living quarters for the space-borns on the outer rim, along with the rest of us. But they have access to all of the Colony, except for the power and utility sections, and they seem to prefer their own choice for receation, in towards the Hub. They've taken over an empty storage section there and converted it to a sort of maze. I won't try and describe it — you'll have to see it for yourself. But it means another walk — uphill this time — before the sleep period."

While he was speaking, he looked at me with a certain, familiar expression. I felt warm inside. We had been increasingly at ease with each other since we left Stanford, and now the last reserve was gone. I smiled back at him.

"I'm not fatigued, Tom," I said. "But I am sleepy — I spent most of the night before we left re-arranging my teaching schedule. Let's wait until tomorrow."

"Sure. I forgot that you have those mighty Earth-trained muscles. You could carry me up to the Hub, I'll bet, and not notice the effort. But let it wait a few hours, and you'll feel more alert when you do take a look round."

Theo Hendon nodded his agreement. He had — not surprisingly — missed all the second level of communication between us, and he didn't seem to notice that I had suddenly and inexplicably changed my priorities completely.

Irresponsible on my part, to put pleasure before

professional work? Sure — but as I get older carpe diem gets more and more reasonable as a motto for life. Tom wanted to show me that his physical collapse in the soupy air and full Earth gravity of Portola Valley was irrelevant in the airy palaces of Laputa. I wanted to help him do it.

The classroom looked conventional enough, even though the furniture was thin and insubstantial by Earth standards. We had gone to a good deal of trouble to find me a hiding place behind a wall projector panel where I could see and hear without being seen. I didn't want to induce atypical behavior in either teacher or students. It had taken me a while to persuade Theo Hendon that I was not really spying on Lena Bartels, but he had finally agreed that there was no way of guaranteeing normal behavior on her part if she suspected that she had a hidden witness.

I was in position early, well before the lesson began. Soon after I had settled myself, the first child floated in through the classroom doorway and made her way to the front row of the fixed benches. She was about nine years old, dressed in a brief, daffodil-yellow costume like a loose, one-piece bathing suit.

The frequent television and film coverage from L-5 couldn't do justice to the reality. The long, skeletal limbs were the same. So was the delicate looking, eggshell-thin skull, with its thin-boned features and sparse covering of fine hair. The factor that the cameras failed to catch at all was the unworldly grace of movement. When the spaceborn moved, I realized how clumsy Tom and his colleagues were in low gravity. As the child moved,

all of her moved. There was a curious symmetry to the motion, an overall balance that was pleasing to the eye while apparently functionally unnecessary (except that my experience has taught me that there is no such thing as 'unnecessary' behavior). I had no idea of the child's name, but in my mind she was Cobweb, Moth, Mustard-seed.

I found out the basis for that graceful symmetry later, but while I was still puzzling and admiring the rest of the children began to arrive. Lena Bartels came in last. By contrast, her movements, though they were economical and practised in low gravity, appeared crude and awkward. She came to the front of the room, checked the class roster just as though it were any schoolroom back on Earth, and began the lesson.

No one ever approaches a problem with a completely open mind. I had read the reports that the children had written, and deep inside me I had blamed the teachers. Only biased and malicious indoctrination, I felt, could lead to such alienation, such misery, in the children's work. I hadn't sensed that bias in Tom, or in Theo Hendon, so subconsciously I expected it to show up in the teachers who had most of the actual classroom contact.

It wasn't there. Lena Bartels was kind, competent and sympathetic.

Some of the children seemed restless, wriggling in their seats while she presented the lesson to them, but I could find no fault with the material, either in the facts or in the manner of its presentation. The facts of history were given clearly, without distortion or personal views of rights and wrongs. Lena Bartels knew how to pace her class

so that the children were neither bored nor bewildered.

I sat through five classes, one after the other, given by five different teachers. By the end of the fifth I was baffled. All the teachers were excellent. Had I thought about it before I left Earth, I would have concluded that it was inevitable. The screening processes for the L-5 Colony were so stringent, so exhaustive, that no psychopath, child-hater or simple incompetent would ever get near the place.

I went back to my room and re-read some of the children's class reports. After looking carefully at a time sequence of them, I could dispose of Tom's original question about 'critical mass' in the children's group behavior. The disquieting undercurrent of misery had been there for a long time. It was Tom and Theo Hendon's awareness that had triggered suddenly, and after that — naturally—they saw the problem everywhere. I checked a few dates in the history of the Colony, then queried a couple of others through the terminal in my room. After that I went to look for Tom.

He wasn't in his office. I tracked him down finally in the high-gee track, a four meter band that ran on air bearings right around the cylinder and rotated faster than the rest. Effective gravity on the track was a little more than half a gee. Tom, along with a hundred other men and women scattered along the nineteen hundred meters of rubberized surface, was pounding out his daily quota of one complete circuit.

He waved to me as he came off the track, jumped to the catch net, and dropped back to the main floor of the exercise section. He looked exhausted.

"Any progress yet?" His voice was weary, but I could hear the hope in it.

I had ideas, but they were still half-formed and in a pre-verbal state. I would have offered a flat 'No' to most people, to avoid discussion before I was ready, but Tom and I had been too close for that. In all our time together, we had only one major disagreement — one that had eventually driven us apart. I felt that my duty lay on Earth, trying to understand and improve the interaction of the teeming billions of a tired planet. As our resources dwindled, that loomed bigger every day as a practical problem. Behaviorists were more important each year, providing the lubricating mechanisms that kept Earth functioning.

Tom had disagreed with me, flatly and completely. As soon as the chance arose, he had applied for a position with the Colony development team.

"This world has had it, Beth," he would say, as we walked around the campus. "You can't see it yet, but it's beginning to run down. This was our cradle, but you can't spend your life in a crib. We have to get off-Earth, up where we have lebensraum, up where power and materials are unlimited. I want to be part of the future, not the custodian of an over-packed museum."

We had finally parted, but the sense of instinctive understanding between us was flooding back. Tom would see through a lie of mine as easily as I would read one of his.

"I have some ideas," I replied, as he towelled his face and arms in the changing-rooms of the exercise section. "But I really don't want to talk about them yet. I need more evidence that I'm heading in the right direction."

He nodded.

"Still a witch, are you?" he said.

I smiled. I used to plead supernatural powers back in our college days, when I couldn't be bothered to fill in all the steps of some long, tortuous train of reasoning that had preceded an 'intuitive' conclusion about a tough problem or a delicate decision. Most people seemed to be quite happy with a magic answer. Tom was one of the few people who knew how my head really worked, but he had always kept my secret. I was Beth, the Witch of Berkeley.

"If you're not worn out," I replied, "I'd like you to take me up to the section near the Hub where the children have their recreation area."

"Give me another five minutes. The high-gee track is rough going."

I looked at his body, pale and skinny, and I thought of the other reason why I didn't care to talk yet. True, I needed more evidence—but equally true, if I were right there was grief ahead for many of us.

This time we went up to the Hub in an elevator, a continuous belt that we grabbed as it came by and rode up the shaft holding on to it. We used an exit point about thirty meters short of the Hub itself. I thought the gravity there was zero, but Tom assured me that we were still experiencing a fiftieth of a gee — I weighed about a kilo, Tom a little less. We pulled ourselves along, hand over hand, to a transparent plastic flap in the section wall, about two meters square. Tom pulled it aside and we floated ourselves through, Tom easily, I

with a good deal more effort and less grace.

We had entered a large, open, octahedral section, about thirty meters in diameter. The walls were unfinished grey metal, smooth and unmarked except for a large number of yellow metal bosses. Tied to these, and criss-crossing the interior space in a complex, bewildering web, were numerous plastic cables, color coded and intricately tied at their many crossing points. The ties themselves were focal points for the attachment of hammocks, cabinets, tent-like enclosures and cloth screens. In the room were about fifty children, singly and in small groups, ranging in age from about four to eleven.

I paused and looked about me.

"They did all this themselves?" I asked.

Tom nodded without speaking. The children looked at us warily as we drifted through the section, moving and guiding ourselves with the aid of the web of taut cables.

We stopped near a child of about six years, painting on a blue, rough-textured plastic sheet. His 'brushes' were small aerosol cylinders, each giving a controllable color spray that ranged in thickness from a fine line to a broad, diffuse swath. His movements as he painted were like an elaborate ballet. As his hand went forward to his canvas, the other thin arm and the long, slender legs moved also. When he looked around at us, I noticed that his arms and legs made small, precise movements at the same time as his head. The effect was very beautiful, and totally alien. I saw that he was painting a flowing pattern of lines, converging on a blue center. The common structure of Earth paintings, into horizontal and vertical ele-

ments, was lacking completely.

"Tom, why do the children move that way?" I asked softly, as we left the child and moved on through the maze of cables. "They seem to move every part of them, all at once."

"They do." Tom looked back at the child. His expression was a strange mixture of affection, worry and sadness. "They learn it when they are very young. They move to keep their heads facing the way they want to, by balancing the linear and angular momentum of each part of the body. I've tried to do the same thing, but never been able to master it. Of course, it's really useful up here, in zero gee. On the outer sections, it doesn't matter so much. They spend so much time up here, they all learn to do it by the time they are four years old."

"But what about the calcium loss, Tom? If they spend all their time in low gee, isn't it uncomfortable for them on the outer rim—their bones won't take it, will they?"

The worry was evident on Tom's face. "That's one of the big problems, Beth. They don't like the outer sections, and they hate to exercise. Every chance they get, they are up here. The first of them are supposed to go down to Earth to complete their education in just two more years. They don't have the bone and muscle to take it. Even if they exercise hard now, it will be very hard on them physically. We've tried every argument. They don't argue back, but they don't change their ways. I've tried every persuasion—their parents, their teachers. Nothing seems to make any difference."

We moved on past a group of four children, completely absorbed in wrapping a sheet around a group of light struts, to form a neat, silver enclosure.

"See there," said Tom. "That's the same thing, on a higher level. Only the older children can do it. They are moving to keep their *total* momentum right, their bodies and the cube they're making. Don't ask me how they do it."

I had seen enough for my theories, but I stayed to watch for esthetic pleasure. It was like the finest choreography, danced with unearthly skill by a group of fairy-folk, delicate-bodied and frail. I knew now what I had to do. But I still had to decide on the right way of doing it.

I never did find that right way. Events overtook me. Tom and I had just been to the outer levels, the 'basement' of the Colony, and Tom had taken me on a long guided tour of the agricultural sections. All the food that we ate was produced on the Colony, with almost perfect recycling. The small losses were made up by occasional shipments of raw materials from the lunar surface. Tom estimated the total materials loss from the Colony at less then one percent of recycled substance per century, which made it effectively self-sufficient for the foreseeable future, even if Earth cut off support for a second and larger Colony. According to Tom, it was the psychological effect of that second Colony which was so important — the Colonists had to feel that they were in space to stay, that it was their natural and real home.

As we returned to the main living quarters, Tom stopped by the message center. He came out looking enormously pleased and excited.

"Beth!" he said. "Why didn't you tell me?" He

waved a message slip at me. "This is from Stanford — approving an early start to your sabbatical, so you can work in the L-5 Colony. It says that if you decide to stay here, as you hinted, you would be asked to serve as an extramural professor for as long as you choose."

I winced at the pleasure in his voice. This would make it harder yet.

"Tom, I don't know if I want to be a colonist here. I do want to spend a year here, at least, trying to help out, and I think it will take at least that long. That's why I sent my message. I didn't expect such a fast reply, or I'd have talked with you before."

"You think you've got the solution to our problem here?"

"Not a solution. All I've got is an explanation."

He looked relieved. "Hell, don't worry about that, Beth. We've solved every other problem that Nature's been able to throw at us up here. If you can tell us the cause of it, we'll find a fix."

"I hope you're right. I wish I was that confident." I thought for a few seconds, then mentally shrugged. I had to get it over with, the sooner the better.

"Tom, I could say this a hundred ways, but none of them are graceful. I'll say it flat out: we don't belong here."

He frowned, then laughed uneasily. "Beth, you'll have to say more than that. I don't know what you're trying to tell me."

I leaned forward and took his hands, thin and bony, in mine. "Look, you know my thought processes as well as anybody in the world — or out of it. I'll tell you exactly how I got to where I am, and you can tell me if you spot any error in the logic."

"All right." He nodded. His face was troubled. "What's the bad news?"

"All that I knew when I came up here," I said, "was that the children in the Colony were feeling terribly lost and unhappy. That was obvious from the things they were writing in school. Then, even before we got here, I noticed an odd thing. You never called them the children — it was always the 'space-borns'. And when I got here I found that the other adult colonists used the same expression."

"Well, Beth, they are space-born — all of them."

"Of course they are, but more than that they are your children. It's not as if some of the children had been born on Earth, and you needed to separate the two types for some reason. They were all born here. Oh, I know there's plenty of love and affection, it's not that. I've seen the teachers working with the children, and I've been impressed by them. But I still found it odd that you would refer to them by a different name. I wondered at first if it were their odd appearance — that was the only explanation that I could think of."

I thought back to that appearance, and to the aerial ballet of the children's activities, the movement of those delicate, graceful bodies with their smooth skin and scanty hair.

"When I got here, I went to hear the classes that were being taught. They were excellent. I can't recall hearing anything better on Earth. Well presented, by teachers who loved the children and their work. I seemed to be stuck. I went back to my room, locked myself in, and re-read the school reports and the medical records.

"Tom, you know the methods I use in my work. I

tried to imagine myself inside the head of one of the space-borns, seeing the world through the child's eyes. It wasn't easy, because the cultural referents are so different — but when I got it, it was a revelation. Remember, not one of the children here has ever been to Earth — not even to the Moon. This, the Colony, is the world. The only real world, the only one that matters."

"We tell them all about Earth, and the Moon too, Beth. They will all visit them, in due course."

"I know you tell them of Earth and Moon — too much. Tom, all your teaching is done by adults, born and raised on Earth, and it has a single viewpoint — a geocentric one. We can't see the world any other way. But try and see it now as an outsider would. You try to get the children to live in the high-gravity parts of the Colony, the ones most like Earth - when all the time they would rather live in zero gee, up near the Hub. You plan elaborate exercise programs for them, designed to prevent calcium loss and to keep their muscles strong. They hate it, they don't need those muscles or that strong bone structure. They don't see any point in running on the treadmill — that's the way they see you, in the Red Queen's Race and getting nowhere. You even promote standards of beauty based on Earth physique — which must make them all feel like freaks.

"Do you wonder that they feel alienated from the adults?"

I paused for breath. Tom was looking unconvinced, and a little stubborn.

"Beth, of course we try and get them to exercise in the higher gravity parts of the Colony. Surely you understand why. We don't want them to feel they're on a treadmill, but if they don't build their bodies they'll never be able to go to Earth at all—it will be closed to them."

"Sure it will." I held to my purpose and pressed on. "Just the way that a trip to Jupiter is closed to you and me. Do we worry about that? Of course not. It isn't home.

"Tom, this is big news. The Colony here is a total success. It can run itself indefinitely. There's only one thing out of place in the Colony. Us. We don't belong here. We're clumsy in the low gravity, we need special measures to keep fit, and we never can learn some of the zero-gee skills of the space children. As for them, they're miserable and self-destructive for one good reason—people they love are telling them they should be something they are not, something they don't want to be. That gets drummed into them, day after day. Do you wonder that they seek happiness away with their own kind, or that they are thoroughly miserable and confused with us?"

Tom was looking crushed and miserable, his eyes full of self-doubt, but I had to finish.

"The children could run this Colony, Tom, today — with a minimum of advice and assistance from us. This is their home. Earth is an alien place, a remote, unreal ornament in the sky. As for us, we've served our purpose. We were just the transition team, essential to getting the place started. Now, we do more harm than good."

I was done. I watched in silence as Tom grappled with what I had said, watched as the despair mounted in his face.

"Beth, if that's it, why can't we see it?" His voice was anguished.

"You are too close to it — you devoted your life to this Colony, all of you. It needed somebody from the outside to take a close look."

"But Beth, you're saying we'd harm the spaceborns — the children," he corrected himself quickly. "We'd never do that."

"You wouldn't harm them, knowingly. You've harmed them, just the same. Don't you see, somehow to you they aren't real children. You watch them, all of you, waiting for the magic day when they will change to human children and be like you. That won't happen, ever. They are right for space. Compared to them, we are clumsy, poorly-coordinated. We aren't right for life up here."

Tom had never been self-deluding, and he had never been a coward. He was fighting to find a flaw in what I said, but on his face was dawning a pained and yearning look, the mask of Moses, learning that he might see but could never live in the Promised Land. I wondered if I could ever soothe away part of that loss.

"Beth." He roused himself, and looked at me, trying one last hope. "If what you say is true, if the children don't need us or want us here — then why do you plan to come and live here, yourself? What use will you be as a behavioral specialist, if you don't even try and influence the children's attitudes? You'll have no work to do here."

I leaned forward and took Tom in my arms, cradling his head on my breast.

"I'll have work, Tom, more work than I've ever had in my whole life. People here will need help to adjust, tremendous help. But not the children. Everyone but the children."

AULIUD WAL

They were a perfect match, and then he changed...

BY SPIDER ROBINSON



The first awakening was just awful.

She was naked and terribly cold. She appeared to be in a plastic coffin, from whose walls grew wrinkled plastic arms with plastic hands that did things to her. Most of the things hurt dreadfully. But I don't have nightmares like this, she thought wildly. She tried to say it aloud, and it came out, "A"

Even allowing for the sound-deadening coffin walls, the voice sounded distant. "Christ, she's awake already."

Eyes appeared over hers, through a transparent panel she had failed to see since it had showed only a ceiling the same color as the coffin's interior. The face was masked and capped in white, the eyes pouched in wrinkles. Marcus Welby. Now it makes enough sense. Now I'll believe it. I don't have nightmares like this.

"I believe you're right." The voice was professionally detached. A plastic hand selected something that lay by her side, pressed it to her arm. "There."

Thank you, Doctor. If my brain doesn't want to remember what you're operating on me for, I don't much suppose it'll want to record the operation itself. Bye.

She slept.

The second awakening was better.

She was astonished not to hurt. She had expected to hurt, somewhere, although she had also expected to be too dopey to pay it any mind. Neither condition obtained.

She was definitely in a hospital, although some

of the gadgetry seemed absurdly ultramodern. This certainly isn't Bellevue, she mused. I must have contracted something fancy. How long has it been since I went to bed "last night"?

Her hands were folded across her belly; her right hand held something hard. It turned out to be a traditional nurse-call buzzer—save that it was cordless. Lifting her arm to examine it had told her how terribly weak she was, but she thumbed the button easily—it was not springloaded. "Nice hospital," she said aloud, and her voice sounded too high. Something with my throat? Or my ears? Or my . . . brain?

The buzzer might be improved, but the other end of the process had not changed appreciably; no one appeared for a while. She awarded her attention to the window beside her, no contest in a hospital room, and what she saw through it startled her profoundly.

She was in Bellevue, after all, rather high up in the new tower: the rooftops below her across the street and the river beyond them told her that. But she absorbed the datum almost unconsciously, much more startled by the policeman who was flying above those rooftops, a few hundred feet away, in an oversize garbage can.

Yep, my brain. The operation was a failure, but the patient lived.

For a ghastly moment there was great abyss within her, into which she must surely fall. But her mind had more strength than her body. She willed the abyss to disappear, and it did. I may be insane, but I'm not going to go nuts over it, she thought, and giggled. She decided the giggle was a healthy

sign, and did it again, realizing her error when she found she could not stop.

It was mercifully shorter than such episodes usually are; she simply lost the strength to giggle. The room swam for a while, then, but lucidity returned rather rapidly.

Let's see. Time travel, huh? That means . . .

The door opened to admit — not a nurse — but a young man of about twenty-five, five years her junior. He was tall and somehow self-effacing. His clothes and appearance did not strike her as conservative, but she decided they probably were — for this era. He did not look like a man who would preen more than convention required.

"What year is this, anyway?" she asked as he opened his mouth, and he closed it. He began to look elated and opened his mouth again, and she said "And what did I die of?" and he closed it again. He was silent then for a moment, and when he had worked it out she could see that the elation was gone.

But in its place was a subtler, more personal pleasure. "I congratulate you on the speed of your uptake," he said pleasantly. "You've just saved me most of twenty minutes of hard work."

"The hell you say. I can deduce what happened, all right, but that saves you twenty seconds, max. 'How' and 'why' are going to take just as long as you expected. And don't forget 'when'." Her voice still seemed too high, though less so.

"How about 'who'? I'm Bill McLaughlin"

"I'm Marie Antoinette, what the hell year is it?" The italics cost her the last of her energy; as he replied "1990," his voice faded and the phosphor

dots of her vision began to enlarge and drift apart. She was too bemused by his answer to be annoyed.

Something happened to her arm again, and picture and sound returned with even greater clarity. "Forgive me, Ms. Harding. The first thing I'm supposed to do is give you the stimulant. But then the first thing you're supposed to do is be semiconscious."

"And we've dispensed with the second thing," she said, her voice normal again now, "which is telling me that I've been a corpsicle for ten years. So tell me why, and why I don't remember any of it. As far as I know I went to sleep last night and woke up here, with a brief interlude inside something that must have been a defroster."

"I thought you had remembered, from your first question. I hoped you had, Ms. Harding. You'd have been the first . . . never mind — your next question made it plain that you don't. Very briefly, ten years ago you discovered that you had leukemia . . ."

"Myelocytic or lymphocytic?"

"Neither. Acute."

She paled. "No wonder I've suppressed the memory."

"You haven't. Let me finish. Acute Luke was the diagnosis, a new rogue variant with a bitch's bastard of a prognosis. In a little under sixteen weeks they tried corticosteroids, L-aspiraginase, cytosine arabinoside, massive irradiation, and mercrystate crystals, with no more success than they'd expected, which was none and negatory. They told you that the new bone-marrow transplant idea

showed great promise, but it might be a few years. And so you elected to become a corpsicle. You took another few weeks arranging your affairs, and then went to a Cold Sleep Center and had yourself frozen."

"Alive?"

"They had just announced the big breakthrough. A week of drugs and a high-helium atmosphere and you can defrost a living person instead of preserved meat. You got in on the ground floor."

"And the catch?"

"The process scrubs the top six months to a year off your memory."

"Why?"

"I've been throwing around terminology to demonstrate how thoroughly I've read your file. But I'm not a doctor. I don't understand the alleged 'explanation' they gave me, and I dare say you won't either."

"Okay." She forgot the matter, instantly and forever. "If you're not a doctor, who are you, Mr. McLaughlin?"

"Bill. I'm an Orientator. The phrase won't be familiar to you —"

"—but I can figure it out, Bill. Unless things have slowed down considerably since I was alive, ten years is a hell of a jump. You're going to teach me how to dress and speak and recognize the ladies' room."

"And hopefully to stay alive."

"For how long? Did they fix it?"

"Yes. A spinal implant, right after you were thawed. It releases a white-cell antagonist into

your bloodstream, and it's triggered by a white-cell surplus. The antagonist favors rogue cells."

"Slick, I always liked feedback control. Is it fool-proof?"

"Is anything? Oh, you'll need a new implant every five years, and you'll have to take a week of chemotherapy here to make sure the implant isn't rejected before we can let you go. But the worst side-effect we know of is partial hair-loss. You're fixed, Ms. Harding."

She relaxed all over, for the first time since the start of the conversation. With the relaxation came a dreamy feeling, and she knew she had been subtly drugged, and was pleased that she had resisted it, quite unconsciously, for as long as had been necessary. She disliked don't-worry drugs; she preferred to worry if she had a mind to.

"Virginia. Not Ms. Harding. And I'm pleased with the Orientator I drew, Bill. It takes you a while to get to the nut, but you haven't said a single inane thing yet, which under the circumstances makes you a remarkable person."

"I like to think so, Virginia. By the way, you'll doubtless be pleased to know that your fortune has come through the last ten years intact. In fact, it's actually grown considerably."

"There goes your no-hitter."

"Beg pardon?"

"Two stupid statements in one breath. First, of course my fortune has grown. A fortune the size of mine can't help but grow — which is one of the major faults of our economic system. What could be sillier than a goose that insists on burying you in golden eggs? Which leads to number two: I'm

anything but pleased. I was hoping against hope that I was broke."

His face worked briefly, ending in a puzzled frown. "You're probably right on the first count, but I think the second is ignorance rather than stupidity. I've never been rich." His tone was almost wistful.

"Count your blessings. And be grateful you can count that high."

He looked dubious. "I suppose I'll have to take your word for it."

"When do I start getting hungry?"

"Tomorrow. You can walk now, if you don't overdo it, and in about an hour you'll be required to sleep."

"Well, let's go."

"Where to?"

"Eh? Outside, Bill. Or the nearest balcony or solarium. I haven't had a breath of fresh air in ten years."

"The solarium it is."

As he was helping her into a robe and slippers the door chimed and opened again, admitting a man in the time-honored white garb of a medical man on duty, save that the stethoscope around his neck was as cordless as the call-buzzer had been. The pickup was doubtless in his breast pocket, and she was willing to bet that it was warm to the skin.

The newcomer appeared to be a few years older than she, a pleasant-looking man with gray-ribbed temples and plain features. She recognized the wrinkled eyes and knew he was the doctor who had peered into her plastic coffin. McLaughlin said, "Hello, Dr. Higgins. Virginia Harding, Dr. Thomas Higgins, Bellevue's Director of Cryonics."

Higgins met her eyes squarely and bowed. "Ms. Harding. I'm pleased to see you up and about."

Still has the same detached voice. Stuffy man. "You did a good job on me, Dr. Higgins."

"Except for a moment of premature consciousness, yes, I did. But the machines say you weren't harmed psychologically, and I'm inclined to believe them."

"They're right. I'm some tough."

"I know. That's why I brought you up to Level One Awareness in a half-day instead of a week. I knew your subconscious would fret less."

Discriminating machines, she thought. I don't know that I like that.

"Doctor," McLaughlin cut in, "I hate to cut you off, but Ms. Harding has asked for fresh air, and —"

"—and has less than an hour of consciousness left today. I understand. Don't let me keep you."

"Thank you, Doctor," Virginia Harding said. "I'd like to speak further with you tomorrow, if you're free."

He almost frowned, caught himself. "Later in the week, perhaps. Enjoy your walk."

"I shall. Oh, how I shall. Thank you again."

"Thank Hoskins and Parvati. They did the implant."

"I will, tomorrow. Good-bye, Doctor."

She left with McLaughlin, and as soon as the door had closed behind them, Higgins went to the window and slammed his fist into it squarely, shattering the shatterproof glass and two knuckles. Shards dropped eighty long stories, and he did not hear them land.

McLaughlin entered the office and closed the door.

Higgins's office was not spare or austere. The furnishings were many and comfortable, and in fact the entire room had a lived-in air which hinted that Higgins's apartment might well be spare and austere. Shelves of books covered two walls; most looked medical and all looked used. The predominant color of the room was black not at all a fashionable color—but in no single instance was the black morbid, any more than is the night sky. It gave a special vividness to the flowers on the desk, which were the red of rubies, and to the profusion of hand-tended plants which sat beneath the broad east window (now opaqued in a riotous splash of many colors for which our language has only the single word "green." It put crisper outlines on anything that moved in the office, brought both visitors and owner into sharper relief.

But the owner was not making use of this sharpening of perception at the moment. He was staring fixedly down at his desk; precisely, in fact, at the empty place where a man will put a picture of his wife and family if he has them. He could not have seen McLaughlin if he tried; his eyes were blinded with tears. Had McLaughlin not seen them, he might have thought the other to be in an autohypnotic trance or a warm creative fog, neither of which states were unusual enough to



call for comment.

Since he did, he did not back silently out of the office. "Tom." There was no response. "Tom," he said again, a little louder, and then "TOM!"

"Yes?" Higgins said evenly, sounding like a man talking on an intercom. His gaze remained fixed, but the deep-set wrinkles around it relaxed a bit.

"She's asleep."

Higgins nodded. He took a bottle from an open drawer and swallowed long. He didn't have to uncap it first, and there weren't many swallows that size left. He set it, clumsily, on the desk.

"For God's sake, Tom," McLaughlin said halfangrily. "You remind me of Monsieur Rick in Casablanca. Want me to play 'As Time Goes By' now?"

Higgins looked up for the first time, and smiled beatifically. "You might," he said, voice steady. "You must remember this... as time goes by.'" He smiled again. "I often wonder." He looked down again, obviously forgetting McLaughlin's existence.

Self-pity in this man shocked McLaughlin, and cheerful self-pity disturbed him profoundly. "Jesus," he said harshly. "That bad?" Higgins did not hear. He saw Higgins's hand then, with its half-glove of bandage, and sucked air through his teeth. He called Higgins's name again, elicited no reaction at all.

He sighed, drew his gun and put a slug into the ceiling. The roar filled the office, trapped by soundproofing. Higgins started violently, becoming fully aware just as his own gun cleared the holster. He seemed quite sober.

"Now that I've got your attention," McLaughlin said dryly, "would you care to tell me about it?"

"No." Higgins grimaced. "Yes and no. I don't suppose I have much choice. She didn't remember a thing." His voice changed for the last sentence; it was very nearly a question.

"No, she didn't."

"None of them have yet. Almost a hundred awakenings, and not one remembers anything that happened more than ten to twelve months before they were put to sleep. And still somehow I hoped...I had hope..."

McLaughlin's voice was firm. "When you gave me her file, you said you 'used to know her,' and that you didn't want to go near her 'to avoid upsetting her.' You asked me to give her special attention, to take the best possible care of her, and you threw in some flattery about me being your best Orientator. Then you come barging into her room on no pretext at all, chat aimlessly, break your hand and get drunk. So you loved her. And you loved her in her last year."

"I diagnosed her leukemia," Higgins said emotionlessly. "It's hard to miss upper abdomen swelling and lymph node swelling in the groin when you're making love, but I managed for weeks. It was after she had the tooth pulled and it wouldn't stop bleeding that . . ." He trailed off.

"She loved you too."

"Yes." Higgins's voice was bleak, hollow.

"Bleeding Christ, Tom," McLaughlin burst out. "Couldn't you have waited to..." He broke off, thinking bitterly that Virginia Harding had given him too much credit.

"We tried to. We knew that every day we waited decreased her chances of surviving cryology, but we tried. She insisted that we try. Then the crisis came ... oh damn it, Bill, damn it."

McLaughlin was glad to hear the profanity — it was the first sign of steam blowing off. "Well, she's alive and healthy now."

"Yes. I've been thanking God for that for three months now, ever since Hoskins and Parvati announced the unequivocal success of spinal implants. I've thanked God over ten thousand times, and I don't think He believed me once. I don't think I believed me once. Now doesn't that make me a selfish son of a bitch?"

McLaughlin grinned. "Head of Department and you live like a monk, because you're selfish. For years, every dime you make disappears down a hole somewhere, and everybody wonders why you're so friendly with Hoskins & Parvati, who aren't even in your own department, and only now, as I'm figuring out where the money's been going, do I realize what a truly selfish son of a bitch you are, Higgins."

Higgins smiled horribly. "We talked about it a lot, that last month. I wanted to be frozen too, for as long as they had to freeze her."

"What would that have accomplished? Then neither of you would have remembered."

"But we'd have entered and left freeze at the same time, and come out of it with sets of memories that ran nearly to the day we met. We'd effectively be precisely the people who fell in love once before; we could have left notes for ourselves and the rest would've been inevitable. But she

wouldn't hear of it. She pointed out that the period in question could be any fraction of forever, with no warranty. I insisted, and got quite histrionic about it. Finally she brought up our age difference."

"I wondered about the chronology."

"She was thirty, I was twenty-five. Your age. It was something we kidded about, but it stung a bit when we did. So she asked me to wait five years, and then if I still wanted to be frozen, fine. In those five years I clawed my way up to head of section here, because I wanted to do everything I could to ensure her survival. And in the fifth year they thought her type of leukemia might be curable with marrow transplants, so I hung around for the two years it took to be sure they were wrong. And in the eighth year Hoskins started looking for a safe white-cell antagonist, and again I had to stay room temperature to finance him, because nobody else could smell that he was a genius. When he met Parvati, I knew they'd lick it, and I told myself that if they needed me, that meant she needed me. I wasn't wealthy like her - I had to keep working to keep them both funded properly. So I staved."

Higgins rubbed his eyes, then made his hands lie very still before him, left on right. "Now there's a ten year span between us, the more pronounced because she hasn't experienced a single minute of it. Will she love me again or won't she?" The bandaged right hand escaped from the left, began to tap on the desk. "For ten years I told myself I could stand to know the answer to that question. For ten years it was the last thing I thought before I fell

asleep and the first thing I thought when I woke up. Will she love me or won't she?

"She made me promise that I'd tell her everything when she was awakened, that I'd tell her how our love had been. She swore that she'd love me again. I promised, and she must have known I lied, or suspected it, because she left a ten page letter to herself in her file. The day I became Department Head I burned the fucking thing. I don't want her to love me because she thinks she should.

"Will she love me or won't she? For ten years I believed I could face the answer. Then it came time to wake her up, and I lost my nerve. I couldn't stand to know the answer. I gave her file to you.

"And then I saw her on the monitor, heard her voice coming out of my desk, and I knew I couldn't stand not to know."

He reached clumsily for the bottle, and knocked it clear off the desk. Incredibly, it contrived to shatter on the thick black carpet, staining it a deeper black. He considered this, while the autovac cleaned up the glass, clacking in disapproval.

"Do you know a liquor store that delivers?"

"In this day and age?" McLaughlin exclaimed, but Higgins was not listening. "Jesus Christ," he said suddenly. "Here." He produced a flask and passed it across the desk.

Higgins looked him in the eye. "Thanks, Bill." He drank.

McLaughlin took a long swallow himself and passed it back. They sat in silence for a while, in a communion and a comradeship as ancient as alcohol, as pain itself. Synthetic leather creaked convincingly as they passed the flask. Their breathing slowed.

If a clock whirs on a deskface and no one is listening, is there really a sound? In a soundproof office with opaqued windows, is it not always night? The two men shared the long night of the present, forsaking past and future, for nearly half an hour, while all around them hundreds upon hundreds worked, wept, smiled, dozed, watched television, screamed, were visited by relatives and friends, smoked, ate, died.

At last McLaughlin sighed and studied his hands. "When I was a grad student," he said to them, "I did a hitch on an Amerind reservation in New Mexico. Got friendly with an old man named Wanoma, face like a map of the desert. Grandfather-grandson relationship -- close in that culture. He let me see his own grandfather's bones. He taught me how to pray. One night the son of a nephew, a boy he'd had hopes for, got alonedrunk and fell off a motorcycle. Broke his neck. I heard about it and went to see Wanoma that night. We sat under the moon—it was a harvest moon — and watched a fire until it was ashes. Just after the last coal went dark, Wanoma lifted his head and cried out in Zuni. He cried out, 'Ai-yah, my heart is full of sorrow."

McLaughlin glanced up at his boss and took a swallow. "You know, it's impossible for a white man to say those words and not sound silly. Or theatrical. It's a simple statement of a genuine universal, and there's no way for a white man to say it. I've tried two or three times since. You can't say it in English."

Higgins smiled painfully and nodded.

"I cried out too," McLaughlin went on, "after Wanoma did. The English of it was, 'Ai-yah, my brother's heart is full of sorrow. His heart is my heart.' Happens I haven't ever tried to say that since, but you can see it sounds hokey too."

Higgins's smile became less pained, and his eyes lost some of their squint. "Thanks, Bill."

"What'll you do?"

The smile remained. "Whatever I must. I believe I'll take the tour with you day after tomorrow. You can use the extra gun."

The Orientator went poker-faced. "Are you up to it, Tom? You've got to be fair to her, you know."

"I know. Today's world is pretty crazy. She's got a right to integrate herself back into it without tripping over past karma. She'll never know. I'll have control on Thursday, Bill. Partly thanks to you. But you do know why I selected you for her Orientator, don't you?"

"No. I don't think I do."

"I thought you'd at least have suspected. Personality Profiles are a delightful magic. Perhaps if we ever develop a science of psychology we'll understand why we get results out of them. According to the computer, your PP matches almost precisely my own — of ten years ago. Probably why we get along so well."

"I don't follow."

"Is love a matter of happy accident or a matter of psychological inevitability? Was what 'Ginia and I had fated in the stars, or was it a chance jigsawing of personality traits? Will the woman she was ten years ago love the man I've become? Or the kind of man I was then? Or some third kind?"

"Oh fine," McLaughlin said, getting angry. "So I'm your competition."

"Aha," Higgins pounced. "You do feel something for her."

"I . . " McLaughlin got red.

"You're my competition," Higgins said steadily. "And, as you have said, you are my brother. Would you like another drink?"

McLaughlin opened his mouth, then closed it. He rose and left in great haste, and when he had gained the hallway he cannoned into a young nurse with red hair and improbably gray eyes. He mumbled apology and continued on his way, failing to notice her. He did not know Deborah Manning.

Behind him, Higgins passed out.

Throughout the intervening next day Higgins was conscious of eyes on him. He was conscious of little enough else as he sleepwalked through his duties. The immense hospital complex seemed to have been packed full of gray jello, very near to setting. He plowed doggedly through it, making noises with his mouth, making decisions, making marks on pieces of paper, discharging his responsibilities with the least part of his mind. But he was conscious of the eyes.

A hospital grapevine is like no other on earth. If you want a message heard by every employee, it is quicker to tell two nurses and an intern than it would be to assemble the staff and make an announcement. Certainly McLaughlin had said nothing, even to his hypothetical closest friend; he



knew that any closest friend has at least one other closest friend. But at least three OR personnel knew that the Old Man had wakened one personally the other day. And a janitor knew that the Old Man was in the habit of dropping by the vaults once a week or so, just after the start of the graveyard shift, to check on the nonexistent progress of a corpsicle named Harding. And the OR team and the janitor worked within the same (admittedly huge) wing, albeit on different floors. So did the clerk-typist in whose purview were Virginia Harding's files, and she was engaged to the anesthetist. Within twenty-four hours, the entire hospital staff and a majority of the patients had added two and two.

(Virginia Harding, of course, heard nary a word, got not so much as a hint. A hospital staff may spill Mercurochrome. It often spills blood. But it never spills beans.)

Eyes watched Higgins all day. And so perhaps it was natural that eyes watched him in his dreams that night. But they did not make him afraid or uneasy. Eyes that watch oneself continuously become, after a time, like a second ego, freeing the first from the burden of introspection. They almost comforted him. They helped.

I have been many places, touched many lives since I touched hers, he thought as he shaved the next morning, and been changed by them. Will she love me or won't she?

There were an endless three more hours of work to be taken care of that morning, and then at last the jello dispersed, his vision cleared and she was before him, dressed for the street, chatting with McLaughlin. There were greetings, explanations of some sort were made for his presence in the party, and they left the room, to solve the mouse's maze of corridors that led to the street and the city outside.

It was a warm fall day. The streets were unusually crowded, with people and cars, but he knew they would not seem so to Virginia. The sky seemed unusually overcast, the air particularly muggy, but he knew it would seem otherwise to her. The faces of the pedestrians they passed seemed to him markedly cheerful and optimistic, and he felt that this was a judgment with which she would agree. This was not a new pattern of thought for him. For over five years now, since the

world she knew had changed enough for him to perceive, he had been accustomed to observe that world in the light of what she would think of it. Having an unconscious standard of comparison, he had marked the changes of the last decade more acutely than his contemporaries, more acutely perhaps than even McLaughlin, whose interest was only professional.

Too, knowing her better than McLaughlin, he was better able to anticipate the questions she would ask. A policeman went overhead in a floater bucket, and McLaughlin began to describe the effects that force-fields were beginning to exert on her transportation holdings and other financial interests. Higgins cut him off before she could, and described the effects single-person flight was having on social and sexual customs, winning a smile from her and a thoughtful look from the Orientator. When McLaughlin began listing some of the unfamiliar gadgetry she could expect to see, Higgins interrupted with a brief sketch of the current state of America's spiritual renaissance. When McLaughlin gave her a personal wrist-phone, Higgins showed her how to set it to refuse calls.

McLaughlin had, of course, already told her a good deal about Civil War Two and the virtual annihilation of the American black, and had been surprised at how little surprised she was. But when, now, he made a passing reference to the unparalleled savagery of the conflict, Higgins saw a chance to make points by partly explaining that bloodiness with a paraphrase of a speech Virginia herself had made ten years before, on the folly of an urban-renewal package concept which had

sited low-income housing immediately around urban and suburban transportation hubs. "Built-in disaster," she agreed approvingly, and did not feel obliged to mention that the same thought had occurred to her a decade ago. Higgins permitted himself to be encouraged.

But about that time, as they were approaching one of the new downtown parks, Higgins noticed the expression on McLaughlin's face, and somehow recognized it as one he had seen before—from the inside.

At once he was ashamed of the fatuous pleasure he had been taking in outmaneuvering the younger man. It was a cheap triumph, achieved through unfair advantage. Higgins decided sourly that he would never have forced this "duel with his younger self" unless he had been just this smugly sure of the outcome, and his self-esteem dropped sharply. He shut his mouth, and resolved to let McLaughlin lead the conversation.

It immediately took a turning he could not have followed if he tried.

As the trio entered the park, they passed a group of teenagers. Higgins paid them no mind — he had long since reached the age when adolescents, especially in groups, regarded him as an alien life form, and he was nearly ready to agree with them. But he noticed Virginia Harding noticing them, and followed her gaze.

The group were talking in loud voices, the incomprehensible gibberish of the young. There was nothing Higgins could see about them that Harding ought to find striking. They were dressed no differently than any one of a hundred teenagers

she had passed on the walk so far, were quite nondescript. Well, now that he looked closer, he saw rather higher-than-average intelligence in most of the faces. Honor-student types, down to the carefully-cultivated look of aged cynicism. That was rather at variance with the raucousness of their voices, but Higgins still failed to see what held Harding's interest.

"What on earth are they saying?" she asked, watching them over her shoulder as they passed.

Higgins strained, heard only nonsense. He saw McLaughlin grinning.

"They're Goofing," the Orientator said.

"Beg pardon?"

"Goofing. The very latest in sophisticated humor."

Harding still looked curious.

"It sort of grew out of the old Firesign Theater of the seventies. Their kind of comedy laid the groundwork for the immortal Spiwack, and he created Goofing, or as he called it, speaking with spooned tongue. It's a kind of double-talk, except that it's designed to actually convey information, more or less in spite of itself. The idea is to almost make sense, to get across as much of your point as possible without ever saying anything comprehensible."

Higgins snorted, afraid.

"I'm not sure I understand," Harding said.

"Well, for instance, if Spiwack wanted to publicly libel, say, the president, he'd Goof. Uh . . . "McLaughlin twisted his voice into a fair imitation of a broken-down prizefighter striving to sound authoritative. "That guy there, see, in my youth we

would of referred to him as a man with a tissuepaper asshole. What you call a kinda guy what sucks blueberries through a straw, see? A guy like what would whistle at a doorknob, you know what I mean? He ain't got all his toes."

Harding began to giggle. Higgins began sweating, all over.

"I'm tellin' ya, the biggest plum he's got is the one under his ear, see what I'm sayin'? If whiskers was pickles, he'd have a goat. First sign of saddlebags an' he'll be under his pants. If I was you I'd keep my finger out of his nose, an' you can forget I said so. Goodnight."

Harding was laughing out loud now. "That's marvelous!" A spasm shook her. "That's the most...conspicuous thing I've ever baked." McLaughlin began to laugh. "I've never been so identified in all my shoes." They were both laughing together now, and Higgins had about five seconds in which to grab his wrist-phone behind his back and dial his own code, before they could notice him standing there and realize they had left him behind and become politely apologetic, and he just made it, but even so he had time in which to reflect that a shared belly-laugh can be as intimate as making love. It may even be a prerequisite, he thought, and then his phone was humming its A-major chord.

The business of unclipping the earphone and fiddling with the gain gave him all the time he needed to devise an emergency that would require his return, and he marveled at his lightning cleverness, that balked at producing a joke. He really tried, as he spoke with his nonexistent caller, prolonging the conversation with grunts to give him-

self time. When he was ready he switched off, and in his best W.C. Fields voice said, "It appears that one of my clients has contracted farfalonis of the blowhole," and to his absolute horror they both said "Huh?" together and then got it, and in that moment he hated McLaughlin more than he had ever hated anything, even the cancer that had come sipping her blood a decade before. Keep your face straight, he commanded himself savagely. She's looking at you.

And McLaughlin rescued the moment, in that split second before Higgins's control would have cracked, doing his prizefighter imitation. "Aw Jeez, Tom, that's hard salami. If it ain't one thing, it's two things. Go ahead; we'll keep your shoes warm."

Higgins nodded. "Hello, Virginia."

"Gesundheit, Doctor," she said, regarding him oddly.

He turned on his heel to go, and saw the tallest of the group of teenagers fold at the waist, take four rapid steps backward and fall with the boneless sprawl of the totally drunk. But drunks don't spurt red from their bellies, Higgins thought dizzily, just as the flat crack reached his ears.

Mucker!

Eyes report: a middle-aged black man with three days' growth of beard, a hundred meters away and twenty meters up in a stolen floater bucket with blood on its surface. Firing a police rifle of extremely heavy caliber with snipersights. Clearly crazed with grief or stoned out of control, he is not making use of the sights, but firing from the hip. His forehead and cheek are bloody and one eye is



ruined: some policeman sold his floater dearly.

Memory reports: It has been sixteen weeks since the Treaty of Philadelphia officially "ended" C.W. II. Nevertheless, known-dead statistics are still filtering slowly back to next-of-kin; the envelope in his breast pocket looks like a government form letter.

Ears report: Two more shots have been fired. Despite eyes' report, his accuracy is hellish — each shot hit someone. Neither of them is Virginia.

Nose reports: All three (?) wounded have blown all sphincters. Death, too, has its own smell, as does blood. That other one: is that fear?

Hand reports: Gun located, clearing holster . . . now. Safety off, barrel coming up fast,

WHITE OUT!

The slug smashed into Higgins's side and spun him completely around twice before slamming him to earth beside the path. His brain continued to record all sensory reports, so in a sense he was conscious; but he would not audit these memories for days, so in a sense he was unconscious too. His head was placed so that he could see Virginia Harding, in a sideways crouch, extend her gun and fire with extreme care. McLaughlin stood tall before her, firing rapidly from the hip, and her shot took his right earlobe off. He screamed and dropped to one knee.

She ignored him and raced to Higgins's side. "It looks all right, Tom," she lied convincingly. She was efficiently taking his pulse as she fumbled with his clothing. "Get an ambulance," she barked at someone out of vision. Whoever it was apparently failed to understand the archaism, for she amended it to "A doctor, dammit. Now," and the

whip of command was in her voice. As she turned back to Higgins, McLaughlin came up with a handkerchief pressed to his ear.

"You got him" he said weakly.

"I know," she said, and finished unbuttoning Higgins's shirt. Then, "What the hell did you get in my way for?"

"I . . . I," he stammered, taken aback, "I was

trying to protect you."

"From a rifle like that?" she blazed. "If you got between one of those slugs and me all you'd do is tumble it for me. Blasting away from the hip like a cowboy . . ."

"I was trying to spoil his aim," McLaughlin said stiffly.

"You bloody idiot, you can't scare a kamikaze! The only thing to do was drop him, fast."

"I'm sorry."

"I nearly blew your damn head off."

McLaughlin began an angry retort, but about then even Higgins's delayed action consciousness faded. The last sensation he retained was that of her hands gently touching his face. That made it a fine memory-sequence, all in all, and when he reviewed it later on he only regretted not having been there at the time.

All things considered, McLaughlin was rather lucky. It took him only three days of rather classical confusion to face his problem, conceive of several solutions, select the least drastic, and persuade a pretty nurse to help him put it into effect. But it was after they had gone to his apartment and gone to bed that he really got lucky: his penis

flatly refused to erect.

He of course did not, at that time, think of this as a stroke of luck. He did not know Deborah Manning. He in fact literally did not know her last name. She had simply walked past at the right moment, a vaguely-remembered face framed in red hair, gray eyes improbable enough to stick in the mind. In a mood of go-to-hell desperation he had baldly propositioned her, as though this were still the promiscuous seventies, and he had been surprised when she accepted. He did not know Debbie Manning.

In normal circumstances he would have considered his disfunction trivial, done the gentlemanly thing and tried again in the morning. In the shape he was in it nearly cracked him. Even so, he tried to be chivalrous, but she pulled him up next to her with a gentle firmness and looked closely at him. He had the odd, inexplicable feeling that she had been . . . prepared for this eventuality.

He seldom watched peoples' eyes closely—popular opinion and literary convention to the contrary, he found peoples' mouths much more expressive of the spirit within. But something about her eyes held his. Perhaps it was that they were not trying to. They were staring only for information, for a deeper understanding . . he realized with a start that they were looking at his mouth. For a moment he started to look back, took in clean high cheeks and soft lips, was beginning to genuinely notice her for the first time when she said "Does she know?" with just the right mixture of tenderness and distance to open him up like a clam.



"No," he blurted, his pain once again demanding his attention.

"Well, you'll just have to tell her then," she said earnestly, and he began to cry.

"I can't," he sobbed, "I can't."

She took the word at face value. Her face saddened. She hugged him closer, and her shoulder blades were warm under his hands. "That is terrible. What is her name, and how did it come about?"

It no more occurred to him to question the ethics of telling her than it had occurred to him to wonder by what sorcery she had identified his brand of pain in the first place, or to wonder why she chose to involve herself in it. Head tucked in

the hollow between her neck and shoulder, legs wrapped in hers, he told her everything in his heart. She spoke only to prompt him, keeping her self from his attention, and yet somehow what he told her held more honesty and truth than what he had been telling himself.

"He's been in the hospital for three days," he concluded, "and she's been to visit him twice a day — and she's begged off our Orientation Walks every damn day. She leaves word with the charge nurse."

"You've tried to see her anyway? After work?"

"No. I can read print."

"Can't you read the print on your own heart? You don't seem like a quitter to me, Bill."

"Dammit," he raged, "I don't want to love her, I've tried not to love her, and I can't get her out of my head."

She made the softest of snorting sounds. "You will be given a billion dollars if in the next ten seconds you do *not* think of a green horse." Pause. "You know better than that."

"Well, how do you get someone out of your head, then?"

"Why do you want to?"

"Why? Because"..." he stumbled. "Well, this sounds silly in words, but ... I haven't got the right to her. I mean, Tom has put literally his whole life into her for ten years now. He's not just my boss — he's my friend, and if he wants her that bad he ought to have her."

"She's an object, then? A prize? He shot more tin ducks, he wins her?"

"Of course not. I mean he ought to have his

chance with her, a fair chance, without tripping over the image of himself as a young stud. He's earned it. Dammit, I ... this sounds like ego, but I'm unfair competition. What man can compete with his younger self?"

"Any man who has grown as he aged," she said with certainty.

He pulled back — just far enough to be able to see her face. "What do you mean?" He sounded almost petulant.

She brushed hair from her face, freed some that was trapped between their bodies. "Why did Dr. Higgins rope you into this in the first place?"

He opened his mouth and nothing came out.

"He may not know," she said, "but his subconscious does. Yours does too, or you wouldn't be so damfool guilty."

"What are you talking about?"

"If you are unfair competition, he does not deserve her, and I don't care how many years he's dedicated to her sacred memory. Make up your mind: are you crying because you can't have her or because you could?" Her voice softened suddenly—took on a tone which only his subconscious associated with those of a father confessor from his Catholic youth. "Do you honestly believe in your heart of hearts that you could take her away from him if you tried?"

Those words could certainly have held sting, but they did not somehow. The silence stretched, and her face and gaze held a boundless compassion that told him that he must give her an answer, and that it must be the truth.

"I don't know," he cried, and began to scramble

from the bed. But her soft hands had a grip like iron — and there was nowhere for him to go. He sat on the side of the bed, and she moved to sit beside him. With the same phenomenal strength, she took his chin and turned his face to see hers. At the sight of it he was thunderstruck. Her face seemed to glow with a light of its own, to be somehow larger than it was, and with softer edges than flesh can have. Her neck muscles were bars of tension and her face and lips were utterly slack; her eyes were twin tractor beams of incredible strength locked on his soul, on his attention.

"Then you have to find out, don't you?" she said in the most natural voice in the world.

And she sat and watched his face go through several distinct changes, and after a time she said "Don't you?" again very softly.

"Tom is my friend," he whispered bleakly.

She released his eyes, got up and started getting dressed. He felt vaguely that he should stop her, but he could not assemble the volition. As she dressed, she spoke for the first time of herself. "All my life people have brought problems to me," she said distantly. "I don't know why. Sometimes I think I attract pain. They tell me their story, as though I had some wisdom to give them, and along about the time they're restating the problem for the third time they tell me what they want to hear; and I always wait a few more paragraphs and then repeat it back to them. And they light right up and go away praising my name. I've gotten used to it."

What do I want to hear? he asked himself, and honestly did not know.

"One man, though . . . once a man came to me who had been engaged to a woman for six years, all through school. They had gotten as far as selecting the wallpaper for the house. And one day she told him she felt a Vocation. God had called her to be a nun." Debbie pulled red hair out from under her collar and swept it back with both hands, glancing at the mirror over a nearby bureau. "He was a devout Catholic himself. By his own rules, he couldn't even be sad. He was supposed to rejoice." She rubbed at a lipstick smear near the base of her throat. "There's a word for that, and I'm amazed at how few people know it, because it's the word for the sharpest tragedy a human can feel. 'Antinomy.' It means, 'contradicbetween two propositions which equally urgent and necessary." She retrieved her purse, took out a pack of Reefer and selected one. "I didn't know what in hell's name to tell that man," she said reflectively, and put the joint back in the pack.

Suddenly she turned and confronted him. "I still don't, Bill. I don't know which one of you Virginia would pick in a fair contest, and I don't know what it would do to Dr. Higgins if he were to lose her to you. A torch that burns for ten years must be awfully hot." She shuddered. "It might just have burned him to a crisp already.

"But you, on the other hand: I would say that you could get over her, more or less completely, in six months. Eight at the outside. If that's what you decide, I'll come back for you in ... oh, a few weeks. You'll be ready for me then." She smiled gently, and reached out to touch his cheek. "Of

course ... if you do that ... you'll never know, will you? " And she was gone.

Forty-five minutes later he jumped up and said, "Hey wait!" and then felt very foolish indeed.

Virginia Harding took off her headphones, switched off the stereo and sighed irritably. Ponty's bow had just been starting to really smoke, but the flood of visual imagery it evoked had been so intolerably rich that involuntarily she had opened her eyes — and seen the clock on the far wall. The relaxation period she had allowed herself was over.

Here I sit, she thought, a major medical miracle, not a week out of the icebox and I'm buried in work. God, I hate money.

She could, of course, have done almost literally anything she chose; had she requested it, the president of the hospital's board of directors would happily have dropped whatever he was doing and come to stand by her bedside and turn pages for her. But such freedom was too crushing for her to be anything but responsible with it.

Only the poor can afford to goof off. I can't even spare the time for a walk with Bill. Dammit, I still owe him an apology too. She would have enjoyed nothing more than to spend a pleasant hour with the handsome young Orientator, learning how to get along in polite society. But business traditionally came before pleasure, and she had more pressing duties. A fortune such as hers represented the life energy of many many people; as long as it persisted in being hers, she meant to take personal

responsibility for it. It had been out of her direct control for over a decade, and the very world of finance in which its power inhered had changed markedly in the interim. She was trying to absorb a decade at once — and determined to waste no time. A desk with microviewer and computer-bank inputs had been installed in her hospital room, and the table to the left of it held literally hundreds of microfilm cassettes, arranged by general heading in eight cartons and chronologically within them. The table on the right held the halfcarton she had managed to review over the last five days. She had required three one-hour lectures by an earnest, aged specialist-synthesist to understand even that much. She had expected to encounter startling degrees and kinds of change, but this was incredible.

Another hour and a half on the Delanier-Garcia Act, she decided, half an hour of exercise, lunch and those damnable pills, snatch ten minutes to visit Tom and then let the damned medicos poke and prod and test me for the rest of the afternoon. Supper if I've the stomach for any, see Tom again, then back to work. With any luck I'll have 1982 down by the time I fall asleep. God's teeth.

She was already on her feet, her robe belted and slippers on. She activated the intercom and ordered coffee, crossed the room and sat down at the desk, which began to hum slightly. She heated up the microviewer, put the Silent Steno on standby and was rummaging in the nearest carton for her next tape when a happy thought struck her. Perhaps the last tape in the box would turn

out to be a summary. She pulled it out and fed it to the desk, and by God it was — it appeared to be an excellent and thorough summary at that. Do you suppose, she asked herself, that the last tape in the last box would be a complete overview? Would Charlesworthy & Cavanaugh be that thoughtful? Worth a try. God, I need some shortcuts. She selected that tape and popped the other, setting it aside for later.

The door chimed and opened, admitting one of her nurses — the one whose taste in eyeshadow was abominable. He held a glass that appeared to contain milk and lemon juice half and half with rust flakes stirred in. From across the room it smelled bad.

"I'm sorry," she said gravely. "Even in a hospital you can't tell me that's a cup of coffee."

"Corpuscle paint, Ms. Harding," he said cheerfully. "Doctor's orders."

"Kindly tell the doctor that I would be obliged if he would insert his thumb, rectally, to the extent of the first joint, pick himself up and hold himself at arm's length until I drink that stuff. Advise him to put on an overcoat first, because hell's going to freeze over in the meantime. And speaking of hell, where in it is my coffee?"

"I'm sorry, Ms. Harding. No coffee. Stains the paint — you don't want tacky corpuscles."

"Dammit . . . "

"Come on, drink it. It doesn't taste as bad as it smells. Quite."

"Couldn't I take it intravenously or something? Oh Christ, give it to me." She drained it in a single gulp and shivered, beating her fists on her desk in revulsion. "God. God. God. Damn. Can't I just have my leukemia back?"

His face sobered. "Ms. Harding — look, it's none of my business, but if I was you, I'd be a little more grateful. You give those lab boys a hard time. You've come back literally from death's door. Why don't you be patient while we make sure it's locked behind you?"

She sat perfectly still for five seconds, and then saw from his face that he thought he had just booted his job out the window. "Oh Manuel, I'm sorry. I'm not angry. I'm ... astounded. You're right, I haven't been very gracious about it all. It's just that, from my point of view, as far as I remember, I never had leukemia. I guess I resent the doctors for trying to tell me that I ever was that close to dying. I'll try and be a better patient." She made a face. "But God, that stuff tastes ghastly."

He smiled and turned to go, but she called him back. "Would you leave word for Bill McLaughlin that I won't be able to see him until tomorrow after all?"

"He didn't come in today," the nurse said. "But I'll leave word." He left, holding the glass between thumb and forefinger.

She turned back to her desk and inserted the new cassette, but did not start it. Instead she chewed her lip and fretted. I wonder if I was as blase the last time. When they told me I had it. Are those memories gone because I want them to be?

She knew perfectly well that they were not. But anything that reminded her of those missing six months upset her. She could not reasonably regret the bargain she had made, but almost she did. Theft of her memories struck her as the most damnable invasion of privacy, made her very flesh crawl, and it did not help to reflect that it had been done with her knowledge and consent. From her point of view it had not; it had been authorized by another person who had once occupied this body, now deceased, by suicide. A life shackled to great wealth had taught her that her memories were the only things uniquely hers, and she mourned them, good, bad or indifferent. Mourned them more than she missed the ten years spent in freeze: she had not experienced them.

She had tried repeatedly to pin down exactly what was the last thing she could remember before waking up in the plastic coffin, and had found the task maddeningly difficult. There were half a dozen candidates for last-remembered-day in her memory, none of them conveniently cross-referenced with time and date, and at least one or two of those appeared to be false memories, cryonic dreams. She had the feeling that if she had tried immediately upon awakening, she would have remembered, as you can sometimes remember last night's dream if you try at once. But she had been her usual efficient self, throwing all her energies into adapting to the new situation.

Dammit, I want those memories back! I know I swapped six months for a lifetime, but at that rate it'll be five months and twenty-five days before I'm even breaking even. I think I'd even settle for a record of some kind—if only I'd had the sense to

start a diary!

She grimaced in disgust at the lack of foresight of the dead Virginia Harding, and snapped the microviewer on with an angry gesture. And then she dropped her jaw and said, "Jesus Christ in a floater bucket!"

The first frame read, "PERSONAL DIARY OF VIRGINIA HARDING."

If you have never experienced major surgery, you are probably unfamiliar with the effects of three days of morphine followed by a day of demerol. Rather similar results might be obtained by taking a massive dose of LSD-25 while hopelessly drunk. Part of the consciousness is fragmented . . . and part expanded. Time-sense and durational perception go all to hell, as do coordination, motor skills, and concentration — and yet often the patient, turning inward, makes a quantum leap toward a new plateau of self-understanding and insight. Everything seems suddenly clear: structures of lies crumble, hypocrisies are stripped naked, and years' worth of comfortable rationalizations collapse like cardboard kettles, splashing boiling water everywhere. Perhaps the mind reacts to major shock by reassessing, with ruthless honesty, everything that has brought it there. Even Saint Paul must have been close to something when he found himself on the ground beside his horse, and Higgins had the advantage of being colossally stoned

While someone ran an absurd stop-start, variable-speed movie in front of his eyes, comprised of

doctors and nurses and I.V. bottles and bedpans and blessed pricks on the arm, his mind's eye looked upon himself and pronounced him a fool. His stupidity seemed so massive, so transparent in retrospect that he was filled with neither dismay nor despair, but only with wonder.

My god it's so obvious! How could I have had my eyes so tightly shut? Choking up like that when they started to Goof, for Christ's sake — do I need a neon sign? I used to have a sense of humor — if there was anything Ginny and I had in common it was a gift for repartee — and after ten years of "selfless dedication" to Ginny and leukemia and keeping the money coming that's exactly what I haven't got any more and I damned well know it. I've shriveled up like a raisin, an ingrown man.

I've been a zombie for ten mortal years, telling myself that neurotic monomania was a Great And Tragic Love, trying to cry loud enough to get what I wanted. The only friend I made in those whole ten vears was Bill, and I didn't hesitate to use him when I found out our PPs matched. I knew bloody well that I'd grown smaller instead of bigger since she loved me, and he was the perfect excuse for my ego. Play games with his head to avoid overhauling my own. I was going to lose, I knew I was going to lose, and then I was going to accidentally "let slip" the truth to her, and spend the next ten years bathing in someone else's pity than my own. What an incredible, impossible, histrionic fool I've been, like a neurotic child saying, "Well, if you won't give me the candy I'll just smash my hand with a hammer."

If only I hadn't needed her so much when I met

her. Oh, I must find some way to set this right, as quickly as possible!

His eyes clicked into focus, and Virginia Harding was sitting by his bedside in a soft brown robe, smiling warmly. He felt his eyes widen.

"Dilated to see you," he blurted, and giggled.

Her smile disappeared. "Eh?"

"Pardon me. Demerol was first synthesized to wean Hitler off morphine; consequently I'm Germanic-depressive these days." See? The ability is still there. Dormant, atrophied, but still there.

The smile returned. "I see you're feeling better."

"How would you know?"

It vanished again. "What are you talking about?"

"I know you're probably quite busy, but I expected a visit before this." Light, jovial — keep it up, boy.

"Tom Higgins, I have been here twice a day ever since you got out of OR."

"What?"

"You have conversed with me, lucidly and at length, told me funny stories and discussed contemporary politics with great insight, as far as I can tell. You don't remember."

"Not a bit of it." He shook his head groggily. What did I say? What did I tell her? "That's incredible. That's just incredible. You've been here..."

"Six times. This is the seventh."

"My God. I wonder where I was. This is appalling."

"Tom, you may not understand me, but I know precisely how you feel."

"Eh?" That made you jump. "Oh yes, your miss-

ing six months." Suppose sometime in my lost three days we had agreed to love each other forever — would that still be binding now? "God, what an odd sensation."

"Yes it is," she agreed, and something in her voice made him glance sharply at her. She flushed and got up from her bedside chair, began to pace around the room. "It might not be so bad if the memories just stayed *completely* gone . . ."

"What do you mean?"

She appeared not to hear the urgency in his voice. "Well, it's nothing I can pin down. I... I just started wondering. Wondering why I kept visiting you so regularly. I mean, I like you — but I've been so damned busy I haven't had time to scratch, I've been missing sleep and missing meals, and every time visiting hours opened up I stole ten minutes to come and see you. At first I chalked it off to a not unreasonable feeling that I was in your debt — not just because you defrosted me without spoiling anything, but because you got shot trying to protect me too. There was a rock outcropping right next to you that would have made peachy cover."

"I . . . I . . . " he sputtered.

"That felt right," she went on doggedly, "but not entirely. I felt . . . I feel something else for you, something I don't understand. Sometimes when I look at you, there's . . . there's a feeling something like déjà vu, a vague feeling that there's something between us that I don't know. I know it's crazy — you'd surely have told me by now — but did I ever know you? Before?"

There it is, tied up in pink ribbon on a silver

salver. You're a damned fool if you don't reach out and take it. In a few days she'll be out of this mausoleum and back with her friends and acquaintances. Some meddling bastard will tell her sooner or later — do it now, while there's still a chance. You can pull it off: you've seen your error — now that you've got her down off the damn pedestal you can give her a mature love, you can grow tall enough to be a good man for her, you can do it right this time.

All you've got to do is grow ten years' worth overnight.

"Ms. Harding, to the best of my knowledge I never saw you before this week." And that's the damn truth.

She stopped pacing, and her shoulders squared. "I told you it was crazy. I guess I didn't want to admit that all those memories were completely gone. I'll just have to get used to it, I suppose."

"I imagine so." We both will. "Ms. Harding?"
"Yes?"

"Whatever the reasons, I do appreciate your coming to see me, and I'm sorry I don't recall the other visits, but right at the moment my wound is giving me merry hell. Could you come back again, another time? And ask them to send in someone with another shot?"

He failed to notice the eagerness with which she agreed. When she had gone and the door had closed behind her, he sank his face into his hands and wept.

Her desk possessed a destruct unit for the incineration of confidential reports, and she found

that it accepted microfilm cassettes. She was just closing the lid when the door chimed and McLaughlin came in, looking a bit haggard. "I hope I'm not intruding," he said.

"Not at all, come in," she said automatically. She pushed the *burn* button, felt the brief burst of heat, and took her hand away. "Come on in, Bill, I'm glad you came."

"They gave me your message, but I ." He appeared to be searching for words.

"No, really, I changed my plans. Are you on call tonight, Bill? Or otherwise occupied?"

He looked startled "No."

"I intended to spend the night reading these damned reports, but all of a sudden I feel an overwhelming urge to get stinking drunk with someone — no." She caught herself and looked closely at him, seemed to see him as though for the first time. "No, by God, to get stinking drunk with you. Are you willing?"

He hesitated for a long time.

"I'll go out and get a bottle," he said at last.

"There's one in the closet. Bourbon okay?"

Higgins was about cried out when his own door chimed. Even so, he nearly decided to feign sleep, but at the last moment he sighed, wiped his face with his sleeves, and called out, "Come in."

The door opened to admit a young nurse with high cheeks, soft lips, vivid red hair and improbably gray eyes.

"Hello, nurse," he said. He did not know her either. "I'm afraid I need something for pain."

"I know," she said softly, and moved closer.

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Do I know you?

If I do, if you're an old Galaxy reader who has followed Jim and Jerry and me to this new incarnation: hi, good to see you, sit down and have a beer, be with you in a minute, OK?

If I don't, if you and I need introduction, then this bookazine format is a success. The demographics indicate that the vast majority of science fiction readers are only vaguely aware (if at all) that there are magazines which print good science fiction every month. So we came to you. If you are one of those thousands who look only at the paperback book racks, you will not have read my previous review columns in Galaxy or Analog, and so there are a number of things to get straight before we start.

First, I am NOT a critic, I am a reviewer. I will not attempt to tell you why you should have liked that dreadful bore, or why you shouldn't have liked that low-brow adventure. In fact, I'll try not to cover books you're likely to have already seen. What I'm trying to do is keep you from getting ripped off when you pay out good beer-money for science fiction. I try to be a sort of Consumer's Guide to SF, reacting with a reasonably consistent set of prejudices, so that you know, not only that I spit it out, but what flavor it was. For all I know, you may like pistachio ripple. I was guite pleased when one fella wrote to say that he got good results by habitually buying everything I panned and avoiding everything I liked - for him, my column works.

Second, you should know that I write science fiction for a living, and have many pals who do

likewise. I have given up plugging my own stuff in my own column (you know, except when I just can't help myself), and I maintain that I call 'em as I see 'em, without allowing either friendship or enemyship to blah blah woof woof. But it seems to me that you have a right to know which of the writers I'm discussing are total strangers and which are family. Consequently in this column I first-name friends and more-than-passing acquaintances, and last-name all others.

Finally, we come back to the question of "Who the hell are you, anyway?" Since Destinies is something new in sf publishing, I really don't know. I mean, I think I know you: I was myself a paperback-and-library-ONLY reader of sf for 25 years (until I found out that magazines paid good money for stories, and began selling to them). But I'm willing to listen and learn, to modify this column through positive and negative feedback. I will read all letters addressed to me c/o Ace Books (I travel around a lot, lately). I will not never no way read any original manuscripts; I will burn them on sight in my Ashley Automatic woodstove. I will in all likelihood not answer any mail; time simply forbids it. But I'll read it, and pay attention. Talk back to me. OK?

Now you sit down here with the rest of my friends and have a beer too; we're going to look at some books together. They are a random sample of the approximately 180 books that have passed in front of my face this month, and they have in common only that I thought they looked interesting enough to start. I make no pretense toward universality, and I don't believe in deliberately

selecting obvious turkeys as "sacrificial victims" — unless, of course, they especially piss me off. I do make a practice of stomping on non-obvious turkeys, attractive-looking trash. But I try to pick books that will pay off, just like you do: I believe that the best way to combat the Hax of Sol III is to ignore them.

Let's get started.

NEWCOMERS

Okay, I'm putting myself in your place, and it seems to me that as I stand here before the bookrack with a precious buck ninety-five clutched in my fist my central problem is all these goddam newcomers.

Used to be you could keep track of 'em without spending a fortune. For one thing, they used to bring out maybe a dozen new writers a year; and for another thing, a buck ninety-five used to buy two books. Now sf is booming; new writers are falling like a plague of frogs from the sky, and prices are going off the wall. You can't afford to experiment that often, and when you do, Sturgeon's Law (90% of everything is shit) is working against you.

So I get the free review copies (once in a while, when they remember), and I did the experimenting for you.

First and foremost, I direct your attention to John Varley, one of the most promising writers to appear in recent years.

We've assumed that you're not an habitual

reader of sf magazines (until now, of course, heh heh), so Varley's short fiction will be new to you (one novel is out in paperback, Ophiuchi Hotline). Know then that there was a period of about 6 or 8 months last year when it seemed impossible to pick up an sf mag without finding at least one strikingly good story by John Varley. Singly and together they attracted so much attention that Varley has managed to sell a short story collection about five or six years sooner than is common in this business (read: sooner than I did). It is called The Persistence of Vision, and it is so good that I recommend you spring ten bucks for hardcover, something I don't do lightly. Not only isn't the paperback due out from Dell until Spring, but vou'll want to own a durable copy of this one. You'll read it to pieces, and you'll be lending it to special friends for years to come.

Varley is a master of extrapolation from known science; he knows this solar system perhaps more intimately than any other science fiction writer alive; his prose is fluid, skillful and witty; and as a story-teller he ranges from fair to brilliant, touching all bases in between. His most typical gambit is to startle the shit out of you — but do it so skillfully and logically that a second later you're saying, "Oh, of course — nothing startling about it. I'd have thought of it myself in a minute." Like Fred Astaire, he makes it look easy.

What do I mean by startling? Oh, how about a weather-sculptress on Luna who is beginning to find being repeatedly murdered annoying? Or a man who has taken a brief vacation in the skull of a lioness, only to find on his return that his own

body has been misplaced? (they stash him in a computer while they're tracking it down, to keep him from sensory-deprivation madness). Or a new kind of pressure suit, which allows lovemaking in a pool of liquid mercury?

These and other stories (plus a thoughtful introduction from sf's premier critic, Algis Budrys) form reason enough to buy the book — but the title story, "The Persistence of Vision," is so stupendous, so emotionally wrenching, so rich in good old-fashioned sense of wonder, that I'd be recommending the hardcover if all it contained was this story and a bunch of blank paper.

Varley starts with the factual premise that a 1964 epidemic of German measles resulted in the birth of 5,000 deaf-blind children (the usual annual incidence of deaf-blind births in the U.S. is 140—and there are never enough Anne Sullivans for even that many Helen Kellers!). Varley extrapolates, and hypothesizes that some of these children might, when grown, band together to form a commune, a society of and for the deaf-blind. And out of these simple ingredients he creates the finest science fiction story written in the last two years. I refuse to spoil it by telling you any more about it, but I will say that I've read it three times this month, and plan to read it several more times.

A first-collection to rank with those of Niven, Zelazny, Kornbluth and Tiptree. Don't miss it.

Another newcomer worth your investment is Marta Randall. *Journey* is her second novel, and a damned impressive one it is.

The back cover blurb nearly turned me off: what with John Jakes saying that it "carries the family saga into an exciting new dimension" ("As long as it stays there," responds my subconscious), and the copywriter talking of "a family dynasty whose name will thunder across the generations to the farthest reaches of time and space" ("As long as it stays there," my subconscious obligingly agrees again). Even the *inside-cover* quote from Charlie Brown (editor of *Locus* and reviewer for *Isaac Asimov's Science Fiction Magazine*), which *did* impress me, was marred by the typo attributing it to "N. Brown."

But I tried it anyway, and I'm glad I did. It is a science fiction family saga, a kind of space/soap opera — but so, come to think of it, was Dune, or Foundation, or The Rolling Stones. Randall creates a whole family as her protagonist, over a span of four generations, and nearly all the family members get a turn at being the viewpoint character. Each and every one of the characters is rounded, engaging and warmly real, whether seen in the first or the third person, and the intricate windings of their karma provided a story that held my interest throughout. I cared about those people, one and all, and still do.

Randall's prose is more than readable, more than competent. It is polished, measured, rich in color and emotion yet never overindulgent, economically evocative. Somehow or other, she has created a 324-page book without an ounce of fat on it anywhere, an enormous and sprawling—yet perfectly controlled—saga. John Jakes

isn't in her league.

Footnote: there's a sharp difference between Randall's "good" and Varley's "good." Varley is trying to write about the future as it might conceivably be; consequently in order to follow one of his stories you must be educated and flexible in your thinking, even for a science fiction fan. That is, you must be pretty adaptable to follow the emotional logic of a protagonist in whose world death is a correctable nuisance, sex-changes are monplace, the concept of fatherhood has disappeared, bodies are treated like automobiles and computers are citizens. Randall, on the other hand, has chosen to stack her plot so that the resulting world is more familiar to the average American reader: people are born in the usual way, grow up to be one sex or the other, die when their time comes, and don't seem to use computers. Save for a few episodes of genetic manipulation and some well-portrayed human-alien friction, it might almost not be an sf novel at all.

Mind you, I'm not complaining. It's a truism that a genuinely accurate and authentic novel of the far future would be utterly unintelligible to the contemporary reader. Randall's characters and I share an emotional matrix — whereas of all Varley's output, only the viewpoint character of "The Persistence of Vision" was anyone I could readily identify with. Randall's emotional impact is, to me, just as valuable as Varley's extrapolative brilliance.

Journey is startlingly good, and I look forward to more books from Marta Randall.

Yet another newcomer who returns the penny is * Steven Spruill, with yet another kind of book and an equally professional job.

Keepers of the Gate is a fast-paced action-packed novel of interstellar intrigue and suspense, which succeeds in holding itself a good several notches above the usual mindlessness of the genre. Spruill writes with ease and occasional elegance, managing the difficult feat of sustaining "the light touch" at book-length. He's still feeling his way with characterization, but getting there, and his plotting is tight and competent. (It's worth noting that the paperback edition has been revised — and improved.)

Basic situation: Jared Hiller, Captain of Naval Intelligence, lost a great number of bodily parts in an explosion (caused by treachery) while spying on newly-discovered aliens called Proteps. Hiller is now about 1/3 plastic and steel, has X-ray eyes and enormous strength, and is retired, an emotional if not physical cripple. One day he spots a man whom he is positive he knows — but the man he knows lost an arm years ago, and Hiller's X-ray eyes prove that this chap has two meat arms. Then Hiller uncovers evidence that the man is a Protep spy, a Quisling: could the Protep have the secret of organic regeneration? And there's this beautiful girl who seems to know a lot and has a dubious cover story...

From there everything gets pleasantly Maltese Falconish, and tumbles headlong to a satisfying finish. It's what you call a Good Light Read and I would next like to see Spruill turn his obvious tal-

ents to a book with a little more weight to it.

But then, God knows, Good Light Reads are not that easy to find these days.

Millenial Women is not entirely composed of newcomers — better than half of it, for instance, is a "full-length novel" by Ursula K. Le Guin (I've seen her name spelled 3 different ways on 3 different books — this is how it's spelled in M.W.).

But of the five other authors represented, only one is at all likely to be familiar to you non-magazine types: Marilyn Hacker, who won the Lamont Poetry Award and the National Book Award (1975), and co-edited the short-lived sf quarterly paperback Quark with Samuel R. Delany (with whom she also co-authored a charming daughter). Of the rest only Joan D. Vinge is established even in magazine sf (at this writing, she is a finalist for the 1977 John W. Campbell Award for Best New Writer).

So Millenial Women looks a little suspicious crouching there on the bookrack, mutely soliciting your \$8.95. If (says the Built-In-Shit-Detector in your mind) the Le Guin novel is really full length, and if it's any good, why didn't she publish it herself under her own byline, so her fans could locate it? If (continues the B.I.S.D.) these other Jenny-come-latelies are any good, why'd they have to hype 'em with a Le Guin? And finally (the B.I.S.D. triumphantly concludes), that has got to be the yoogliest cover ever painted, a hopelessly botched female figure in shades of one color (stale rhubarb), plainly executed by a first-year plumbing student. Final verdict: phooey.

A clear miscarriage of justice - your Built-In-

Shit-Detector needs cleaning.

The Le Guin novel, by my Casio FX-21 calculations, runs about 50,000 words, a slightly short novel but a righteous one. It is not her best, but it is far from her worst, and with just a bit of editing it might have been much better (Le Guin's characteristic ambiguity is here a little overdone.). And why it is sharing a book with a bunch of new kids is that you might not have bought the new kids and Le Guin wanted to give them a hand (a kind of literary altruism that seldom occurs outside of sf), on the grounds that they deserved it.

Which they do. Since I am a magazine reader, I already knew that Joan Vinge is a terrific writer—so I was not surprised to find "Phoenix in the Ashes" (the longest piece in the book besides the Le Guin) an excellent novelette, a convincing and engaging story of a world ruined by atomic warfare, struggling to preserve and rebuild at any cost. (The ending was a bit trite—but then, I've used it myself, so perhaps I should shut up.) And since Ted Sturgeon has been raving to me about Elizabeth Lynn for over a year, I was not too surprised to thoroughly enjoy her "Jubilee's Story," a genuine gripper.

But Cynthia Felice, Diana L. Paxson and Cherry Wilder were all completely new to me, and so frankly I was a little surprised by their obvious skill, talent and promise. Felice's "No One Said Forever" is really not sf at all — but it paints such an economically poignant antinomy (lovely word: see my story in this issue if you don't know what it means) with such a satisfying ending, that I don't care. Paxson's "The Song of N'Sardi-El" and Wild-

er's "Mab Gallen Recalled" are both undeniable sf, and of undeniable quality, not perfect but quite promising.

All in all a surprisingly good anthology, clocking in at

about 80% on the Spidermeter
$$\left(\frac{\text{story enjoyment}}{\text{total stories}}\right)$$

× 100, with a variable Finagle Factor). One thing, though: I note that with this book, as with the Marta Randall, the emphasis is on human emotions, rather than ideas. There's not a single brilliant-new-conception in either book, neither Varley pyrotechnics nor Spruill plotting. On the other hand, neither Varley nor Spruill can consistently achieve the depth of emotional insight that all these ladies seem to take for granted.

Thus we arrive at Robinson's Law of New Writers: new male writers tend to overemphasize ideas at the expense of emotion; new female writers tend the other way. Based as it is on a sample of 4 books, 7 women and 2 men, this generalization is practically worthless — but it's intriguing . . .

The next batch of newcomers includes some established professionals with worldwide reputations. The "newcomer" here is the format itself, and all I can say is, it's about time.

Fantasy art has been around for a long time. But it has always been a field (like sf writing until quite recently) where "you'd better be in it for love, because you ain't NEVER gonna make any money." Frank Frazetta, for instance, spent years drawing comic books and painting brilliant paperback cov-

ers before it occurred to Bantam that a book of his art might make coins.

It made many coins, and now fantasy art books are flourishing everywhere. Even Heavy Metal, with generally mediocre artists, is apparently selling like hell, and suddenly a bunch of the most overlooked and underpaid geniuses on Earth are discovering that they have, for the first time in history, a potential mass-market medium.

First let's talk about Ariel. It's hard to define what Ariel is, exactly: it's sort of a roughly annual fantasy and fantasy art magazine in outsized trade paperback format, distributed by a mass-market paperback house. Hmmm, sounds like as much of a category-bastard as Destinies itself.

Anyway, it's 9 inches by 12, full color throughout, and it's got fiction, art and articles — with the emphasis unquestionably on the art. Ariels I and II were not distributed by Ballantine, so you won't have seen them — I found them at convention huckster rooms. Both were good, trembling on the verge of excellent. I guess I'd have to say the same about this one, Ariel Volume Three.

For one thing, at this point it takes a really novel and striking piece of fantasy fiction to hold my attention — it's just not my pipe of tea — and only half of this fiction fits the bill. For another, the "Two Poems" by Roger Zelazny (two "poetic" paragraphs from Creatures of Light and Darkness) are nearly incomprehensible out of context and are accompanied by full-page illustrations which bear no discernible relation to them. And the experiment of illustrating a story with Penthouse-like

foggy photography (you read *some* magazines, don't you?)was a failure which should not have seen print.

On the other hand, nearly ALL the rest of the artwork is terrific; the interview with Barry Windsor-Smith (the original, award-winning artist for the Conan comic) is interesting and splendidly illustrated with his uniquely haunting work; the illustrated version of Harlan Ellison's "Along the Scenic Route" by Al Williamson is quite nice, and the stories by Moorcock, Niven and Bruce Jones are fabulous — especially Niven's "Transfer of Power," one of the best fantasy short-shorts ever written.

The reproduction is good, the color is rich, Windsor-Smith's cover painting is a classic, the layout by editors Thomas Durwood and Bruce Jones is stunningly professional and consistently eye-catching, and the binding is strong enough for about 5-10 careful readings or one 3-year-old child, whichever comes first. It doesn't really plug smoothly into the Spidermeter's, uh, scanning orifice, but I'd give it an overall rating of 80% — and anything over 70%, in these troubled times, is a recommendation-to-buy (as opposed to a recommendation-to-bi, which can only be made by a qualified sex therapist).

One last gripe, though: it's maddening enough that art books never number their goddam pages — but it's twice as irritating when they gratuitously throw in a table of contents, listing each piece by the page numbers that don't exist. (sort of a fable of contents...) (All right, that does

it! No more parentheses for awhile.)

Much more successful is Sorcerers, subtitled "A Collection of Fantasy Art." It comes from the same gang that produce Ariel: whereas the latter was edited by Durwood and Jones with Armand Eisen as "Editorial Consultant," this one is edited by Jones and Eisen, with Durwood as Consultant. Assume, in other words, first-class repro, layout and design.

Now, about the artists: I already knew the work of Alex Nino, Jack Kirby and James Steranko from my old comic book days, and I was quite familiar with the work of the Hugo-winning George Barr. To my dismay, I find that Jack Kirby has completed the collapse into indulgence and self-parody that he began when he quit Marvel Comics: only in one pencil sketch is any trace of his genius apparent. But the Steranko stuff is good if sparse, the Barr is quite excellent (particularly the very first picture, which seems to contain the essence of awe and wonder), and the extensive Alex Nino spread is simply stunning, 6 paintings and two Finlayesque sketches of astonishing beauty. I frankly never suspected Nino was this good.

Of the artists I didn't already know, I found all of them excellent, mature talents in full flower. Steve Hickman, Michael Hague, Kenneth Smith and Brad Johannsen happen to work in styles which only occasionally appeal to me — but I can't gainsay their obvious talent and craft, and they may happen to be right up your alley. And to my eye Tim Conrad and editor Bruce Jones are simply

superb, accomplished geniuses of rare skill and subtlety. Michael Whelan, who closes the book, is also damn good.

About 90% on the Spidermeter. No, considering the Nino, the Barr and the Conrad, make it 95%. A rare and beautiful book.

Last of the three premier releases from Ariel/Ballantine is a genuine winner, a 100% reading from the word go. No, come to think, make it 105%—the pages are numbered. I took a cab downtown to Ballantine to get my review copy when I saw the press release, and I may have each page plasticized for longer life.

Forgive me: a personal fetish. I am stone gonzo for the artwork of Richard Corben.

I discovered him in the underground comics, old moldering issues of Slow Death and Grim Wit. I followed him, sometimes gritting my teeth, through Eerie and Creepy, and I went bananas when Nickelodeon Press published a hardcover collection of Corben's underground work. Last year Corben published a brilliant full-length book, Bloodstar, a sort of adult comic book based on a Robert E. Howard science fiction novella with a John Jakes rewrite. It was not the first book-length illustrated sf, but it was the first really great one, a landmark event. By chance the publisher was Morningstar Press: two fellows named Durwood and Eisen. Sound familiar?

So then Corben began serializing a l-o-o-ong story in the French magazine Metal Hurlant and its American counterpart, Heavy Metal, written by

himself, under the running title, "Den." It was a Lovecraftian fantasy, chockfull of wizards, warlocks, pyramids, demons and hideous hybrid mutants; featuring an impossibly musclebound hero and an impossibly spathic heroine and some of the most spectacular color work ever seen. The story had its ups and downs, but the artwork was so consistently excellent that it kept me buying Heavy Metal in spite of that magazine's tendency toward sophomoric nihilism, junioric S & M and what I think of as the Clash of Symbols.

Well, now you can get the whole saga between two covers, on better paper, and without all them other turkeys, and you'll never guess who published it. Yep, Eisen & Durwood.

There's a foreword by Fritz Leiber, an interesting intro by Bruce Jones about the Corben movie on which the book is apparently based (!), and a stunning frontispiece (reprinted inside the back cover too, which I guess makes it a backispiece). (My God, the parentheses are creeping back...) Oh, and the title is no longer "Den" — it's now Never-Where.

If you don't already know Corben's vivid cinematographic style, his spectacular use of color and his incredible detail, venture eight dollars. If you do already know him, you stopped reading several paragraphs ago (if not sooner) and are already on your way to the bookstore; see you when you get back.

Enough of newcomers. Let's graduate on upward and leave you with a couple of established

pros.

Joe Haldeman is awful young to be an established pro. If you discount pseudonymous taxis (hack jobs) and adaptations, he's had only three real novels published. But the first of these, The Forever War, won both the Nebula (voted only by members of the Science Fiction Writers of America) and the Hugo (voted by anybody in the world—you, if you're interested. I'll tell you how in the next issue of Destinies.) for Best Novel; and the paperback rights for the second, Mindbridge, sold for a then-record six figures. I submit that Joe is an established pro.

His third and latest book, All My Sins Remembered, is a crackling, bristling, fast-paced read, a hell of a good adventure story. In fact, it's better at that than the other two books combined. It's vivid and inventive and exciting as hell, with surprises planted like landmines among a parade of believable and sympathetic characters in compelling and plausible situations. It is so economically drawn that I don't find a spare word or an unnecessary clause anywhere in it: pure red meat, lightly marbled with poesy here and there.

In fact, absolutely my only problem with the book is that it is so goddam depressing it drives me out of my mind.

Basic situation: pleasant, likable, rather idealistic young man applies for a diplomatic position with the Confederacion (read: "Galactic Federation"). In the course of hypnotic interview someone decides he would make a pretty good assassin—so they *steal* him, literally rob him of his

body and will with drugs and hypnosis. He is eptified into a first rate killer and sent out again and again on missions of dubious ethicality which require him to paint the landscape with blood (sometimes literally), a good deal of it innocent-bystander blood. Every five years or so they peel away onion layers to get down to the original personality (which used to be an Anglo-Buddhist), for what is called a "redundancy check" but seems to be a sort of confessional cathartic. When

WARNING! I AM ABOUT TO COMMIT A SPOILER! IF YOU DON'T WANT TO KNOW HOW THE BOOK ENDS, SKIP THE REST OF THIS PARAGRAPH.

after twenty-three years of slaughter, his accumulated guilts and regrets have become too much to be borne, and his base-personality goes catatonic with remorse, the protagonist is most casually killed by his superiors. It's cheaper than mindwipe. End of book.

See what I mean? In and around this basic premise, Joe has woven a hell of a gripping and moving and exciting adventure novel. But the problem is, his protagonist is so likable I found myself resenting Joe for torturing the poor guy for my entertainment.

I mean, I kept hoping that one of the guy's opponents would capture him, deprogram him, and turn him loose on the dirty bastards who made him an involuntary assassin in the first place. In that cause maybe I could stomach intrigue and sudden merciless death. Like on the old Mission: Impossible show, when I kept hoping to God those arrogant criminals would get busted for fifty years apiece, turn state's evidence and, while the Secretary was busy disavowing, blow the whistle on the son of a bitch with taped copies of his silly self-destructing tapes. The real villains in this book are powerful, clever, and utterly ruthless, and they are never dealt with. At the end, the implication is that the Confederacion pretty generally rules the Galaxy and will always, inevitably, triumph. Why? Because their assassins are the most competent. Because the Confeds are the most ruthlessly pragmatic scum in space. Now how can I put down a book like that feeling satisfied?

I still recommend it. The three adventure novellae of which it is made (two from Galaxy, one from Cosmos) are individually excellent, and unusually smoothly combined by the new sandwich material. But the last taste it will leave in your mouth is the bitter taste of pain, of unfairness. I'm not militating for mandatory happy endings, by any means: life is often unfair. But I maintain that it is fair more often than it is not (relevant quote from Heinlein: "I don't want justice; I want charity.") — and if it is in truth this unfair, this inescapably bleak, the only sane course for Joe's hero would have been to flush his head down the toilet before the government could get its hands on him. I find this ostrich attitude all too prevalent already these days — and it's a perilously short step from there to the paranoiac ignorance of movies like Capricorn One (which supposes that the Omniscient Evil Gummint not only would but could successfully fake a manned Mars landing!)

If it is true that what we all agree to be so is so, then I (reluctantly, because Joe is a good friend) wish to strongly and publicly disagree with this book. No. No, this is not true. Evil will never get that efficient. No, you can't do that to a man, not for twenty-three years. At the very least, his subconscious will find an opportunity to suicide "accidentally". I may be wrong, but I'm positive: you can't enslave a free man.

I urge you to disagree with All My Sins Remembered too; toward that end I would suggest that you buy the book and read it.

Kate Wilhelm is an established pro if anybody is, with 11 novels and story-collections in print and last year's Best Novel Hugo perched on her mantel. And sure enough, she has produced another striking book in *Margaret and I*.

Paradox. Oftentimes beginners who want to be science fiction writers will write what is essentially a mainstream story and give it a science fictional setting so that they can sell it as sf. Sometimes it works out okay, as with Marta Randall's Journey; more often it's dreadful. So here we have an accomplished sf writer, Kate Wilhelm, writing an unquestionable sf novel, and then giving it a contemporary setting, apparently so that it could be disguised and sold as a mainstream novel.

Both of these gambits have hard financial logic behind them. Sf editors are much more likely to buy first novels than are mainstream editorsand mainstream editors pay enormously better.

Consequently there isn't a word on the jacket of Margaret and I to suggest that it has anything to do with sf—unless you happen to know what the Hugo Award is given for. The blurb quote describes Wilhelm as "one of the masters of psychological fiction in America," and the backcover hype drops one thin hint about a "transformation scarcely envisioned by the science of man," but the book is not to be found in the sf section of the bookstore, and perhaps no more than 2% of its readers will know why it is dedicated "To Damon—of course." (Sf fans will know that Ms. Wilhelm is married to noted sf writer, editor and critic Damon Knight.)

Make no mistake: it's a science fiction novel, and a damned good one. It is the story of Margaret, who is at a time of crisis in her marriage and her life, the standard stuff of mainstream "women's novels" — but it is being told by Margaret's subconscious mind, which privately feels that Margaret is a hopeless idiot and a bit of a ninny (shades of Dick Geis!)

This alone could have made for a delightfully innovative Freudian novel — but Wilhelm just can't help being a science fiction writer: even her plot turns science fictional, and we end up with a Jungian novel, in which Margaret's subconscious and some chillingly evil bad guys and (at long last) Margaret's conscious mind all wrestle together over the secret of access to the unconscious, the overmind that transcends time and death.

Altogether a brilliant and haunting book. In

spots coincidence is entirely too kind to Wilhelm's plot, but three things kept me from minding it: the fascinating delineation of the power-relationship (and the tangled emotional ties) of Margaret's conscious and subconscious as seen by the latter; the utterly splendid notion of exploring the reactions of the subconscious to being hypnotized, during and after; and the terrific sex scenes.

So all in all I can't blame Wilhelm or Pocket Books for not calling this a science fiction novel. Certainly Margaret is worth more money than sf usually fetches, and it deserves to be read by a wider audience than just the sf crowd. But whenever I see it in a bookstore, I can't resist smuggling a couple copies over to the sf section, where they faithful may find them.

A strange and stimulating novel, combining startling science fictional ideas and abundant emotional insight. And, of course, Wilhelm's trademark: effortless, beautiful prose.

In the next issue of *Destinies* I'll be telling you about how and why to vote for the Hugo Awards (tell the nice publishers what you want to see), how to keep track of every science fiction book published each year, hardcover and paperback, and how to obtain copies of the ones that your benighted bookstore fails to stock — in addition to the usual Consumer Sampling of some of the next couple of months' worth. Till then, don't take any wooden characters (and watch out for those parentheses. Once you've got the habit it's hard to bracket.).

Such clowns would be funny were they not so horrible. But one thing's for sure: funny or horrible, they are

AGENTAGES Charlies

by Dean Ing



"... I found fear a mean, overrated motive; no deterrent and, though a stimulant, a poisonous stimulant whose every injection served to consume more of the system..."

...T. E. Lawrence, Seven Pillars Of Wisdom

At the first buzz of the phone, Everett decided to ignore it. He'd planned his selfish Saturday for weeks, determined that official business would positively not deflect him from one last autumn day in the high country. Born a hundred and fifty years too late to be a mountain man, Maurice Everett lived his fantasy whenever he could—briefly by necessity, alone by choice. It wasn't until the third buzz, as he struggled into a turtleneck, that he recognized the buzzer tone of his unlisted number. Only his informants, and probably the FBI, had access to this tenuous link between newsmen and the federal government.

Everett spoke briefly, listened long, and promptly forgot the Rockies that lay in sere majesty on his horizon in Colorado Springs. "You're already en route, then," he said, thrusting the earpiece between head and shoulder as he tugged on heavy socks. "But why the Shoshone-Beardsley intersection? Doesn't the parade go through the center of Pueblo?" A pause. "Sure; handy for you and me, and the tactical squads too. Those mothers must be awfully confident." A final pause. "Maybe fifty minutes if I drive the superskate, but I haven't a CB rig in it. My problem anyhow; and thanks, Leo. Really."

Once before he hit U.S. route eighty-seven and

twice after, Everett was noticed by Colorado Highway Patrol cruisers. He kept the tiny Mini-Cooper in racing tune though he rarely had time for his infatuation with the little freeway raptor. The big cruisers invariably saw his honorary highway patrol decals, fell back to check his plates, then let him continue fleeing south at nearly three kilometers a minute. A Federal Communications Commissioner was supposed to be circumspect, and Maurice Everett had been criticized for his maverick ways; but he used special privilege only in the line of duty. Mavericks had settled the West, and they might yet settle the electromagnetic spectrum.

Everett took the second offramp at Pueblo as if the curve were a personal affront, then eased off as he entered boulevard traffic. According to the newsman's tip, he would be at the intersection in time for the terrorist demonstration. Briefly, Everett was reminded of Charlie George, who had sat near him at — what was it, the Associated Press convention? The comedian had opined, in his laconic drawl, "TV will still play whore to any pimp with a machine pistol. We're the tush of terrorism." Everett had laughed at the remedy Charlie had proposed. But then, you were supposed to laugh at Charlie.

Everett spotted vehicles of two different networks as he neared the target area, and forgot about TV comedians. The van, he overtook; the big Honda bike overtook them both, more by maneuverability than speed. The van gets you status, the bike gets you there first, he mused. Electronic newsgathering equipment was so compact, newspeople could do ENG with two-wheeled vehicles though the Honda was too small to carry powerful transmission equipment.

Everett kept the van in his rearview and when it stopped, he found a niche for the Mini. From that point on, he was in enemy country.

He hesitated a moment in choosing decoy emblems. His was a camouflage problem: he wanted to avoid a make by newsmen, and a few knew Maury Everett on sight. But he also wanted to avoid getting himself killed. He donned wraparound dark glasses for the first criterion, and an armband over his rough leather jacket to meet the second. Terrorists knew who their friends were; the armband said simply, PRESS.

Following a National Broadcasting Network cameraman on foot, Everett wished he too had a lightweight videotape rig — even a dummy Micam would do. It had been years since a terrorist had deliberately downed a media man, and while Everett's informant could not predict details of the demonstration, it was prudent to suspect gunfire.

The boulevard was lined with spectators enjoying that foolish marvel of autumn anachronism, a homecoming parade. Everett could not pause to enjoy the brassy polychrome of assembled high school bands which high-stepped, a bit wearily by now, between wheeled floats. He focused instead on the newsmen. One, a bulky Portacam slung over his back, clambered atop a marquee for a better view. Two others from competing stations took up positions nearer the intersection, almost a

block from Everett. The comforting mass of a stone pillar drew Maury Everett into its shadow. He could see a thousand carefree people laughing, pointing, children darting at stray float decorations, cheering the discordances in the music of these devoted amateurs. Was the tip a false alarm? If not, Everett thought, this happy ambiance might be shattered within minutes. And he, one of the famed FCC Seven Dwarfs, was powerless.

Watching nubile majorettes cavort despite a chill breeze on naked thighs, Maurice Everett faced his personal dilemma for the hundredth time since his appointment. Newsmen dubbed their solution 'disinvolvement'. You have a job and you assume its risks. If you are government, you stay in your bureau and off the toes of other bureaucrats. If you are business, and most explicitly media newsgathering, you rise or fall chiefly on informal contacts and you do not interfere with news. You do not divulge sources for two reasons. The legal reason is backed by the Supreme Court, and the selfish reason is that fingering a contact is professional suicide. If Everett somehow interrupted the impending show after its careful leakage to TV newsmen by some unknown malcontent, his sources would evaporate instantly, permanently. And his primary utility lay in knowing the actual nuts and bolts of ENG, newsgathering by compact electronic gear. Freedom of reportage, even when irresponsible, was a fundamental function of media. Theorists called it surveillance: Maurice Everett called it hellish.

The Portacam man had shifted position to a

second-landing fire escape next to the synagogue. A thorough pro, he was taking shots of the parade so that whatever happened, some sort of story might be salvaged. Everett saw that all the floats featured the same general theme: athletics. Lumbering beyond him was a float honoring the 1980 Olympics winners, a crudely animated statue labeled 'Uri' waving three gold medals. That would be Yossuf Uri, Israel's surprise middle-distance winner. The hulking mannikin beside it represented the Soviet weights man, whose heart had later failed under the demands placed upon it by too many kilos of steroid-induced muscle tissue.

The casual connection of death with the display goaded Everett's mind toward a causal inference, but he froze for too many seconds. A synagogue on the corner, an Israeli hero approaching it, and a vague tipoff by a terrorist. No matter how little the newsmen knew, Maurice Everett clawed his way to a terrible conclusion.

Later, he could regain an uneasy sleep whenever he awoke streaming with the perspiration of guilt; for he had vaulted the horns of his dilemma. "Stop," he bawled, and knew his voice was hopelessly lost in the general clamor. Everett sprinted between bystanders, knocked a beldame sprawling, caromed into the side of another float. He was still on his feet, still shouting for attention, when the great torso of Yossuf Uri came abreast of the synagogue and disappeared in a blinding flash.



How Jewish can you get? The stable manager fingered the crisp twenty-dollar bill, smiling down at the signature. "I've saddled up a perty spirited mare, Mr. Rabbinowitz," he said, taking in the wistful smile, the olive skin, the dark hypnotic eyes. "Sure that's what you want?"

"Precisely," the little man pronounced his favorite word, and paced out to the corral. He mounted the mare quickly, gracefully, and cantered her out along the rim of the arroyo. The stableman watched him, puzzled, certain that he had seen Rabbinowitz before. Suddenly, as the figure dipped below his horizon in the afternoon sun, the stableman laughed. Meticulous silken dress and manner made the illusion even better, a youthful cosmetic version of a man more character than actor. "George Raft," he murmured, satisfied.

The mare was no filly, but she had Arabian lines. The rider held her at a gallop, imagining that he was in Iraq and not California. He savored the earthy scents and rhythms of this, a small pleasure he could justify in terms of security. No one, he felt, would bug a bridle trail. Presently he came in view of San Jose rooftops and at that moment — precisely — knew that he was being watched.

He made an elaborate show of patting the mare's neck, leaning first to one side and then the other, scanning — without seeming to — every mass of shrub cover within reasonable pistol-shot. Nothing. His heels pressured the mare. She was already plunging ahead when he heard the girl cry out behind him. He had passed her before sensing

her? Most disturbing.

He wheeled the mare and returned, erasing his frownlines for the girl. She was clapping now, a jet-haired comely thing. "Ayyy, que guapo," she laughed aloud, showing a pink tongue between dazzling teeth. The gold cross at her throat, the peasant blouse: a latina.

He misjudged her in two ways: "You like the horse?"

"The combination," she answered, growing more serious. Her hands were clearly in sight, fingernails trimmed close, and he did not see how she could hide a significant weapon while showing so much youthful flesh. But still, — . Now she stroked the mare's nose, looking up at him. He liked that. "Like music," she said, and waited.

The formula should not have surprised him so. "Music by Sedaka?"

"Imsh'Allah," she said. How convenient that a popular composer's name should also, in several related tongues, mean gift. Well, this one would give.

He complimented her on the deception, dismounting, walking with her to a tree-shaded declivity. The mare tethered, they sat. "Curious," he began, "how my appetites are whetted by a job well done." They spoke English and then Arabic, softly, warmly, and when he remounted it was not on the mare. Presently they drew apart.

The girl combed her hair with impatient fingers. "You have seen videotapes of the morning's work?"

"Very early morning," he yawned. "I nearly



missed my flight to San Jose. But no, I only heard a bulletin. Did we get suitable coverage?"

She nodded gravely. "Hakim will be pleased."

"Of that, I am certain." Their great bituminous eyes locked for a moment before, toying with her, he continued. "But Hakim must have a media center. You are prepared?"

"Prepared? When I hailed you," she riposted, "did you or did you not think I was a local chicana?"

Echoes of repugnance clashed like scimitars

behind his quiet words. "You are clever, you are nubile. I speak of greater things than—" and paused after using a grossly sexist Bedouin term for their recent communion. He saw her corneas expand. Pleasure or pain? "I must know whether you have the site, the men, and the equipment I required."

"I cannot say. My instructions are to provide only for the leader himself. He may not arrive. Or he may." She shrugged.

"You are clever. But you are prepared for Hakim Arif?"

She said simply, "We are Fat'ah."

"And who am I?" He removed his left small finger at the last joint, replaced the prosthetic tip while she regained her composure. "I signed your instructions, 'Rabbinowitz'."

"I — sire, you are Hakim Arif," she murmured, seeming to grow smaller.

"So I am. And angry at continued small talk, and impatient for my media. We have another demonstration to plan, depending on the results we see from today's work."

She quickly explained the route to the site she had prepared, naming each landmark three times. He did not remind her of his long familiarity with travel in the United States, but listened with critical approval. It was best to arrive after sunset, she said, which also gave her time to alert the others.

"Two of the three knew you before," she added, and named them. The third had been recruited in Damascus after Hakim Arif's last sojourn there, but Arif had read impressive reports.

"They will serve," he said, rising to collect the somnolent mare some distance away. He flung over his shoulder, "Better perhaps than a woman who deflects my questions." She could not see him smile. He turned the mare and trotted her back to the girl. Again he stared down from a commanding height, stern, refractory: the visage of Fat'ah. "Soon, then," he said, eyeing the sun.

"Sire," she stammered. Her body was controlled; only her voice trembled. "I did not know you. Your face is known to few in Fat'ah."

"Or out of it, as Allah is merciful," he rejoined. "Perhaps I shall be merciful too."

"If God wills," she said in Arabic.

"Or perhaps —" he waited until she met his eyes again, "I shall beat you."

"Perhaps you will," she said, not flinching.

Hakim Arif flogged the mare mercilessly up the trail, enjoying the experience, enjoying the memory of the girl's eyes. They had dilated again at his threat. Under a westering sun he sped back to the stable. He was thinking: spawn of pain. We Fat'ah are the children of El Aurans after all...

Two hours later he found the Fat'ah site, temporary as it must be but better situated than he expected. The bungalow commanded a clear view of the San Jose skyline and, on three sides, open pastures beyond carbine range. On the fourth side a swath of scrub oak followed a brook so near the house that he could almost leap from its porch into thick cover. Two men patrolled the greenery, protecting Hakim Arif's escape route. Hakim was pleased. He let his distant smiles and nods say so.

Let those idiots in the PLO show all the ersatz egalitarianism they liked: Fat'ah, born of Fat'h, born of Al Fat'h, born of injustice, was effective because he, Hakim Arif, was so.

But despite himself: "Ah," he breathed jubilantly, surveying the media center the girl had assembled. Four small TV sets half-encircled a desk which also faced an expanse of window. Four multiband radios were ranged to one side. All sets had earplugs. Three telephones were within reach. Note pads, blank card files, colored pens, a typewriter, a minivid recorder and two audio cassette machines filled most of the working space. The squat table underfoot was almost hidden by stacks of directories; Bay Area numbers, Los Angeles numbers, Washington numbers precisely as he had specified. Hakim knew the danger of heavy dependence on help supplied by telephone companies. There were ways to trace one from his patterns of inquiry. Unless, of course, one mastered the system.

The girl stood near, gnawing a full underlip, watching him assess the media center. "Rashid and Moh'med," he rapped suddenly. "Are they prepared to spend the night as pickets?"

"Each after his way," she murmured.

"And the husky one, the Panamanian?"

"En route to Santa Cruz. A powered parafoil requires skill. He knows his work; when he secures telephones he will call." She hesitated, then went on, "Yet he does not know how to address you in person." Her inflection said that she shared the man's concern.

The Fat'ah leader had not risen this far by allowing cynicism to show in his voice. "Do we fight for democracy? Is my name Hakim? Then Hakim it is!"

He began to play with his new equipment, not waiting for the latino's call. It was nearly an hour before the news shows, but the girl flicked a finger toward the minivid. He fumbled it into operation and saw that she had edited earlier newscasts into a videotape festival of the Pueblo horror. Hakim Arif settled back into a chair, notepad ready, and watched his favorite show.

Like a dry bearing in his head, a thin pure tone pierced Everett's awareness. "When will I quit hearing that whistle," he demanded.

The white smock shrugged. "It goes with the injury," the doctor replied. "With luck, another day or so. No, don't try to sit up, you'll disturb the tubes. Follow orders and you'll be up in a few days, Mr. Everett. You're a big healthy animal; give your system a chance."

Everett glanced out the window of the Denver hospital. The fine cloudless day was lost to him, and he to the Rockies. "Hell of a day to be down."

"But a very good day to be alive," the doctor insisted. "Eleven others weren't so lucky, including a whole handful of TV people. You have no idea what an outcry the networks are making over those five particular fatalities."

Thanks to the drugs, Everett did not feel the bruised kidney, hairline fracture, and other modest rearrangements of his middle-aged anatomy. During his thirty-six hours of coma, the Denver people had done very well by him. But there were things they could not do. Curbing impatience he said, "Let's assume I stay put, don't hassle my nurse, and take lunch in approved fashion," glancing at the intravenous feeding apparatus.

The surgeon folded his arms. "If," he prompted.

"If I can trade the nurse for a staff member in here to —"

"Contraindicated. We're trying to excite regrowth around that flap torn in your tympanum, Mr. Everett. At your age, a blown eardrum is tough to repair. The nurse stays, the FCC goes."

"My left ear's okay, though. And even a felon gets one phone call."

After a judicious pause: "You've got it." He spoke to the nurse for a moment, stopped with his hand on the door. "We're starting you on solid foods, provided you make that one call and no more. We can haggle too. Agreed?"

"Agreed." Maury Everett watched the door swing shut, thinking of channels. FCC staff to network honchos? A mutual friend? Both too slow, and always loss of fidelity when the message was indirect. The hell with it. "Nurse, I want you to call NBN Hollywood and get one man on the line. I want nobody else, I want him with all possible dispatch, and it might help if you tell him Commissioner Everett is ready to lay the tush of terrorism."

She waited starchily, receiver in hand. "You're to avoid excitement. Is this an obscene call?"

"Everybody's a comedian," he grunted. "But the

one I want is Charlie George."

Everett never knew exactly when the whistle died in his cranium. It was gone when he donned street clothes five days later, and that was enough. He was shaky, and wore an earplug on the right side, but he was functioning again. A staff member packed his bag because there was no wife to do it, and brought the taxi because he wasn't going home. The office would simply have to improvise until he had recuperated in Palm Springs — a tender negotiation with militant medics, based on his promise to relax with friends at the California resort city. He did not tell them it would be his first visit, nor that he had met only one of those friends.

Everett did not feel the Boeing clear the runway, so deep was he into a sheaf of clippings collated by his staff. A dozen dissident groups claimed so-called credit for the Pueblo blast, each carefully outlining its reasons, each hopeful that its motive would be touted. As usual, the commissioner noted with a shake of the massive head, our media system accomodated them all.

Only one group was armed with guilty knowledge: Fat'ah, led by the wraithlike Iraqi, Hakim Arif. Shortly after the blast, a United Press International office took a singular call from Pueblo, Colorado. It spoke in softly accented English of a microwave transmitter hidden in a tennis ball on a synagogue roof, and of galvanized nails embedded in the explosive. These details were easily checked by UPI. They were chillingly authentic. The caller went on to demand that Fat'ah, the only true believers in Palestinian justice, be given a base of

operations for its glorious fight against Jewish tyranny. Ousted from Jordan, then ostensibly from Syria, Fat'ah was simply too militant even for its friends. It had nowhere to go. It chose, therefore, to go to the American people. Its channel of choice was a hideous explosion which left nearly a dozen dead and three dozen injured, half a world away from its avowed enemy.

When the caller began to repeat his spiel, police were already tracing the call. The message was on its fourth rerun when a breathless assault team stormed a Pueblo motel room. Not quite abandoned, the room contained a modified telephone answering device which, upon receiving a coded incoming call, had made its own prearranged call with an endless tape cartridge. The device was quite cunning: when an officer disgustedly jerked the telephone receiver away, it blew his arm off.

According to the Newsweek bio, Fat'ah's leader was a meticulous planner. When Hakim Arif was twelve, U.S. and Israeli agencies had only recently aided Iran in designing its secret police organ, SAVAK. SAVAK was still naive and Hakim already subtle when, during a visit to Iran by the youth and his father, security elements paid a lethal call on the elder Arif. The boy evaporated at the first hint of trouble, taking with him most of the emeralds his father had earmarked for bribes in Iran. SAVAK knew a good joke when it was played on them, and praised the boy's foresight. They would have preferred their praise to be posthumous; in the Middle East, drollery tends to be obscure.

Hakim took his secondary schooling in English-speaking private academies under the benevolent gaze of relatives in Syria, who never did discover where the jewels were. He also came under sporadic crossfires between Arab guerrillas and their Israeli counterparts, and knew where his sympathies lay. The magazine hinted that young Arif may have taken additional coursework in a school of socialist persuasion near Leningrad. How he got into an Ivy League school was anybody's guess, but a thumbnail-sized emerald was one of the better suppositions.

Trained in finance, media, and pragmatism, Hakim Arif again disappeared into the Near East — but not before leaving indelible memories with a few acquaintances. He quoted the Koran and T. E. Lawrence. He was not exactly averse to carrying large amounts of cash on his person. He won a ridiculously small wager by chopping off the end of a finger. And he was preternaturally shy of cameras.

Arif and Fat'ah were mutually magnetized by desire and bitterness, but not even Interpol knew how Arif came to lead a guerrilla band who rarely saw their leader. Thwarted by security forces in Turkey, England, Syria, and Jordan, Fat'ah was evidently fingering the tassels at the end of its tether. Perhaps Arif had sold his last jewel; the fact was clear that the goals of Fat'ah, reachable by sufficient injections of cash into the proper systems, were elusive.

Everett paused in his reading to gaze wistfully at California's mighty Sierra range that stretched

away below the Boeing. With the dusting of early snow on sawtooth massifs, it looked as cold and hard down there as the heart of Hakim Arif. What sort of egotist did it take to shorten his pinkie on an absurd wager, yet avoid photographers? A very special one, to say the least. Everett resumed reading.

The conservative Los Angeles *Times* devoted much space to a strained parallel between law enforcement agencies and Keystone Kops. The smash hit of the new TV season was a Saturday night talk show in which a battery of NBN hosts deigned to speak, live, only to callers who were already in the news. Soon after midnight on the Saturday of the Pueblo disaster, a caller identified himself as Hakim Arif. He demanded instant air time. A reigning cinema queen was discussing oral sex at 12:17:25, and found herself staring into a dead phone at 12:17:30. Arif was speaking.

Incredibly, the Iraqi responded to questions; prerecording was out of the question. While Arif launched into the plight of Palestinian Arabs and the need for funding to continue the heroic struggle, network officials feverishly collaborated with police, the FBI, and the telephone company. Arif was obviously watching the show, to judge by his critique of one host's silent mugging.

Arif used no terms objectionable enough to require bleeping; he merely promised to repeat the Pueblo entertainment in larger and larger gatherings until, in its vast wisdom and power, the United States of America found a haven for Fat'ah. And oh, yes, there was one condition: the country

of the haven must adjoin Israel.

While voiceprint experts established the identical patterns of the Pueblo and NBN show voices, a co-host asked if Arif realized that he was asking for World War Three. Arif, chuckling, replied that he trusted the superpowers to avoid over-response to Israeli banditry. As Arif chuckled, a Lockheed vehicle lifted vertically from Moffett Field in California for nearby Santa Cruz. Its hushed rotors carried four case-hardened gentlemen over the coast range in minutes to a parking lot two hundred yards from the Santa Cruz telephone booth which comprised one end of the telephone connection. Police cordoned the area and awaited the fight.

There was no fight. There was only another clever device in the booth, relaying the conversation by radio. Its sensors noted the approach of the bomb squad to the booth with the 'out of order' sign, and suddenly there was no telephone, no device, and no booth; there was only concussion. The *Times* surmised that Arif could have been within thirty miles of the booth. No one, including Arif, knew that the Lockheed assault craft had passed directly over his bungalow in San Jose.

Arif's next call passed through another booth in Capitola, near Santa Cruz, to CBS. He was in good spirits. Government agencies were in overdrive. No one was in a position to corral even one arm of Fat'ah and when Arif was good and ready, he closed down his media center. By the time his bungalow had been discovered, Arif had a two-day start. That is, said the private report compiled for Everett, if it had been Arif. Fingerprint plants were

common gambits in disinformation games. The Iraqi's MO varied, but he always knew how to use available channels, including the illegal importation of some of his devices from sources among the Quebecois. There was more, and Everett forced himself to read it. Behind the old-fashioned reading glasses, his eyes ached. Presently he closed them and tried to ignore the faintly resurgent whistle in his head.

Two flights and a limousine later, Maurice Everett declined help with his suitcase and carried its reassuring bulk in Palm Springs heat toward a vacant lot. At least it looked vacant, until he strode through a slot in the sloping grassy berm and realized that this comedian knew how to use money.

The berm surrounded a sunken terrace open to the sun. Around the terrace and below ground level lay the translucent walls of Charlie George's hideaway. It reminded Everett of a buried doughnut, its hole a glass-faced atrium yawning into the sky, slanted solar panels more attraction than excrescence. It was thoroughly unlike the monuments erected nearby: logical, insulated, understated. Already, Everett liked Charlie George better for making sense even when he was not compelled to.

The commissioner was nonplused for an instant by the man who met him at the door like a sodbuster's valet. Denims tucked into beflapped, rundown boots; suspenders over an ancient cotton work shirt; a stubble of beard. Yet there was no mistaking the loosejointed frame or the shock of corntassel hair over bushy brows, familiar to anyone who watched prime time. Beneath the strong nose was a mouth legendary for its mobility, from slackjawed idiocy to prudish scorn. Everett realized with a start that it was speaking.

"You wanted it informal," said Charlie George, and ushered Everett to a guest room.

They talked easily while Everett changed into his scruffies. "I haven't sounded out the rest of the Commission," Everett admitted, wincing as he adjusted his pullover. "McConnell's a reasonable sort, though, and I'll lay it out for him so he'll know you're serious about separating TV from terrorism. These panel talks with the AP and UPI sure haven't excited him — or me. I like your scenario better."

The comedian kept his eyes sociably averted as Everett donned soft leather trousers. "We've been batting out details for an hour."

"Who's we?"

Charlie leaned his head toward the window facing the atrium. "No net veepees, just a couple of pivotal people I told you about." He led Everett through a kitchen saturated with musks of tortilla and taco sauce, into sunlight toward a buzz of voices in a hidden corner of the atrium.

They found two men seated, dividing their attention between sketch pads and bottles of Mexican beer. The smaller one made a point of rising; the taller, a show of not rising. "This is our friend in the feds," Charlie placed a gentle hand on Everett's shoulder. "Maury Everett: Rhone Althouse here, and Dahl D'Este there."

Althouse wore faded jeans and Gucci loafers.

Only the footgear and a stunning Hopi necklace belied his undergraduate appearance. He was closely-knit and tanned, and his handshake had the solidity of a park statue. It was hard to believe that this pup was a media theorist who had deserted academia for a meteroric rise in gag writing. "I hope you guys move quicker separately than you do together," he said to Everett, with the barest suggestion of a wink.

Everett smiled at this threadbare gibe. FCC decisions never came quickly enough for the industry it regulated. "Don't bet on it," he replied. "I'm still pretty rickety today."

D'Este, doodling furiously on a mammoth sketch pad, stopped to gaze at Everett with real interest. "I forgot," he said in a caramel baritone, "you were the star of the Pueblo thing. Perhaps you'll tell me about it." His tone implied, some other time, just we two.

Everett accepted a Moctezuma from Charlie George and eased his broad back onto a lawn chair. "All I know, literally, is what I've read since I woke up. I hope to learn a lot more from you three, in hopes it doesn't happen again."

"Ah," said D'Este, beaming. His elegant slender height was covered by a one-piece burgundy velour jumpsuit which, Everett hazarded, might have been tailored expressly for this event. Dahl D'Este affected tight dark curls, his tan was by Max Factor. He hugged the sketch pad to him and stood to claim his audience. "Well then, the story thus far —" He paused as though for their host's permission and seemed gratified. "Charlie has this —wild idea that he can ring in a new era of

comedy. Instead of avoiding the issue of terrorism in comedy, and believe me luv, we do, he wants to create a fabulous character."

"A whole raft of 'em," the comedian put in. Everett nodded; he knew the general idea but would not rob D'Este of his moment.

"Charlie has seduced the best talents he could find to plan graphics, that's me, and situations, that's Rhone. Of course, that's ironic, because Charlie is NBN, Rhone is an ABC captive, and for the nonce I'm doing CBS sets. I don't know how Charlie beguiled his old enfant terrible," he smirked at Althouse, "to cross traditional lines in this madness." Everett, who knew it had been the other way around, kept silent. "As for me, I couldn't resist the challenge."

"Or the retainer," Althouse drawled in a murmur designed to carry.

The splendid D'Este ignored him. "While Charlie and Rhone brainstormed their little skits, I've been inventing Charlie's logo for the new character. A cartoon of the sort of loser who — how did you put it, Rhone?"

"Rates no respect," the younger man supplied. "If he tried dial-a-prayer he'd get three minutes of raucous laughter."

"Well, my logo will peer out at the world from Charlie's backdrop like a malediction. I really ought to sign it. Behold, a very proper Charlie!" With this fanfare, Dahl D'Este spun the sketch pad around and awaited reactions.

Everett was thankful that he didn't need to surrogate approval. The sketch was, somehow, the

face of Charlie George as an enraged Goya might have seen him. Yet the surface similarity was unimportant. Splashed across the paper in hard sunlight was a stylized symbol of repellence. The head and shoulders of a vicious imbecile faced them as it would glare out at untold millions of viewers. The face was vacuously grinning, and gripped a fused stick of dynamite in its teeth. The fuze was too short, and it was lit. In redundant arrogance, just exactly out of scale as though reaching toward the viewer, was a time-dishonored hand gesture: the stink-finger salute.

Laughter welled up from the group and geysered. Althouse raised his beer in obeisance.

"Ah — about the monodigital scorn," Charlie wavered, darting a look at Everett.

Althouse held his hands open, cradling an invisible medicine ball. "C'mon, Charlie, it's perfect." He too risked a sidelong glance at the FCC man. "And for its public use, our precedent was a recent vice president."

D'Este: "Of which net?"

"Of the United bloody States," cried Althouse in mock exasperation. "Yes it's naughty, and yes it's safe!"

"I'm inclined to agree," said Everett, "if it's done by a questionable character for a crucial effect."

D'Este leaned the sketch against the solar panels. "A proper Charlie," he repeated, then looked up quickly. "Did you know that British slang for a total loser is a veddy propah Chahlie?"

"Poor Dahl," sighed Althouse. "Did you know we picked the name 'Charlie George' in 1975 because semantic differential surveys told me they were the outstanding loser names in the English-speaking world? Bertie is good, Ollie is better; but Charlie George is the people's choice!"

"Thanks for nothing," Everett chortled. "I always wondered why citizens band jargon for the FCC was 'uncle Charlie'." Althouse affected surprise, but not chagrin.

Charlie looked out into the middle-distance of his past. "I wasn't too keen to change my name from Byron Krause to Charlie George," he mused, "until I thought about that poem."

Althouse saw curiosity in Everett's face and broke in. "I tacked it up on a soundstage bulletin board, and Charlie saw people react, and bingo: Charlie George." He squinted into the sun, then recited.

Heroes all have lovely names, Like Lance, or Mantz, or Vance, or James;

But authors elevate my gorge By naming losers Charles and George.

There's no suspense on the late, late show; Big deal: the bad guy's Chas., or Geo.

Goof-offs, goons, schliemiels and schmucks: Georgies, every one — or Chucks.

Since the days of Big Jim Farley, Fiction's fiends have been George and Charlie;

No wonder heroes all seem crass To any guy named Geo., or Chas. I think I'll change my name, by golly! My last name's George. The nickname's Cholly.

Everett grinned, but: "Obviously some of your earliest work," D'Este purred.

"Point is, Dahl, it fitted the image I was after. And it's been good to me," the comedian insisted. "Your logo is great, by the way; it is a proper charlie." He paused. "I want you to release it to the public domain."

The ensuing moment held a silence so deep, Everett's ear hurt. D'Este broke it with a strangled, "Just—give it away? Like some amateur? No—" and there was horror in his husked, "—residuals?"

"Oh, I'll pay you a great lump. But I want the thing available with no restrictions, for any medium anywhere, anytime. PBS. Mad Magazine. The National Enquirer maybe."

"Madness. Madness," D'Este said again, aghast, his normal hyperbole unequal to this task. He reached for a beer.

When Rhone Althouse spoke again it was in almost fatherly tones. "I'm afraid you haven't been listening very closely, Dahl. It's no accident that Charlie and I are planning to spring this idea in different networks. Charlie's the rudder of several committees where the power is in some veepee. I have a little leverage in ABC and with any positive audience response we can slowly escalate the trend. If there's no problem in, ah, certain quarters." He raised an eyebrow toward Maurice Everett.

Everett traced a pattern on the label of his beer bottle, thinking aloud. "There shouldn't be any serious objection from us," he began. "It's in the public interest to pit media against terrorism—and if you find yourselves in jeopardy it won't be from the Commission." He could not keep an edge from his voice. "Personally I think you've waited too goddam long."

"They nearly bagged an FCC man, you mean," Charlie prodded.

"No. Yes! That too, I can't deny personal feelings; but I was thinking of ENG men from three networks, casually hashed like ants under a heel. That's why network execs care. That's why your iron is hot. But so far I don't hear evidence of any broad scope in your plans."

The comedian bit off an angry reply and Everett realized, too late, that he teetered on the brink of a lecture that none of them needed. This group represented, not problem, but solution.

Althouse rubbed his jaw to hide a twitch in it. "You came in late," he said softly. "You didn't hear us planning to expand this idea into news and commentary. If you've ever tried to apply a little torque to a network commentator, you know what howls of censorship sound like. Morning news and editorializing are more folksy, a good place to start."

"Start what? Boil it down to essentials."

"It boils down to two points: we turn every act of terrorism into a joke at the terrorist's expense; and we absolutely must refuse, ever again, to do a straight report on their motives." Everett sat rigidly upright at the last phrase, ignoring the pain in his side. "Good God, Althouse, that really is censorship!"

"De facto, yes; I won't duck that one. But legally it's a case of each network freely choosing to go along with a policy in public interest. Wartime restrictions beyond what the government demands are a precedent, if we need one. And the National Association of Broadcasters could publish guidelines for independent stations. The NAB is an ideal go-between."

The issue lay open between them now like a doubly discovered chess game. Everett saw in Althouse a formidable player who had studied his moves and his opponent. "It's unworkable," Everett said. "What'll you do when some Quebec separatist gang tortures a prime minister? Sit on the news?"

"Maybe not, if it's that big a story. We can give coverage to the event, sympathetic to the victim—but we must deride the gang as proper charlies, and refuse to advertise their motives."

"While you let newspapers scoop you on those details?"

"Probably — until they get an attack of conscience."

Everett's snort implied the extravagance of that notion. "A couple of Southern Cal people did indepth surveys that suggest there's no 'probably' to it. Editors print assassination attempts as frontpage stuff even if they know it brings out more assassins. They admit it."

"Hey; the Allen-Piland study," Althouse

breathed, new respect in his face. "You get around."

"I've been known to read hard research," Everett replied.

"And newsmen have been known to modify their ethics," Charlie George said. "If this becomes censorship, Maury, it'll be entirely self-imposed."

"I'm sure this sounds like an odd stance for me to take," Everett smiled sadly, "but I tend to balk at social control. Hell, Althouse, you've studied Shramm and his people."

"Right. And I remember something you don't, it seems. Most media philosophers claim that, between simple-minded total liberty to slander and hard-nosed total control over the message, there's something we always move toward when we confront a common enemy. It's called Social Responsibility Theory. We used it to advantage in 1917 and 1942. It's time we used it again."

That the issue would arise in the Commission seemed certain. It was equally certain that Everett must select a principle to override others sooner or later. He had a vivid flash of recollection: a willowy girl with gooseflesh and a baton, bravely smiling after an hour of parading, ten seconds before her obliteration. "I don't like it," he said slowly, measuring the words, "but I don't like wars on children either. You make God-damned sure this social responsibility doesn't go beyond the terrorism thing." His promise, and its limitation, were implicit.

"I don't like it either," D'Este spat. "I seem to be part of a media conspiracy I never asked for. Charlie, you didn't ask me here just for graphics. What, then?"

"Commitment," Charlie said evenly.

"I'm working on CBS specials! How I'm expected to collar newsmen, writers, and producers is beyond me, regular programing is out of my line."

"Nothing in television is out of your line," Rhone Althouse began, laying stress on each word. As he proceeded, Everett noted the upswing in tempo, the appeal to D'Este's vanity, the loaded phrases, and he was glad Althouse did not write speeches for politicians. "You're independent; you work for all the nets, you know everybody in key committees all over the industry, and when you lift an idea you pick a winner. Charlie can sweet-talk NBN news into using that logo when there's a place for it — we think — while he develops his satire.

"You know the old dictum in showbiz: if it succeeds, beat it to death. I'll start working the same shtick in ABC comedy — Christ, I'm doing three shows! — and I can drop the hint that this lovely logo is public domain. With any luck, the idea can sweep NBN and ABC both. News, commentary, comedy.

"And you, Dahl? Will CBS keep out of the fun for some asinine inscrutable reason? Or will one of its most active —" he paused, the word homosexuals hanging inaudibly in the air like an echo without an antecedent," — free spirits, champion the idea from the inside? That's really the only question, Dahl. Not whether you can do it, but whether you will."

"Intending support, Everett murmured, "It'll take guts, in a milieu that hasn't shown many," and immediately wished he hadn't.

"No one corporation owns me, Mr. E," D'Este flung the words like ice cubes. "I don't have to stroke your armor."

"That's not what I meant. None of you have considered asking the next question," Everett responded.

Charlie George misunderstood, too. "Ask yourself if it's worth some trouble to keep this industry from being a flack for maniacs, Dahl. If we don't start soon, ask yourself if you'd like to see the FCC license networks themselves when Congress considers tighter government control."

An even longer silence. "Madness," D'Este said at last, "but in this crazy business, — I have misgivings, but I'll go along." He folded his arms challengingly and stared at Everett. "Licensing? Is that the sword you were brandishing, the next question you meant?"

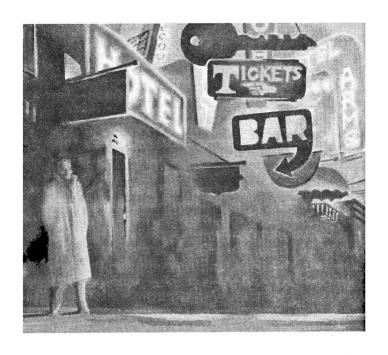
Everett swigged his beer, then set it down. His smile was bleak. "That never crossed my mind; I think Charlie overstated. Here's what I meant: if this idea takes hold, the idea men could be spotlighted, and that means to people like Hakim Arif. I had a brush with their rhetoric, and they weren't even after me. See what it brought me." He peeled his shirt up to reveal the tape that bound the bandage to his right side. Angry stripes, the paths of debris in human flesh, marked his belly and pectorals beyond the tape.

He hauled the fabric down, regarded the so-

bered media men. "We have a lot of questions to thrash out, but none of you can afford to ignore the next one: if you take them all on — Palestinians, IRA, Chileans, Japanese extremists, — what are the chances they'll come after you personally?" For once, he noted with satisfaction, Rhone Althouse sat unprepared, openmouthed.

Hakim's feet were light on the steps as he hurried from the bank. The sheer weight of banknotes in his attaché case tugged at his left arm but failed to slow his stride. Fourteen minutes to rendezvous; plenty of time unless he were followed. His quick pace was perfectly normal in metropolitan New York City. He checked his watch again before entering the cafeteria. No one followed or seemed to loiter outside the place. He bought a chocolate bar to tempt, but not to entertain, his empty stomach. Slipping the candy into a pocket of his silk shirt, away from the extended shoulder holster, he thought of the pleasures of self-denial. He salivated for the chocolate. Later he would watch the girl eat it. He surveyed the cafeteria's glass front through reflective sun glasses. Twelve minutes; time to burn. He left by a different exit, moving unobtrusively down the street.

It was sheerest luck that the antique store was placed just so, and boasted a mirror angled just so. Hakim spotted the glance from a stroller to the unmarked sedan, both moving behind him and in his direction. The stroller drifted into another shop. A tall blond man emerged from the sedan, and in a hurry. Hakim's body braced for action.



He continued his brisk pace. Instead of converging on him they had exchanged tails, which meant he was expected to lead them — whoever they were. Federals, probably, judging from the cut of their suits. He tested the notion of the Jewish Defense League, not so farfetched in Manhattan, and felt perspiration leap at his scalp. But their methods were more direct, and the tail he had picked up must have mooched around the bank for days. And that meant inefficiency, which implied government. He cursed the overcoat that



impeded his legs in November cold, then saw the third-rate hotel.

The blond man entered the lobby as Hakim was leaving the stair onto the filthy mezzanine and wasted seconds on two other passages; seconds that saved him. Hakim found the fire exit, burst the cloor seal, and slithered past the metal grating to clrop into the alley. He sprinted for the street, adjusted his breathing again as he slowed to a walk, then turned another corner and risked a peek over his shoulder. The sedan was following with its

lone driver.

Hakim had nine minutes and needed seven. He wanted that rendezvous, not relishing the alternative risks of public transportation to Long Island. Nearing the next corner he noted the lack of pedestrians and made his decision. He broke into a run, turned sharply, ran a few steps, then turned back and melted into a doorway. He did not want the driver to pursue him afoot and knew this to be the next option of his pursuer.

A small girl sat on the stair in his doorway at Hakim's eye level, watching silently as he fumbled in his coat. He flashed her a smile and a wink. The sedan squalled around the corner. Hakim gauged his move to coincide with commitment to the turn, made five leaping paces, and fired as many times. The parabellum rounds pierced glass, cloth, flesh, bone, upholstery, and body panels in that order, each silenced round making no more noise than a great book suddenly closed. The sedan's inertia carried it into a forlornly stripped foreign coupe. Hakim held the sidearm in his coat and retraced his steps, winking again at the little girl just before he shot her. Then he reseated the pistol, careful to keep the hot silencer muzzle away from the expensive shirt.

Seven minutes later Hakim hurried up another alley, squirmed into a delivery van, and nodded at the sturdy Panamanian who lazed behind the wheel in coveralls as the engine idled.

The van's engine was mounted between front seats with an upholstered cover. Bernal Guerrero had built an extension just long enough to accomodate a small Iraqi and the makeshift upholstery would pass casual inspection. Kneeling with the extension cover up, reluctant to relinquish control to the latino, Hakim urged caution. "Drive South first; I was followed." He did not elaborate.

For a time, Guerrero attended strictly to driving. Soon the distant beeps of police vehicles were lost and Hakim directed his driver to the bridge approach. Once over the East River, in heavy traffic, Hakim began to relax but did not stir from his position. Guerrero adjusted the inside rearview. "The funds were on hand, then."

Hakim met his eyes in the mirror. "Was that a question?"

"Deduction, senor. The briefcase seems heavy — and you are smiling."

"A wise man smiles in adversity," Hakim quoted, reloading six rounds into the clip.

"I trust Moh'med was smiling at the last," Guerrero said obliquely. "I liked him."

"Moh'med was a fool. You cannot load down an underpowered aircraft and maneuver it, too."

"A fool, then," Guerrero said. "I agree that a satchel charge would have been simpler."

Hakim's irritation was balanced by the utility of the sinewy Guerrero. The Panamanian's suggestions were good and he did not press them. Yet his conversation always provoked broader answers than Hakim cared to give. "You agree with whom? Have you toured the Statue of Liberty, Guerrero? A satchel charge might disfigure the torch, nothing more. I planned to destroy the thing. Think of the coverage," he breathed, and chuckled.

They were past Queens, halfway to the site in Farmingdale, before Hakim spoke again. "The new funds," he said as if to himself, "will pour into accounts for Fat'ah exactly as long as our coverage is adequate. But our supporters may not enjoy last night's media sport at our expense."

Guerrero nodded, remembering. But to prattle is to reveal, and this time he said nothing. Amateur films had caught Moh'med, his handmade bomb shackles hopelessly jammed, as he veered away from his first pass at the great gray statue, the previous day. The canister weighed nearly three hundred kilos and as it dangled swaying from the little Piper, Moh'med must have known he could neither land, nor long maintain control. To his credit, he had fought the craft into a slow shallow turn and straightened again, kilometers from his target. With any luck he might have completed his run, barely off the surface of the harbor, and crashed directly into the Statue of Liberty. But the new fireboat hovercraft were very quick, faster under these circumstances than the Piper that careened along at all of ninety kilometers an hour.

Hakim sighed. What ignominy, to be downed by a stream of dirty salt water! Still, "The Charlie George show made Moh'med a martyr," he asserted.

"To what? Idiot liberation, they said. And," Guerrero reminded him, "NBN news did not carry the story well. 'A terrorist quenched with a water pistol,' indeed. It is — la palabra, ah, the word?

Provocative."

"As you are," Hakim said shortly. "Let me worry about media, and let the Americans worry about our next demonstration."

"Our next demonstration," Guerrero echoed. It was not quite a question.

"Soon, Guerrero, soon! Be silent." Again Hakim felt moisture at his temples, forcing him to acknowledge a sensation of pressure. Harassment was the guerrilla's tool; when he himself felt harassed, it was best to cancel the operation. But he dared not. Something in Guerrero's attitude, indeed in Hakim's own response to television's smug mockery, said that Hakim Arif must choke that dark laughter under a pall of smoke.

He shifted his cramped legs to sit atop the attaché case as they skirted Mineola. Soon they would roll into the garage at Farmingdale, soon he would bear the case inside with a show of indifference, reviewing the site again to assure its readiness for — for whatever; he did not know what.

Fat'ah must be ready with only four members now, and he could not easily muster more on short notice. The Damascus site and its people would again be secure for a time, now that Hakim could furnish bribes, but Damascus is not Farmingdale, New York and Hakim knew he was improvising. Fat'ah could not afford always to improvise. Nor could it afford to delay vengeance for the Moh'med fiasco.

The double-bind was adversity. Hakim forced himself to smile, thinking of smoke. Of black smoke and of media, and of the girl who would be

warm against him in the chill Long Island night. He vowed to deny himself the third, which made his smile more genuine, and knew that he could now concentrate on the first two.

Rashid and the girl failed to hide their relief at the sight of the money, stacks of twenties and fifties, which Hakim revealed in due time. During supper their eyes kept wandering to the cash until Hakim wordlessly arose and dumped it all back into the case. "Now we will have sweet coffee," he sighed, the girl rising to obey, "and contemplate sweeter revenges. Even today I struck a small blow; the eleven o'clock news may bear fruit." He was gratified to see curiosity in their silent responses.

Hakim did not expect to occupy the ABC lead story, but grew restive as national, then local news passed. Had his escape gone unnoticed, then? It had not, for, "There was an evident postscript, today, to the blundering attempt on the Statue of Liberty," said the anchorlady. "If anyone can make sense of it, perhaps Richard can."

Her co-anchor gazed out at millions, his backdrop a leering idiot that was becoming familiar. He dropped a piece of typescript as if it were defiled and related little more, factually, than the locale and the killing of Hakim's pursuer. He went on: "What places this below the usual level of crime in the Big Apple, according to one source, is that the gunman's description matches that of a Fat'ah charlie, and his victim was a Daoudist, another terrorist. The current guess is that the victim was trying to make friendly contact, and the gunman mistook him for someone who knew too

much." A frosty smile. "Or perhaps that's a charlie's way of hailing a taxi."

Injected by his co-anchor lady: "About the little girl he missed at point-blank range?"

"Maybe he thought she knew too much, too. And compared to these charlies, maybe she does. She's almost five years old."

Hakim used great restraint to continue his televiewing. The girl at his side began with, "But you said, —" until Hakim's hand sliced the air for silence

The weather news endorsed the frigid gusts that scrabbled at the windows, and Hakim's mood was like the wind. He could not have missed the urchin — and his daring coup was against domestic security forces, he was certain. Well, almost certain. Was it even remotely possible that the coxcomb Abu Daoudists had intended —? On the other hand, government sources could have deliberately lied to the newsmen with a release designed to confuse Fat'ah.

The girl ghosted to the kitchenette to prepare fresh sweet coffee which Hakim craved, and subsequently ignored, as he lounged before blank television screens. The art of disinformation was but recently borrowed from the Near East, but the Americans were learning. But if they know I know that Daoud could not know where I am, his thoughts began, and balked with, where am I?

He released a high-pitched giggle and the girl dropped her cup. Hakim angrily erased the rictus from his face and pursued another notion. Daoudists could be behind this, seeking to share the media coverage in their bungling fashion. He, Fat'ah, would need to arrange more talks with his television friends. Not exactly friends, he amended, so much as co-opportunists who could always be relied upon to give accurate and detailed coverage if it were available. Except in wartime, whispered a wisp from a forgotten text. It was unthinkable that American television networks could perceive themselves at war with Fat'ah.

Unthinkable, therefore Hakim thought about it. The same grinning salacious fool was becoming the prominent image behind every news item on terrorism. On competing networks! He thought about it some more. While Fat'ah planned the attack that was to cost Moh'med his life, Ukrainian dissenters had made news by murdering three enemies in the Soviet Secretariat. A scrap of dialogue haunted Hakim from a subsequent skit on the Charlie George Show.

INT. SQUALID BASEMENT NIGHT

CHARLIE wears a Rasputin cloak and villainous mustache, leaning over a rickety table lit by a bent candle. He scowls at CRETINOV, who cleans a blunderbuss with a sagging barrel.

TWO-SHOT CHARLIE AND CRETINOV

CHARLIE

Comrade leader, I say we kidnap everyone who calls us fools!

(bored)

Nyet; where would we keep four billion people?

This established the general tenor of a five-minute lampoon, redolent of impotent fools, on terrorism against the Kremlin. The Ukrainians had enjoyed the sympathy of the United States government. Perhaps they still did, but obviously television moguls thought differently.

When had Hakim last heard a sympathetic rendering of the justice, the demands, the motivations, of a terrorist group? For that matter, he persisted, any factual rendering at all? A harrowing suspicion helped a pattern coalesce in Hakim's mind as he absently reached for his coffee. Every datum he applied seemed to fit an undeclared war that he should have suspected from this medium. A medium upon which Fat'ah was all too dependent; newspapers brought details, but TV brought showers of cash from Fat'ah well-wishers. Had the Americans at last conspired to rob him of his forum, his voice, his cash?

Hakim Arif retrieved his images of smoke and media, this time imagining a greasy black roil erupting from a picture tube. It should be simple enough to test this suspicion. If it proved to be accurate, Hakim vowed, he would bring war to this monster medium.

He sipped the tepid coffee, then realized that he had forbidden it to himself. Rage flung the cup for him, shattering it against a television set that squatted unharmed. The girl's gasp paced Guerrero's reaction, a sidelong roll from his chair from which the latino emerged; a crouching wolverine, his Browning sidearm drawn. Guerrero was not particularly quick, but his hand was steady. In the

silent staring match with the latino, Hakim told himself, he dropped his own eyes first to atone for his rashness.

Hakim stood erect and exhaled deeply from his nose. "We need rest," he said.

"Yes, you do," Guerrero agreed, tucking the automatic away.

Hakim did not pause in his march to the far bedroom. He read the latino's implied criticism, but would absorb it for now. He could not afford to waste Guerrero. Yet.

As long as the National Association of Broadcasters wanted to hold a convention during Thanksgiving holidays, Everett admitted, it was nice to find that Reno was its choice, He wandered among the manufacturers' exhibits in the hotel foyer, grudgingly accepting some responsibility for the presence of so many new security devices. Say what you like about media men, their self-interest is intelligent. Cassette systems shared display space with microwave alarms. One import drew the commissioner's admiration: an outgrowth of an English medical thermovision system, it could display so small a mass of metal as coins in a pocket — unless they were at body heat, no more, no less.

A voice behind him said, "Neat. Any charlie who sneaks his forty-five past that rig will have to carry it as a suppository," and Everett wheeled to face Rhone Althouse.

Everett's delight was real, though brief. "Thank God for somebody I can ask questions of, instead of just answering 'em," he said.

"I heard your speech on porn," was the reply, "and I can't believe you have any answers. Seriously, I did want to — well, uh, actually Charlie George, um." He cocked his head to one side. "The fact is, our Palm Springs meeting has become the worst-kept secret since the Bay of Pigs. Dahl D'Este couldn't sit on such a juicy tidbit for long. For one thing, his lady-love is a gossip columnist."

"It's a little late, but thanks for the warning. Lady? D'Este makes both scenes?"

A one-beat pause. "Yeah, ob and epi — and thanks for the straight line. Charlie G. and I thought you should know that the word would be leaking. It should have a positive effect in the industry," Althouse added quickly. It had the sound of an excuse.

Everett nodded, hands thrust into pockets of his stylishly discomfiting jacket. "Well, you're answering my questions before I ask. I'll have to deny my part in it for the record; but between us, Rhone, I'm willing to let it live as a rumor. The commission is interested in this ethical epidemic, naturally. I've been asked how long you can keep it up." Raised eyebrows invited an answer.

"Hell, it's popular," the writer grinned. "With CBS taking it up, it's a trendy thing—oh," he amended. "You mean the reprisals?"

This time Everett's nod was quick. "Those Fat'ah pismires cost NBN a bundle when the net refused to air that videotape Arif sent them."

"Fortunes of war," Althouse shrugged. "Don't think our own Charlie isn't hurting, even if he doesn't flinch. He's got a piece of several stations, and those transmission towers Fat'ah destroyed didn't do the dividends any good. Insurance tripled."

"Didn't flush out any friendly envoys from the nets to pay anybody off, I suppose."

Althouse squinted in the subdued light. "I think I would've heard if that were in the mill. If that's the crux of your concern — officially, I mean, — I can't answer for the whole industry. Maury, it's become a grass-roots movement, just as I hoped; doesn't have a single spokesman. That's where its strength lies. But it looks to me like a full-scale media war." He hesitated, glanced around them, bit his lip. For the first time, Everett saw something in the writer that was not young, something of the mature hunted animal. "We haven't forgotten those scenarios you laid on us. Do you have — cancel that, I don't want to know. Do you think we should have around-the-clock protection when our names hit the newspapers?"

"Let me put it this way: you and I both know D'Este can put us on the list of endangered species. You think our names are due to hit news stands?"

"I know they are," said Althouse, with a sickly smile that told Everett this was why the writer had flown to Reno: face-to-face admission that Everett could expect the worst. There could be little pleasure in a print-media hero label when it was also a death warrant.

No point in asking how Althouse knew. His pallor said he knew. "Tell Charlie George we are

about to learn what it's like to be a popular politico," Everett remarked, fashioning a cross-hair 'X' with his forefingers. As an effort at lightness, the gesture fell flat. "How long before our oh-so-responsible press fingers us?"

"Tomorrow."

Everett drew a long breath. "Goddam the world's D'Estes, we ought to put out a contract on that guy ourselves. Well, can't say I didn't expect this sooner or later. I intended to stay and gamble 'til Sunday, but somebody just raised the stakes on us and I've decided to find some pressing business elsewhere. Luck, Rhone." He turned and moved away.

Althouse stood and watched the big man, wondering if Everett would hide, wondering if he should disappear himself as D'Este had already done. He took some comfort in Everett's refusal to blame him for the original idea. But the commissioner had known the danger, even while he lent tacit bureaucratic support. D'Este gone to ground, Everett forewarned: better than nothing, yet poor defense against the fury of terrorism which his own scripts had deflected against them all. An unfamiliar itch between his shoulders made Althouse aware that he was standing absolutely still, alone in a hotel, a perfect target. Rhone Althouse walked away quickly. He did not care who noticed that his path was a zigzag.

The news magazines made up in depth what they lacked in immediacy. The article was satisfyingly thorough under its head, "TV: No More Strange Bedfellows?" It began: For weeks, every pundit in the sprawling television medium had matched his favorite terrorism rumor against the rumors in the next studio. The scathing satire on terrorism, newly unleashed and widespread in TV, was said to originate in an oval office. Or, less likely, that it was a propaganda ploy jointly financed by Israel and England. One pollster claimed that the scripts merely reflect what the American viewer wants to see.

The truth, as it filtered from CBS this week, was both likelier and stranger than whodunits. There had been no tugs at domestic political strings and no foreign influence. But in the persons of four highly regarded media men, there was definitely a plot. The top banana, to no one's great surprise, turned out to be NBN's answer to Jacques Tati, the protean Charlie George. Of considerably more interest was the reputed anchorman, anomalous FCC sachem Maurice D. Everett (see box)....

"All bedfellows are strange," murmured Hakim, patting the rump of the girl who slept as he scanned the stack of magazines. He read the four-page article carefully, marking some passages with flow pen, then concentrated on the thumbnail biography of Maurice Everett. The short piece commented on Everett's unpredictability, his sparse personal life, and his penchant for outdoor sport. Hakim did not find these details pleasant; the man could be trouble.

Presently Hakim riffled through other magazines, finding—as he had expected—invaluable information on his enemies. His sullen longing found its focus in names, faces, details which, given time, Hakim could fashion into targets.

Print media made one thing clear: no matter

how successful his coup, the terrorist was still to be treated as a proper charlie. Hakim saw this dictum as a simple clash of wills. If the fait accomplicarried no leverage, one could try the threat. No hollow promise, but one steeped in potency. The sort of threat one could employ when the enemy is isolated, immobilized, and at risk. Hakim wondered which of the four men he would take first and felt a lambent surge of rekindled strength. He turned off the light and nudged the girl. It had not once occurred to the Fat'ah leader that other charlies, less cautious than he, might react with a blinder savagery.

Everett urged his Mini-Cooper up the ice-slick highway out of Golden, Colorado wishing he had accepted the company of a federal agent. He had refused that and a snub-nosed piece in a shoulder holster on the same grounds: they were both confining and might call attention to the user. The car was repainted and relicensed, though, and during his five days of new celebrity his Denver office had intercepted only a lone ceramic letter-bomb. Perhaps he was exaggerating his importance, but he would feel safer spending his weekend at one of the rental cabins outside the little town of Empire. Even do a little winter stalking, who could say?

The three men who could say, kept well to the rear. For a time the driver sweated to keep his BMW in sight of the Mini and settled for occasional glimpses of the tiny vehicle as the terrain permitted. There were few turnouts available after

the new snow, and the further Maurice Everett isolated himself, the better they liked it.

Everett chose the roadhouse on impulse, backing the Mini in to assure easy return. He ordered coffee and began shucking the furlined coat before he realized that he was alone with the counterman. He slapped snow from the front of his winter hat, then saw the dark blue BMW ease off the highway. Everett took his coffee with hands that shook, watching through fogged windows as the sleek sedan began to emulate his parking manners. No, not quite; the BMW blocked his Mini, and only one of the car's three occupants emerged. Three coffees to go, or one commissioner?

Everett saw the raincoated man cradle his long, gaily-wrapped package, speak briefly to his driver; Everett noted the Vermont license plate and used his time wisely. He walked to one end of the roadhouse, far from the windows and counterman, and piled his coat high in the last booth, putting his hat atop it. The coffee steamed in the center of the booth table, untasted bait.

Everett stepped directly across the aisle from his end booth into the men's room, hoping that his circumstantial case was nothing more than that, hoping that the raincoated man would get his coffee and go to Empire, or Georgetown, or hell. He did not close the door or try the light switch.

There was nothing he could see in the gloom that would serve as a weapon and as he settled on the toilet, fully clothed and staring at his coffee three meters away, he felt the toilet seat move. One of its two attachment wingnuts was gone. Gently, silently, Everett set about removing the other. Early or late, he reasoned, the audacious bird gets the worm.

He heard the front door of the roadhouse sigh shut, heard a mumbled exchange — one voice had an odd lilt to it — at the counter ten meters from him, heard the counterman open a refrigerator. So Mr. Raincoat wanted more than coffee? Cheeseburgers, or diversion?

Under the clank and scrape of short-order cookery, Everett heard soft footfalls. He stood, breathing quickly and lightly through his mouth, gripping the toilet lid with no earthly thought of what he was doing with it. He felt like a fool: oh, hello, I was just leaving, sorry about the lid, it didn't fit me anyhow... and then Mr. Raincoat stepped to Everett's booth as if offering his package, one hand thrust into the false end of the package, and he must have seen that he was confronting an uninhabited hat and coat just as Everett swung the lid, edge on, against the base of his skull from behind and to one side.

Everett was appalled at himself for an instant. He had drygulched a harmless holiday drunk, he thought, as the man toppled soundlessly onto Everett's coat. The contents of the package slid backward onto the floor then, and Everett reflected that harmless drunks do not usually carry sawed-off automatic shotguns in Christmas packages with false ends.

Everett's snowshoes were in the Mini and without them he would be stupid to run out the back way. The counterman, incredibly, was busy incinerating three steaks and had seen nothing. Everett wrote the BMW license number on his table with catsup, though he could have used blood, and wrestled the raincoat from the unconscious man.

The only way out was past the BMW. He hoped it would flee at his first warning shot, then realized that the occupants were waiting to hear that shot. How would Mr. Raincoat exit? Backward, no doubt, holding the shotgun on the counterman. Everett's trousers were the wrong shade of gray but he could not afford to dwell on that.

He slid into the raincoat which pinched at the



armpits, turned its collar up, retrieved the shotgun and checked the safety. Gripped in glacial calm, he reminded himself of Pueblo and quashed his fear with one thought: my turn! Everett had time to pity the counterman, but not to question his own sanity, as he moved past windows near the front door and turned his back on it.

The blast tore a fist-sized hole in the floor and sent a lance of pain through Everett's bad ear. The counterman ran without hesitation out the rear door into a snowdrift, screaming, and Everett backed out the front door fast. The BMW engine blipped lustily and a voice called, "In, in, ye fookin' twit," and Everett spun to see a man holding a rear door open with one hand, a machine pistol forgotten in the other. Everett did not forget the weapon and aimed for it. He missed, but blew out the windshield from the inside

The driver accelerated to the highway, the left rear door of the car flapping open, and Everett fired twice more. The first shot sent pellets caroming off the inside of the sedan and the second was a clean miss. Everett flopped hard into the snow so that he only heard, but could not see, the shiny BMW slide off the highway. It was a long vertical roll to the river but neither of the occupants minded the cold water, being dead at the time.

Everett burst into the roadhouse to find that his first victim was still unconscious, and realized that he had things to set right. The counterman must be tamed, the telephone must be used; but first things first. He needed the toilet lid for a mundane purpose, and right now.

The NBN electrician learned from an honest bartender in Burbank that his wallet had turned up minus cash, but with papers intact. He verified that his licenses and the new NBN security pass were accounted for and vowed to forget it.

NBN officials assured Charlie George that the fenced backlot in the San Fernando Valley was secure, far better than a leased location and nearer Hollywood. They did not add that their own security chief disagreed, and avoided mentioning the obvious: backlots are cheap. The new passes, they said, employed dipoles for inexpensive electronic ID. Of course, Fat'ah employed them too.

It was midmorning before Charlie George and his writers were mollified with the script, a tepid takeoff on the attempt at Maurice Everett the previous Friday. The skit had two things going for it: Charlie's Irish accent was uproarious, and he could do pantomimic wonders as an IRA Provisional trying to pull a trigger and chew gum at the same time. They threw out the lines identifying the terrorist driver as French-Canadian. It was faithful to the new connection between separatist gangs, but it was also confusingly unfunny.

They managed a half-dozen takes before noon and, as lunch vans began their setups at unobtrusive distances from the exterior set, Charlie's nose directed his eyes toward the new van which advertised hot Mexican food. Charlie's mania for Mexican food had been duly noted by news magazines.

"Okay, it's a wrap," the unit director called. "Lunch!" Charlie threw off his prop raincoat, ignoring the free spread by NBN. He drifted instead

toward the *menudo* and its vendor, Bernal Guerrero.

Only one side panel of the van was raised, for the excellent reason that one side was rigged for lunch, the other for Charlie. The comedian waited his turn. The compact latino appeared to recognize his patron only at second glance, bestowed a grave smile on Charlie and said, "For you, Señor Carlito, something special." Had Charlie not followed Guerrero to the hidden side of the van, Hakim could have fired the veterinarian's tranquilizer gun from inside the van, through his thin silvered mylar panel.

Charlie's smile was quizzical until he felt Guerrero's needle enter his side like a cold lightning bolt. He cried only, "Hey, that hurts," not convincingly, before Guerrero's gristly fingers numbed his diaphragm. Three other patrons on the innocent side of the van turned, then were rediverted as racks of warm lunch items began to spill onto the macadam — one of Hakim's deft touches.

Guerrero grasped Charlie by the thighs and lifted, hurling the limp NBN star against the featureless side panel. The panel swung inward, dumped Charlie at the feet of Hakim Arif, and swung shut again. Guerrero hurried back to see patrons catching the spill of food, made a gesture of hopelessness, said "Keep it," and dropped the open side panel. He found it difficult to avoid furious action before reaching the driver's seat because he could hear, a hundred meters away, screams from the script girl who had seen it all.

As the van howled between two hangarlike

sound stages, Guerrero bore far to the right to begin his left turn. He had thirty seconds on his pursuers but Hakim had made it clear that they must expect communication between the exterior sets and the guarded backlot gate. Guerrero smiled, hearing Hakim's curses as he struggled with a dead weight greater than his own, and sped toward the perimeter cyclone fencing. Outside the fence was an access road, deserted except for a small foreign sedan and a larger car towing an old mobile home. These vehicles were motionless.

Guerrero slapped the button in plenty of time but was not pleased. He slapped it again, then pressed it with a rocking motion as he tapped the brakes hard. Fifteen feet of cyclone fencing peeled back as the bangalore torpedo at last accepted his microwave signal, and Guerrero felt the pressure wave cuff the van. He angled through the hole, negotiating the shallow ditch with elan, and exulted in his choice of a vehicle with high ground clearance. As he made a gear change, accelerating toward escape, he could see Rashid in his outside rearview, dutifully towing the decrepit mobile home into position to block immediate pursuit along the access road.

The girl waited for Rashid in her smaller car, the only vehicle of their regular fleet that was not a van. Guerrero waited for nothing, but tossed quick glances to check the possibility of air surveillance. Van Nuys airport was soon sliding past on his right and they would be vulnerable until he reached the state university campus where their other vans waited.

Minutes later, Guerrero eased the van into a campus parking lot. Hakim was ready with the crate and together they wrestled it from their vehicle into the rear of a somewhat smaller van. As Hakim urged the smaller vehicle away, encouraging its cold engine with curses, Guerrero wheeled the kidnap van across the lot and abandoned it along with his vendor's uniform. It might be many hours before the kidnap van was noticed, among the hundreds of recreational vehicles on the campus. Guerrero knew what every student knew: a recreational vehicle was limited only by what one defined as recreation.

He moved then to his last vehicle change, flexing his hands in the thin gloves as he waited for the engine to warm, for the flow of adrenaline to subside, for the next item on his private agenda. He had carefully ascertained that Arif's fingerprints were on the abandoned kidnap vehicle, and that his own were not. On the other hand, Arif had given him only a public rendezvous some kilometers to the west in Moorpark and not the location of the new site which, Guerrero knew, might be in any direction. The latino grumbled to himself in irritation. Arif's monolithic insistence on sole control was a continuing problem, but Guerrero had to admit the little palo blanco was precise. He checked the time and grinned to himself; it wouldn't do to be late picking up Rashid and the girl. Guerrero's masters were precise, too.

By six PM, Hakim was so far out of patience that he fairly leaped from his seat in the Moorpark bus station at his first sight of Guerrero. The Panamanian bought a newspaper, saw Arif stand, then ambled out onto the street. It was too dark to read the fine print but, waiting for Hakim to catch up, Guerrero saw that they had again made the front page above the fold.

Though Guerrero walked slowly, Hakim sounded breathless. "I told the girl to make rendezvous," he said, as they paused for a stop light. "And you are four hours late!"

"The Americans had other ideas," Guerrero growled convincingly. "She and Rashid tried to run a blockade."

"Escape?"

"I was lucky to escape, myself. They were cut down. Hakim."

Hakim's voice was exceedingly soft. "This you saw?"

"I saw. It may be here," he lied again, brandishing the folded newspaper, ready to grapple with the Iraqi if he saw his cover blown. Hakim Arif only looked straight ahead, and fashioned for himself a terrible smile.

They walked another block, forcing themselves to study window displays, checking for surveillance as they went. "The comedian will be conscious soon," Hakim said as if to himself. "He will be noisy, no doubt." Then, as a new possibility struck him: "Was your van compromised?"

Guerrero gave a negative headshake, very much desiring to keep his own vehicle. "It is just ahead there," he indicated. "Do I abandon it now?" Always, he knew, Hakim was perversely biased against an underling's suggestion.

"We have expended twelve thousand dollars in vehicles, and two Fat'ah lives this day," Hakim snarled. "No more waste. Stay here, wait for my van, then follow."

Guerrero nodded and sauntered to his parked van as Arif hurried away. One cigarette later, the latino saw Arif's vehicle pass. He followed closely in traffic, then dropped back as they turned north onto Highway 23 toward the mountains. Well beyond the town of Fillmore, the lead van slowed abruptly, loitered along the highway until it was devoid of other traffic. Then Hakim swung onto a gravel road; Guerrero sensed that they were very near the new Fat'ah site and philosophically accepted his inability to share that suspicion.

After two kilometers they turned again, and Guerrero saw that the new site was a renovated farmhouse in a small orchard. He hurried to help Hakim unload the crate at the porch, ignoring the awful sounds from inside it. Only when the crate was opened inside did Guerrero learn why Charlie George, gagged and tightly bound, was such a noisy passenger.

The long legs had been taped flexed, so that muscle cramps would almost certainly result. More tape looped from neck to thighs, assuring that a tall man would make a smaller package. Heavy adhesive bands strapped his arms across his chest, the left hand heavily retaped over a crimson-and-rust bandage. Guerrero did a brief double-take, rolling the captive over to see the maimed left hand. Despite the gag, the prisoner moaned at the rough movement. From Guerrero, a

sigh: "Will you rid the world of fingers, Hakim?"

The Fat'ah leader knelt to examine the bandage while Charlie tried to speak through the gag. "An ancient and honored custom, my friend," he said, and backhanded Charlie viciously to quell the interruption. "I mailed his small finger special delivery to the National Broadcasting Network people. I added a promise to forward more pieces until my demands are aired," he continued, staring into Charlie's face as he spoke. He wheeled to regard Guerrero. "I might have delivered it there myself while waiting for you!"

"Your demands, not Fat'ah's," Guerrero mused aloud.

"I am Fat'ah," almost inaudible.

"It is reducing itself to that," Guerrero agreed ambiguously, then adroitly blunted the goad. "What may I do now?"

Hakim retained a precarious control. "Familiarize yourself with the house, cook a meal, mend your tongue. I shall arrange for our guest to—entertain us."

The nearest lights, Guerrero found, were over a kilometer off, too far to carry the sounds of the interrogation of Charlie George. The latino took his time, kept away from the 'guest' room, and waited for Arif to kill their captive in outlet for his frustration. When the screams subsided, Guerrero began to heat their stew.

The American was stronger than either of them had thought. He managed to walk, a tape-wrapped garrotte wire looped as leash about his throat, to the table but fell trying to sit in the folding chair. Hakim's smile was a beatitude, so well did his captive behave. Charlie's nose was a ruin, his right ear torn — "It will come off anyway," Hakim chuckled — but his mouth had been left equipped for conversation. He was not disposed to eat and his hands shook so badly that Hakim laughed; but Hakim needed say only once, "Eat it all," softly. Charlie George ate it all.

Hakim produced a huge chocolate bar for dessert and helped eat it. He felt no desire or need to deny the stuff, while the garrotte wire was in his hand. After the chocolate: "You maintain that this satire is too widespread to halt," he prodded the exhausted captive, "and I say you will halt it, piece by piece."

"You underestimate their greed," Charlie replied, scarcely above a whisper. From time to time he squeezed his left wrist hard. "Every nightclub schlepper in the Catskills is inventing stealable material — and the public loves it." He managed something that could have been a smile. "You're a smash, Arif."

Hakim looked at the wall a moment. "And the new series you mentioned? What is the investment?"

"One on ABC, one on CBS," Charlie said. "Buy em off if you can. Try ten million apiece. They'll laugh at you." With this unfortunate phrase he trailed off; exhaustion tugged at his eyelids. Hakim reached out with delicate precision and thumped the bloody bandage. "Ahhhhh ... I don't see what you gain by torture," Charlie grunted. "I have no

secrets."

Guerrero, taking notes, gestured at the captive with the butt of his pen. "Perhaps you do not know what you know."

"And perhaps you are being punished," Hakim murmured.

"What else is new," Charlie said, and was rewarded by a sudden tug on the wire. "Sorry," he managed to croak.

"Repeat after me: 'I beg forgiveness, Effendi,'" Hakim smiled, and tugged again. Charlie did it. "Now tell us again how your network amassed those extra tapes to be aired in the event one of you was captured." Charlie did that, too. Eventually Hakim saw that the answers were more disjointed, less useful, and led the unprotesting Charlie to the torture room. Guerrero saw the captive trussed flat on a tabletop before Hakim was satisfied, and kept the butt of his ballpoint pen aimed at the doorway, putting away his gear as Hakim returned.

"I will set up the media center," Hakim said mildly. "You will install this lock on our guest's door." It was a heavy push-bolt affair.

Guerrero set about clearing the bowls away as Hakim brought media monitors in. "I saw lights of a village from the porch," Guerrero reported. "With only the two of us left, you might brief me to that extent."

"I might — when you need to know. Information is at a premium now, is it not? We have not even a telephone here. But no matter," he said, setting his small portable TV sets up. "We can do what we must."

Guerrero paused, framed another guarded question, then thought better of it and went after tools for the door lock. From his van, he saw that the windows of Charlie's room were boarded. Returning with the tools, he installed the simple lock, pausing to watch the monitors with Arif. There was no mention of a shootout between Rashid and police — naturally — but there was also absolute silence on the daring daylight abduction of Charlie George. Guerrero sáw Arif's subliminal headshakes and was emboldened; the Iraqi might have doubted Guerrero's story if the kidnapping had received major coverage. As it was, Hakim Arif focused only on television as his source of dis-, mis-, and non-information.

When the last newscast was done, Hakim read and made notes on alternative courses of action. At last he replaced the notebook, ascertained that Charlie George was breathing heavily, and sought his own bedroll. Then, for the first time, he missed the girl until he thrust the image of her body from him. "We shall see, tomorrow," he said to the sleeping Guerrero, and fell into a sleep of confidence.

The next morning, there was still no news of the abduction on television. A National Public Radio newscast mentioned the fact that newspapers carried headlines on a reported kidnapping while television sources refused comment. Hakim forced their captive to eat a mighty breakfast and smiled fondly as Charlie complied. The comedian had bled more during the night but, Guerrero judged, not nearly enough. Hakim Arif seemed content to sit in their orchard site until their food ran out.

The noon news was innocent of Fat'ah, but Hakim was ebullient.

Finally at supper Hakim hinted at his motive for optimism. "Your show goes on at eight," he said to Charlie. "If your people place any value on you, we shall have what we demand."

"The show was taped in pieces weeks ago, you know," Charlie replied, constant pain diluting his voice. "They don't have to worry about dead air."

"I shouldn't talk so casually about pieces or death, if I were you," Hakim rejoined. "I shall bet you one ear that we get coverage."

Charlie made no reply, but tried to read a paperback which Guerrero had discarded. Shortly after his own show began, the captive showed signs of distress. Hakim handed the leash wire to Guerrero who waited in the bathroom while Charlie lost his supper. The audio was up, the door nearly closed. Guerrero took a calculated risk. "You will not leave here alive, Carlito. If you hope, throw that up, too."

Charlie knelt, face in his hands, rocking fore and aft. Muffled by his bandaged hand: "Why d'you think I'm so puking scared? NBN won't cave in; we agreed on that tactic. I wish I could retract it but I can't. And if I did, they wouldn't." He looked up through streaming silent tears, his hands bloodily beseeching. "And if they would?"

"You would still die," Guerrero said, wondering if it were true.

"What can I do?" It was an agonized whisper.

"Die. Slowly, appeasing him, in a week; or quickly, avoiding pain, if you anger him enough."

Their eyes met for a long moment of communion. Charlie retched again briefly, and the moment passed.

The Charlie George Show passed as well, without reference to the kidnapping until the end of the show. Charlie normally traded jokes with his live audience for a few moments but, instead of the piece Charlie had taped, his rotund secondbanana comic appeared. Standing before the familiar logo, he mimicked a gossip columnist with barbed one-liners. Finally, he said, there was no rumor in the truth—his tongue pointedly explored his cheek—that Charlie was in a plummet conference with stagestruck terrorists. They wanted a big hand, but Charlie only gave them the finger.

Hakim watched the credits roll, snapped off the set, and treated Charlie George to a malevolent smile: "You win," he said, "and you lose."

"You got coverage," Charlie husked, "and anyhow, you're going to do whatever you want to. NBN got your message, and you got theirs."

"I have other messages," Hakim said, and spat in Charlie's face.

Charlie saw cold rage in the zealot eyes and accepted, at last, that the network would not save him from consequences of events he had shaped. He spoke to Hakim, but looked at Guerrero. "Have it your way, you pile of pigshit. We did a sketch on that: we'll give you coverage in a pig's pratt, that's where you rate it — "

The garrotte cut off the sudden tirade. Without Hakim's tape over the wire it would have cut more

than that, as Hakim used the wire leash to throw Charlie to the floor. Hakim held the leash tight, kicking expertly at elbows and knees until his victim lay silent and gray on the red-smeared floor. He squatted to loosen the wire and nodded with satisfaction as the unconscious man's breathing resumed in ragged spasms, the larynx bruised but not crushed. Guerrero kept his face blank as he helped drag their burden into the torture toom, then laid his ballpoint pen on a shelf while Hakim trussed Charlie George to the table.

"Keep him alive awhile," Guerrero urged. To his dismay, he heard Hakim grumble assent.

"He must not cheat me of his awareness," the Fat'ah leader explained, "when I take more souvenirs." He paused, studying the inert hostage, then jerked his gaze to the Panamanian. "What was he really saying, Guerrero? Damn you, or kill me?"

"Does it matter what the tree says to the axe?"
"If only all your questions were so cogent,"
Hakim laughed. "That was worthy of El Aurans himself; he who understood pain so well — . No, it does not matter. Tomorrow the comedian will be replenished. And wrung empty again."

Charlie was half-dragged to their morning meal; one arm useless, the other barely functional. He moaned softly as Guerrero and Hakim attacked their cereal. Then Hakim, using his own traditionally unclean left hand in private amusement,

gravely took Charlie's spoon and began to feed him. Charlie knew better than to refuse, saying only, "You are one strange man."

"You must continue to function, and it is easy to be polite to an inferior. Another thing," he said, watching Charlie's difficulty in swallowing, "your schoolboy taunts will not compel me to kill you. Fat'ah is not compelled. It compels. And punishes."

"The monitors," Guerrero said, indicating his wristwatch.

"You will watch them when we have taken Charlie George to his room." Hakim had tired of his game with the spoon and, with the implacable Guerrero, conveyed Charlie to the room Charlie dreaded.

Hakim trussed Charlie to the table again as Guerrero faced the monitors in the next room, then hauled Charlie's torso to the table's edge. The captive lay face up, hanging half off the table, his head a foot from the spattered floor. He saw Hakim produce the knife, elastic bands, clear plastic tube and gossamer bag, and tried not to guess their uses. Hakim taped him firmly in place as blood gradually pounded louder in the ears of Charlie George.

Hakim brought the knife to Charlie's throat, smiling, and Charlie closed his eyes. Hakim tugged at the torn ear until Charlie opened his eyes again and then, in two quick sweeps, he severed the ear.

Charlie fought his own screams through clenched teeth, sobbing, straining against the bonds. His face a study in dispassionate interest, Hakim stanched the flow of blood and, holding Charlie by his hair, sprinkled a clotting agent over the gory mess before he applied a rough bandage.

It took Charlie George four tries to say, between gasps, "Why?"

"Questions, questions," Hakim sighed. "Your ear will go to the Los Angeles Times and its coverage may provoke your television people. This may even start a modest media war. And this is because I choose," he continued, quickly pulling the flimsy polyethylene bag over Charlie's head.

Hakim snapped the elastic bands around Charlie's neck and stood back, watching the red stain spread past his bandage inside the bag. Charlie's eyes became huge with horror as his first breath sucked the bag against his nose and mouth. After twenty seconds, Hakim thrust the plastic tube under the elastic and into Charlie's mouth, then tugged the bag in place. The tube was short and not entirely flaccid, and Hakim pulled his chair near to hold the free end of the tube away from loose ends of the bag.

Hakim waited until the breathing steadied. Charlie's eyes were closed. "Open your eyes," Hakim said gently. No response. "Open them," he said, placing a fingertip lightly over the tube's end. Charlie's eyes flew open and Hakim's finger moved back.

"Have you heard of the dry submarine, my friend? You are wearing one. The wet submarine is favored in Chile; it features a variety of nasty liquids in the bag. Yours may soon qualify as wet," he added, seeing the runnel of crimson that

painted the bag's interior in Charlie's feeble struggles.

"Why, you ask, and ask, and ask," Hakim continued, crooning near as though speaking to a valued confidante, a beloved. "Because you will perhaps return to your sumptuous life, if it pleases me. You will be my message to your medium, a man who knows he has been totally broken. El Aurans, the Lawrence of Arabia, broke after long torture and found ambition gone. Few were his equal but," the dark eyes held a soft luminosity as he quoted, "'My will had gone and I feared to be alone, lest the winds of circumstance... blow my empty soul away.' I do not think you can avoid carrying that message," Hakim added. "This is true Eastern martial art: corner the enemy, and leave him nothing. Your Machiavelli understood."

From the other room came Guerrero's call: "Coverage, Hakim!"

The little man turned in his chair, picked up the severed ear, and released the tube which lay nearly invisible against the bag. In three strides he was through the door, to loom at Guerrero's side.

The item was insignificant, merely an admission that an NBN star was a possible kidnap victim. Television was carrying the news, but obviously was not going to dwell on this event. "So I must contact another medium," Hakim said, and held up his ghastly trophy.

Guerrero blinked. "It has been quiet in there."

"He no longer complains," Hakim answered, deliberately vague.

"You are finished, then," Guerrero persisted.

It was Hakim's pleasure to joke, thinking of the abject terror in the eyes of Charlie George. "Say, rather, he is finished," he rejoined, and turned back toward the torture room.

Guerrero followed unbidden, his excitement mounting. He saw their captive hanging inert like some butchered animal, his head half-obscured in glistening red polymer. He could not know that Charlie George had spent the past moments desperately inhaling, exhaling, trying with an animal's simplicity to bathe his lungs in precious oxygen. Charlie's mind was not clear but it held fast to one notion: Guerrero was anxious for his death. Mouth and eyes open wide, Charlie George ceased to breathe as Guerrero came into view.

Guerrero's mistake was his haste to believe what he wanted to believe. He saw the plastic sucked against nostrils, the obscenely gaping mouth and staring eyes. He did not seek the thud of Charlie's heart under his twisted clothing and failed to notice the slender tube emergent from the plastic bag. "The poor pendejo is dead, then?" He rapped the question out carelessly.

Hakim's mistake was the indirect lie, his automatic response to questions asked in the tone Guerrero used now. "Truly, as you see," Hakim said, gesturing toward Charlie George, amused at Charlie's ploy.

His merriment was fleeting. From the tail of his eye he saw Guerrero's hand slide toward the Browning and in that instant, Hakim resolved many small inconsistencies. Still, he flung the knife too hastily. Guerrero dodged, rolling as he

aimed, but could not avoid the chair that struck him as he fired. The Iraqi sprang past the doorway, slammed the door and flicked the bolt in place as chunks of wallboard peppered his face. He counted five shots from the Browning but knew the damned thing held nine more. Half blinded by debris from Guerrero's slugs, Hakim elected to run rather than retrieve his own automatic which lay at his media display in the path of Guerrero's fire against the door lock.

Hakim reached his van quickly, almost forgetting to snap the hidden toggle beneath the dash, and lurched toward the road with a dead-cold engine racing and spitting. He dropped low over the wheel, unable to see if Guerrero followed. He had cash and an exquisite Israeli submachinegun, Fat'ah's survival kit, behind him in the van.

Hakim considered stopping to make a stand on the gravel road but checked his rearviews in time to reconsider. Guerrero was there, twenty seconds behind. Hakim would need ten to stop, ten more to reach and feed the weapon. He would fare better if he could increase his lead, and guessed that Guerrero would withhold fire as they passed through the village of Piru. It was worth a try.

Slowing at the edge of the little town, Hakim saw his rearview fill with Guerrero's van. Whatever his motive, the Panamanian evidently had a hard contract to fulfill and might take insane chances. Hakim wrenched the wheel hard, whirling through a market parking lot. A grizzled pickup truck avoided him by centimeters and stalled directly in Guerrero's path, and then Hakim was

turning north, unable to see how much time he had gained.

The road steepened as Hakim learned from a road sign that Lake Piru and Blue Point lay ahead. He searched his rearviews but the road was too serpentine for clear observation, and Hakim began to scan every meter of roadside for possible cover.

He took the second possible turnoff, a rutted affair with warnings against trespassers, flanked by brush and high grass. The van threw up a momentary flag of dust, a small thing but sufficient for Guerrero, who came thundering behind, alert for just such a possibility.

Hakim topped a low ridge and did not see Guerrero two turns back. Dropping toward a hollow, he tried to spin the van but succeeded only in halting it broadside to the road. He hurtled from his bucket seat, threw open the toolbox, and withdrew the stockless Uzi with flashing precision. Two forty-round clips went into his jacket and then he was scrambling from the cargo door which thunked shut behind him. If Guerrero were near, let him assault the empty van while Hakim, on his flank, would cut him down from cover.

But he had not reached cover when the van of Bernal Guerrero appeared, daylight showing under all four tires as it crested the rise before the mighty whump of contact. Hakim stopped in the open, taking a splayed automatic-weapons stance, and fitted a clip in the Uzi.

Almost.

It may have been dirt from the jouncing ride, or a whisker of tempered steel projecting like a worrisome hangnail; whatever it was, it altered many futures.

Hakim dropped the clip and snatched at its twin, missed his footing, and sprawled in the dust. The van of Guerrero impended, crashing around Hakim's wheeled roadblock into the grassy verge, a great beast rushing upon him. Guerrero set the handbrake and exited running as Hakim, his weapon hoary with dirt, essayed a multiple side roll. He was mystified when Guerrero merely kicked him in the head instead of triggering the automatic.

Hakim waited for death as he gazed into the dark nine-millimetre eye of the Browning. "Daoudist," he surmised bitterly.

"I am Fat'ah," Guerrero mimicked, breathing deeply. His face shone with sweat and elation. "And in Panama, a *Torrijista*, and everywhere, always, KGB." He wiped dust from his mouth, the gun muzzle absolutely unwavering and much too distant for a foot sweep by Hakim. "Rise, turn, hands on your head." Hakim obeyed.

The latino marched him back to his own van and forced him to lie prone in the pungent dust. While Guerrero ransacked the tool box, Hakim listened for distant engines, voices, a siren. In the primeval mountain stillness he could even hear ticks from his cooling engine, but nothing remotely suggested deliverance.

Presently, standing above the little Iraqi, Guerrero ordered his hands crossed behind him. Hakim recognized his garrotte wire by its bite and was briefly thankful it was not about his neck. At

further orders, Hakim stalked to Guerrero's own vehicle and lay on his face beside it as he tried to identify a succession of odd sounds.

"Had you the wit to take a four-wheel-drive path," Guerrero mused pleasantly as he worked, "you might have escaped. Since the day before yesterday my front differential housing has been full of transceiver gear." Guerrero leaned into his van, arranged the controls, flicked the engine on and stood back. "You wanted coverage, Hakim? Well, turn and stand — and smile, you are live on Soviet television."

The camera in Guerrero's hand looked very like a ballpoint pen but, unlike the unit left in the torture room, it did not store audiovisual data. It merely fed its impressions to the transceiver equipment packed into the van's dummy differential case. Hakim considered the possibility of a hoax until he heard the fierce whine of a multikilowatt alternator over the whirr of the engine, and then saw the great inflated meter-broad balloon, spidery metallic film covering its lower segment, that sat on Guerrero's horizontal rear cargo door. Almost certainly a dish antenna, he marveled, for a Molniya satellite in clarkeian orbit.

Hakim did not show his relief but remained docile as Guerrero shoved him down at the base of a manzanita shrub. Such equipment was fiendishly expensive and tallied well with Guerrero's claim to be a KGB infiltrator, which meant Soviet control. Hakim was limp with gratification; at least his captor represented law and order, not capricious revenge by some gang of charlies.

"There was no American blockade," Hakim accused, and drew a hissing breath as the wire tugged at his wrists.

"What does it matter to whom I turned them? It was neatly done except for the girl, and a bent mount on the differential housing," Guerrero replied, slitting Hakim's sleeves, tearing away the fifty-dollar shirt. "Rashid is entertaining the KGB — as you would be, had we known your idiotic choice of sites in advance. We opted against a motorcade, and then I was unable to transmit our location." Pride forbade him to add that he had not been furnished with sophisticated receiving gear, so that feedback to Guerrero was by relatively primitive tonal signals.

"You are a fool; they could have homed in on your unit, had you only kept it going."

"And so might you, with the noise and microwave interference." Hakim took a stinging slap. "That was for the lecture." Another slap, with an effect that shocked Hakim. "And that was for making it necessary to interrogate you here; I dare not pass that village again before dark."

Hakim swallowed hard. It was not Guerrero's brawn that bred such terror with each small successive violence. Hakim and pain were dearer friends than that. Yet he felt a rising sense of dread, and of something else; a betrayal of faith. And how could this be so, when Hakim's only faith was in Hakim?

Guerrero stepped away and laid the pencil-slim camera on an outcrop of weathered basalt. "You have seen these before," he chided. "A similar device recorded your last tender sessions with the comedian. Later I will retrieve the microcorder and feed those scenes to the Molniya."

As he spoke, he took a slender case from an inside pocket. Hakim feared the hypodermic but, far worse, dreaded the fact that he was bathed in sweat. He prepared to flail his body, hoping to destroy the injector or waste its unknown contents.

Guerrero was much too battle-wise. He chose a nearby stick of the iron-hard manzanita and, with a by-your-leave gesture to the camera, suddenly deluged Hakim with blows. It became a flood, a torrent, a sea of torment, and Hakim realized that the thin shrieking was his own. He, Hakim Arif, mewling like any craven berber? He invoked his paladin's wisdom: "...no longer actor, but spectator, thought not to care how my body jerked and squealed." Jerking and squealing, Hakim cared too much to feel the prick of the needle in his hip.

Hakim rallied with great shuddering gasps, rolled onto his back, and fought down a horror he had expected never to meet. His emissary, pain, had turned against him.

Guerrero leaned easily against a boulder, tossing and catching a drycell battery of respectable voltage. "You have long been a subject of KGB study at Lubianka in Moscow," he glowered, "and I am impressed by our psychologists. You built a legend with your vain volunteer anguish, Hakim, and never knew that the operative word was volunteer." His face changed to something still uglier. "You will divulge two items. The first, Fat'ah ac-

counts. The second is your new Damascus site." He raised the stick and Hakim cowered, but the things that touched his naked flesh were merely the drycell terminals.

Merely an onslaught of unbearable suffering. Hakim needed no verbal assurance to learn that the drug made each joint in his body a locus of gruesome response to even the mildest electrical stimulus. When his spasm had passed he had fouled himself, to the syncopation of Guerrero's laughter.

"Your funds," Guerrero said, extending the drycell, and Hakim bleated out a stream of information. Squinting into the overcast as if to confirm the satellite link over thirty-six thousand kilometers away, Guerrero grinned. "Coding, I am told, is automatic, and gracias a Dios for small favors. But it may take some minutes to check your figures. Perhaps in Los Angeles, perhaps Berne or at Lubianka. But if you lie, you must understand that I will quickly know it. Lie to me, Hakim. Please. It justifies me."

Raging at himself, Hakim hurriedly amended crucial figures. The pain in his joints did not linger but its memory overhung him like a cliff. Through it all, degrading, enervating, the sinuous path of Guerrero's amusement followed each of Hakim's capitulations.

When Hakim fell silent, the other pressed his demand. "You are learning, I see. Now: the Damascus site, the new one. The Americans would like to know it, too, but they tend to impose order slowly. We shall be more efficient even without pento-

thal." Hakim squeezed his eyes tight-shut, breathing quickly, wondering if it were really possible to swallow one's tongue—and then the drycell raked his bicep and jawline.

Hakim was transfixed, skewered on a billion lances that spun in his body, growing to fiery pin-wheels that consumed him, drove all else from his being. Hakim was a synonym of appalling agony. Guerrero, who had previously laughed for the necessary effect, punished his lower lip between his teeth and looked away. He wished he were back soldiering under Torrijos, hauling garrison garbage, anything but this filthy duty.

Yet appearances were everything and, "Again? I hope you resist," he lied, and had to caution Hakim to answer more slowly. Under the torture, answers came in a fitful rhythm; a phrase, shallow breathing, another strangled phrase, a sob, and still another phrase. Hakim was finished so soon that Guerrero knew embarrassment. He had hurried, and now he needed only wait. The military, he shrugged to himself, must be the same everywhere.

Waiting for his van's radio speaker to verify or deny, Guerrero viewed his keening captive with glum distaste. "The girl was more man than you," he said in innocent chauvinism. "Rashid accepted capture, but not she. Another agent took her knife. She fought. When he pointed the knife against her belly she embraced him. I never heard the sound of a knife like that before, it ..."

"Kill me," he heard Hakim plead.

"Before I know how truly you betray Fat'ah? For

shame."

"Yes, for shame. Kill me."

"Because you are so quick to surrender? Because you are not your beloved Lawrence, but only a small puppeteer? Absurd, Hakim. Think yourself lucky to know what you are, at last: a primitive little executive, a controller — even of yourself as victim. Is it so much more glorious to be a masochist pure and simple, than what you really are?"

"Enough! End it," Hakim begged.

"As you ended it for the comedian, perhaps. I waited for days to record your disposal of that man. Without those orders, my work would have been simpler." Guerrero spat in irritation.

Hakim stared. The Soviet security organ had waited only to obtain a video record of Fat'ah killing the comedian? He fathomed the KGB logic gradually, concluding that they could use the evidence to justify reprisals if it suited them.

Another thought brought a measure of calm: he still had control over Guerrero's future. Hakim exercised it. "It was not my intent to kill Charlie George," he said distinctly. "And we left him alive."

Guerrero said nothing for ten seconds. "The video record will show that he died," he asserted, licking lips that were suddenly dry.

"It will show his breathing tube, and also what we both knew: that he is an actor." Their eyes met in angry silence.

Guerrero insisted, "The record will vindicate me," and Hakim knew that Guerrero too was posturing for the benefit of the camera pickups. His own effectiveness contaminated by haste, Guerrero would be forced to return and kill Charlie George himself.

Guerrero approached again with the drycell and locked his gaze to Hakim's for the last time. Torture would prove nothing more, and Guerrero feared what it might seem to prove. The crowning irony was that under further torture, Hakim might further compromise his torturer. Hakim trembled in tears, but did not drop his gaze. Guerrero laid the drycell on a stone.

Hakim did not recognize the coded sequence from the van but saw Guerrero register relief at a musical signal. In any case, Hakim in his weakness had spoken the truth. Guerrero was lashing Hakim's feet with wire at the time, and resumed the job until his prisoner was positioned feet spread, knees bent, face up. Enraged at Hakim's revelation, Guerrero had chosen a vengeance option. He enjoyed that choice but realized only half of its full expense as he stalked to his van and returned.

Guerrero tore a strip of tape, placed it dangling from a branch before Hakim's eyes, and stuck a capsule to the tape within range of Hakim's mouth. "Before I knew you, Arif, I would not do what I do now. Let us say it is for Moh'med, whom I hated to sacrifice. Did you think the bomb shackles jammed themselves?" He read the surge of anger that raced across Hakim's face. "So: no, I will not end your life — but you will. I wonder if you are devout, and if your followers are. In any event, the capsule acts quickly. Exercise your control, Hakim; take one last life on television," he finished,

whisking Hakim's van keys away. He brought the drycell near Hakim's side and the Iraqi arched away as well as he might, lashed to bushes by lengths of his garrotte wire.

The drycell went beneath Hakim's naked back, centimeters from contact. Guerrero trotted away with one backward look and Hakim strained fitfully to hold his arch. Weeping, laughing, Hakim knew that Guerrero had left his own van to permit transmission of Hakim's option. But Guerrero did not know of the toggle beneath Hakim's dash panel, which reduced the Panamanian's own options to zero.

There was no sound of starter engagement, only the slam of a door before, a moment later, a heavy concussion wave. The ground bucked and Hakim, muscles already past endurance, fell back. He cared nothing for the rain of metal and flesh that showered around him but, deafened and half stunned by the five kilos of explosive he had buried in the van, Hakim could still exult. The drycell had been turned on its side.

Hakim spent nearly ten minutes scrabbling at debris before he managed to grasp a stone that would abrade the garrotte wire. He kept enough tension on the wire to satisfy his hunger for torment, all the while glaring at the Soviet camera. He could perhaps make use of the van equipment. He might find most of the money in the wreckage of his own van.

And after that, what? His exploitation of media finally smothered, he had known for weeks that the enemy had found an offense that could destroy him. Even before ransacking by the KGB, his coffers were too empty to maintain Fat'ah. The Soviet videotapes would produce hatred and scorn in the people who had previously financed him as easily as they bought English country estates and ten-meter limousines. Hakim would find respect nowhere — not even within himself. There was no more Fat'ah and Hakim was Fat'ah. Therefore there could be no Hakim.

The wire parted silently and Hakim rolled away. Eventually he freed his feet, then sat squatting before the drycell. He had triumphed over Guerrero, but that triumph was his last. He could not bring himself to touch the drycell.

Hakim took the capsule from the tape with gentle fingers, smashed the camera. "Forgive, El Aurans," he whispered, and swallowed. It was minutes before he realized that the capsule was a harmless antihistamine, Guerrero's malignant joke, and an hour before he found that the injection, as Guerrero had known from the first, was the slow killer. But by that time Hakim had stumbled, twitching, into a stream far from the silent smouldering wreckage and was past caring. The body, a source of concern in some shadowy circles, was never found.

Maurice Everett did not attend the private cremation service for Charlie George in Pasadena, on advisement of his Government Issue companion. Rhone Althouse attended, then was driven with

two vehicle changes to his rendezvous with Everett. Althouse gained entry to the building by way of a conduit tunnel with its own guarded entrance. The only identification procedure was handprint analysis but its brevity was deceptive. Gas chromatography assured that the whorls were not synthetic while standard optical matching assured that they belonged to Althouse. The writer dismissed his burly aide temporarily and found the waiting room alone.

"Somehow I never thought of you as a redhead," was Everett's first remark as Althouse entered the room.

"Welcome to the puttynose factory," Althouse returned, taking the hand he was offered. "They do very good work in this clinic; you think facelifts will improve our chances?"

"I couldn't afford the tab," Everett pointed out. "For those bent on nudging it, a free society gets awfully expensive. I'll make do with a bodyguard until we've slid off the back pages of the newspapers."

"That shouldn't take long, now that Charlie George is dead." Althouse smiled at the consternation that fled across Everett's face. "Hey, Maury, we must think of it that way. Charlie George is dead! Defunct, expired, cashed in his chips, a dear departed. But my old friend Byron Krause," he said, wagging a gleeful forefinger, "is still suckin' wind."

"I keep forgetting. Look, do we really have to wait for visiting hours?" They glanced together at the wall clock. "Let's jump the gun a few minutes."

"Don't say 'gun'," Althouse grumbled, leading

the way to the elevator. Moments later they submitted to another print-check outside the private room of one Barry Shaunessy, alias Byron Krause, no longer Charlie George. The attendant who accompanied them into the room never spoke, but he did a lot of watching. Everett thought it wise to make every gesture slow and cautious.

The face behind the bandages must have tried to smile, judging from the crinkles around the mouth and eyes. "Ow, dammit," said a familiar voice. "Maury, good to see you. Listen, Rhone: the first one-liner out of you, and my silent partner here will cut you down."

"Don't say 'cut'," Althouse muttered, then slapped his own mouth.

Everett found a chair, Althouse another. They learned from the NBN star that federal agents had found him half alive, six hours after they began to backtrack from the explosion near Lake Piru. They were aided by tire tracks, reports of a high-speed chase, and fingerprints linking the destroyed van with the avowed kidnapper of Charlie George. "They had the good sense to keep me under wraps from the locals and the media too," added the comedian. "I spent a lot of time thinking before I passed out, and decided I'd rather be a live Krause than dead with all the other charlies. Funny thing is, that sadistic little shit Arif messed me up so much, cosmetic surgery would've been necessary anyhow."

"And that finger?"

"They tell me they can make me another real one, even though it may be stiff. The ear, too. You knew they took my goddam ear? Some agent stepped on it. Boy, some of the apologies I get," he finished, shaking the bandaged head ruefully.

Everett leaned back, folding his arms. The emotional sharing of close friendship came rarely to him and he detested what must be said. "You know, Char — Byron, I can't be allowed to know who you'll be, or what you'll look like. Not for a long, long time anyhow. Just in case ..."

One eye winked in the bandage. "That's what I didn't want to tell you, Maury. Like you said: not for a long time. Though I gather from the news that Fat'ah was creamed by some other bunch in Syria — and Arif is feeding flies all over the Los Padres National Forest."

"No he isn't," Everett said, and shrugged into the silence he had created. "This is for your ears only, and God knows it's little enough but my contact wouldn't tell me more. It seems the Soviets get nervous when outsiders try to panic the American public. They were helpful enough — don't ask me why — to tell us that Arif turned his whole fanatical gang under interrogation. Probably the kind of interrogation we don't like to do; anyway, he got away into the mountains afoot after that explosion. They think he was dying."

"But they don't know," Althouse whispered. "Now I will damned sure get that facelift."

"Nothing's for sure. Disinformation at all levels," Everett replied. "It's inevitable."

"We're part of it," said Byron Krause. "Letting Charlie George die is really like dying, for me. But if my new face works as it should, and if they can alter my larynx to fool a voiceprint, there may be a retreaded top banana cavorting on your set one of these days. And if not, — well, I don't have to work. Then in a few years we'll have a reunion. Without D'unspeakable Este."

"I really want that," Everett said.

"Could happen sooner than we think," Althouse put in. "I keep my fingers into surveys at ABC. It'd be easy to include a few items to find out who the public sees as enemies of terrorism. If the names change quickly I could see that the data gets published, for every charlie on earth to see it's the idea, and not the man, they're up against. If I'm wrong and the same few names keep cropping up,..." He spread his hands in a characteristic gesture.

"You'll falsify the names," Everett suggested.

"I will like hell," said Althouse quickly. "I have some ethics. Nope; but I wouldn't publish the data either."

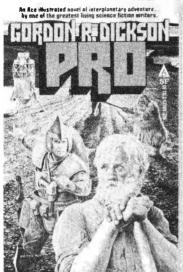
"That's a relief," said Byron Krause. "Your media theories have cost us enough bits and pieces. Oh, quit looking at me that way, Rhone, I wasn't blaming you. You were right about the solution."

"And Maury was right about the risk," Althouse sighed.

"All the same," gloomed the commissioner, "I'll miss the Charlie George show."

"Just remind yourself it was all a lot of hype," Rhone Althouse said, grinning at the bandaged face for understanding. "When you think of the odds this guy beat, you realize he was never a very proper charlie."





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by Clifford D. Simak

The universe is not only stranger than we imagine, it's stranger than we can imagine... or comprehend.

Einstein did not come in. That was unusual. Very seldom was Einstein late or absent. Usually he was waiting, ready to take up again the patient teaching that had been going on for months.

Jay Martin tried again.

-Einstein. Einstein. Are you there?

Einstein was not there.

The console in front of Martin hummed and the sensor lights were flickering. The cubicle was quiet, an engineered quietness, insulated against all distraction. Martin reached up and adjusted the helmet more firmly on his head.

-Einstein. Einstein. Where are you?

A faint sense of beginning panic flicked across Martin's mind. Had Einstein finally given it all up as a bad job? Had he (or she, or it, or them?) simply slipped away, dropping him, finally despairing of making so ignorant a student understand what he had to say?

Something out there stirred, a thin whistle of distant emptiness. Strange, thought Martin, how it always came that way—the haunting sense of distant emptiness. When there was, in fact, no distance nor no emptiness involved. The carrier waves were immune to any of the limitations of the electromagnetic spectrum. Instantaneous, no lag, as if distance, matter, time did not exist.

-Einstein? he asked, convinced that it wasn't Einstein. It didn't feel like Einstein, although he would have been hard pressed if he had been called upon to tell how Einstein felt.

The thin whistle came again.

-Yes, said Martin, I'm here. Who are you?

And the voice (the thought? the pulse? the intelligence?) spoke.

-The turning point, it said.

-Unclear, said Martin. What turning point?

-The universe. The universe has reached its turning point. Universal death has started. The universe has reached its farthest point. It now is running down. Entropy has been accomplished.

-That, said Martin, is a strange way to say it.

-The universe always strove toward entropy.

-Not here, said Martin. No entropy here. The stars still burn.

-At the edge. The outer fringe. The universe at the edge has reached the point of entropy. Heat death. No more energy. And now is falling back. It is retreating.

The distance whistled. The emptiness keened.

-You are at the edge?

-Near the rim. That is how we know. Our measurement

The distance howled, drowning out the words.

- -How long? asked Martin. How long till the end?
- -Equal to the time since the beginning. Our calculations
 - -Fifteen billion years, said Martin.
 - -We do not grasp your measurement.
- -Never mind, said Martin. It makes no difference. I should not have said it.
 - -The pity of it! The irony!
 - -What pity? What irony?
- -We have tried so long. Everyone has tried so long. To understand the universe and now we have no time.
- -We have lots of time. Another fifteen billion years.
- -You may have. We haven't. We're too close to the rim. We are in the dying zone.

A cry for help, thought Martin. The moaning of self pity. And was shaken. For there'd never been a cry for help before.

The other caught his thought.

-No cry for help, it said. There is no help. This is warning only.

The pulse, the thought cut off. Distance and emptiness whistled for a moment and then it, too, cut off.

Martin sat huddled in his cubicle, the weight of all that distance, all that emptiness crashing down upon him.

-2-

The day began badly for Paul Thomas. The desk communicator chirped at him.

"Yes," he said.

His secretary's voice said, "Mr. Russell is here to see you."

Thomas grimaced. "Show him in," he said.

Russell was prissy and precise. He came into the office and sat down in a chair across the desk from Thomas.

"What can I do for R&D this morning?" Thomas asked, ignoring all conversational preliminaries. Russell was a man who was impatient with social amenities.

"A lot more than you're doing," Russell said. "Goddammit, Paul, I know that you are hip-deep in data. It's piling up on you. We haven't had a thing from you in the last six months. I know the rules, of course, but aren't you giving them too strict an interpretation?"

"What are you interested in?"

"The faster-than-light business for one thing. I happen to know that Martin . . ."

"Martin still is working on it."

"He must have something. Besides being a good telepath, he also happens to be a top-notch astrophysicist."

"That's true," said Thomas. "We don't often get a man like him. Mostly, it's a raw farm boy or some girl who is clerking in the five-and-dime. We're running recruiting programs all the time, but..."

"You're trying to throw me off the track, Paul. I've got men aching to get started on this FTL thing. We know you're getting something."

"The funny thing about it is that we aren't."

"Martin's been on it for months."

"Yeah, for months. And not understanding any-

thing he's getting. Both he and I are beginning to believe we may have the wrong man on it."

"The wrong man on it? An astrophysicist?"

"Ben, it may not be physics at all."

"But he has equations."

"Equations, yes. But they make no sense. Equations aren't the magic thing all by themselves that people think they are. They have to make some sense and these make no sense. Jay is beginning to think they're something entirely outside the field of physics."

"Outside the field of physics? What else could they be?"

"That's the question, Ben. You and I have been over this, again and again. You don't seem to understand. Or refuse to understand. Or are too pigheaded to allow yourself to understand. We aren't dealing with humans out there. I understand that and my people understand it. But you refuse to accept it. You think of those other people out there among the stars as simply funny-looking humans. I don't know, no one knows, what they really are. But we know they aren't humans, not even funnylooking humans. We wear ourselves out at times trying to work out what they are. Not because of any great curiosity on our part, but because we could work with them better if we knew. And we have no idea. You hear me? No idea whatsoever. Hal Rawlins is talking to someone he is convinced is a robot — a funny-looking robot, of course but he can't even be sure of that. No one can be sure of anything at all. The point is that we don't really have to be. They accept us, we accept them. They are patient with us and we with them. They

may be more patient than we are, for they know we are newcomers, new subscribers on this party line we share. None of them think like us, none of us think like them. We try to adapt ourselves to their way of thinking, they try to adapt themselves to our way of thinking. All we know for sure is that they are intelligences, all they know is that we are some outrageous kind of intelligent life form. We are, all of us, a brotherhood of intelligences, getting along the best we can, talking, gossiping, teaching, learning, trading information, laying out ideas."

"This is the kind of crap you're always talking," said Russell, wrathfully. "I don't give a damn about all your philosophizing. What I want is something to work on. The deal is that when you have something that is promising, you pass it on to us."

"But the judgment is mine," said Thomas, "and rightly so. In some of the stuff we get here, there could be certain implications..."

"Implications, hell!"

"What are you doing with what we have given you? We gave you the data on artificial molecules. What have you done on that?"

"We're working on it."

"Work harder, then. Quit your bellyaching and show some results on that one. You and I both know what it would mean. With it, we could build to order any material, put together any kind of structure we might wish. Could build the kind of world we want, to order. The materials we want to our own specifications — food, metal, fabrics, you name it."

"Development," Russell said, defensively, "takes

time. Keep your shirt on."

"We gave you the data on cell replacement. That would defeat disease and old age. Carried to its ultimate degree, an immortal world — if we wanted an immortal world, and could control it and afford it. What are you doing with that?"

"We're working on that one, too. All these things take time."

"Mary Kay thinks she has found what may be an ideal religion. She thinks that she may even have found God. At times, she says, she feels she's face to face with God. How about that one? We'll hand it over to you anytime you say."

"You keep that one. What we want is FTL."

"You can't have FTL. Not until we know more. As you say, we have mountains of data on it ..."

"Give me that data. Let my boys get to work on it."

"Not yet. Not until we have a better feel of it. To tell you the truth, Ben, there's something scary about it."

"What do you mean, scary?"

"Something wrong. Something not quite right. You have to trust our judgment."

"Look, Paul, we've gone out to Centauri. Crawled out there. Took years to get there, years to get back. And nothing there. Not a goddamn thing. Just those three suns. We might just as well not have gone. That killed star travel. The public wouldn't stand still for another one like that. We have to have FTL or we'll never go to the stars. Now we know it can be done. You guys have it at your fingertips and you won't let us in on it."

"As soon as we have something even remotely

possible, we'll hand it over to you."

"Couldn't we just have a look at it? If it's as bad, as screwed up as you say it is, we'll hand it back."

Thomas shook his head. "Not a chance," he said.

-3-

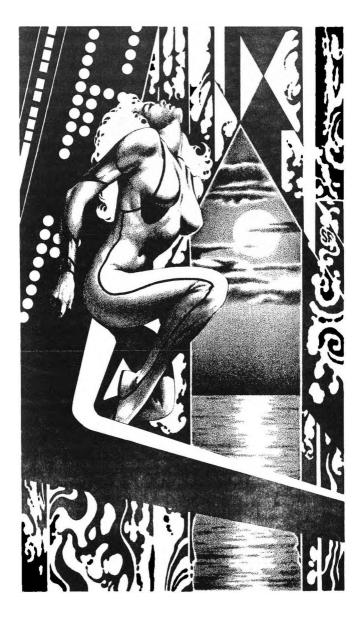
There were no words, although there was the sense of unspoken words. No music, but the sense of music. No landscape, but a feel of tall slender trees, graceful in the wind; of park-like lawns surrounding stately houses; of a running brook glistening in an unseen sun, babbling over stones; of a lake with whitecaps racing in to shore. No actuality, but a compounded belief that a shattering actuality lurked just around the corner, waiting to burst out.

Mary Kay sank into it and let all of it enfold her. This time, she had thought, this time, please God, there will be something that I can understand. But once she had sunk into it, she no longer prayed there would be something to take back. This, in itself, was quite enough. This was all that anyone might want, or need. What was here filled the soul and wiped out the mind.

A stray, human thought intruded, but only momentarily: Some day I'll have it; some day there will be data. Some day there'll be an inkling.

And then the thought snapped off. For there was no need to know. Being here was all.

She was no longer human. She was not anything at all. She simply existed. She was stripped of everything but the inner core of consciousness. She



had no body and no mind. The intellectuality took in only the wonder and the breath-catching happiness, the innocent sensuality, the mindless well-being and the rightness of it all—the rightness of being here. Wherever here might be. She did not even wonder at the here. She simply did not care.

Duty and purpose struggled feebly with the carelessness.

-But? she cried, why show me only? Why not tell me, too? I'm an intelligence. I want to know. I have the right to know.

-Sh-h-h-h

A shushing, a lullaby. A compassion. A tenderness.

Then the holiness.

She surrendered herself wholly to the holiness.

-4-

They looked to him, thought Thomas. That was the hell of it; they all looked to him for guidance, direction and comfort and he had none of these to give. They were out there on the firing line and he was sitting safely back and it would seem there should be something he could offer. But try as he might, he knew that he had nothing. Each of them a sensitive, for if they were not sensitives, they'd not be telepaths.

It took raw courage, he thought, a special kind of courage, to reach out into the cosmos, out into that place where time and space pressed close even if time and space were cancelled out. Even knowing this, knowing that space-time had been

brushed aside, the consciousness of it must be always there, the fear of it always there, the fear of being snared and left and lost within the deepest gulf of it. A special courage to face up to another mind that might be only a few light-years distant or millions of light-years distant, and the alienness that the light-years conjured up and magnified. And, worst of all, the never-forgotten realization that one was a newcomer in this community of intelligence, a novice, a hick, the bottom of the totem pole. A tendency to be retiring and apologetic, even when there was no reason to be apologetic. A kindergartener in a school where high school seniors and college students reared to godlike heights.

Thomas rose from his desk and walked across the room to stand before a window. The desert lay outside, aloof and noncaring, a humped plain of sand and rock, sterile and hostile. Better judgment would have been to place this installation, he thought, in a kinder land where there would be friendly trees and purling streams and forest paths to walk in. But the desert, in the administrative mind, served a better purpose. Its long distances, its discomforts and its loneliness discouraged the curious who otherwise might come flocking in to stare. No secret project, in the usual sense, but one about which not too much was said, about which as little as possible was said in the unspoken but devout hope that in time it might disappear from the public mind.

A spooky thing—too spooky to be thrown open. A shuddery business, this reaching out to other minds across the universe. Not something

which the public comfortably could sleep with. And what was the matter with the public? Thomas asked himself. Did they not realize that the project was mankind's greatest hope? For thousands of years, mankind had staggered along on its own, coddling its prejudices, making its mistakes, then multiplying rather than correcting them, slipping into a too-human groove that had brought, in its turn, untold misery and injustice. New blood was needed, a new mentality, and the one place to get it was from those cultures far among the stars. A cross-pollination process that could improve the texture and might revise the purpose of mankind's stumbling destiny.

The box on his desk chirped at him. He strode from the window and snapped down the toggle.

"What is it, Evelyn?"

"Senator Brown is on the phone."

"Thank you," said Thomas.

There was no one he wanted to talk with less than the senator.

He leaned back in his chair and pressed the button to activate the visor. The visor lighted to reveal the hatchet-face of the senator — ascetic, thin, wrinkled, but with a tightness to the wrinkles.

"Senator," he said, "how kind of you to call."

"I thought to pass the time to day," said the senator. "It has been a long time since we have had a chat."

"Yes, it has."

"As you may know," said the senator, "the budget for your project is coming up before committee in the next few weeks. I can get nothing out of these jackasses who are your superiors in

Washington. They talk about knowledge being the most precious commodity. They say no market value can be placed upon it. I wonder if you would concur."

"I think I would," said Thomas, "although, if that is all they say, it's a fairly general statement. There is so much spinoff. I suppose they told you that."

"They did," said the senator. "They dwelt most lovingly upon it."

"Then what is it you want of me?"

"Realism. Some old-fashioned realism. A hard-headed assessment."

"I'm fairly close to the operation. It's hard for me to step back those few necessary paces to take a good objective look at it."

"Well, do the best you can. This is off-the-record. Just between the two of us. If necessary, we'll have you in to testify. To start with, maybe, how good are the chances for FTL?"

"We are working on it, senator. I have a feeling we still have a long way to go. We're beginning to have a feeling that it may not be a simple matter of physical laws."

"What could it be, then?"

"Emphasizing the fact that we do not really know, I'd be willing to hazard a guess that it might be something we have never heard of. A procedure, or a technique, maybe even a state of mind, that is outside all human experience."

"Now you're going mystic on me. I don't like this mystic stuff."

"In no way mystic, senator. Just a willingness to admit mankind's limitations. It stands to reason that one race on one planet is not going to come up with everything there is."

"Have you anything to back that up?"

"Senator, I think I have. For the last several months, one of our operators has been trying to explain to his opposite number some of the fundamentals of our economic system. It has been and still is a trying task. Even the simplest fundamentals — things like buying and selling, supply and demand — have been hard to put across. Those folks out there, whoever they are, have never even thought of our brand of economics, if, in fact, any kind of economics. What makes it even harder is that they appear to stand in absolute horror of some of the things we tell them. As if the very ideas were obscene."

"Why bother with them, then?"

"Because they still maintain an interest. Perhaps the ideas are so horrible that they have a morbid fascination for them. As long as they maintain that interest, we'll keep on working with them."

"Our idea in starting this project was to help ourselves, not a lot of other folks."

"It's a two-way street," said Thomas. "They help us, we help them. They teach us, we teach them. It's a free interchange of information. And we're not being as altruistic as you think. It is our hope that as we go along with this economic business, we'll pick up some hints."

"What do you mean, some hints?"

"Perhaps some indications of how we may be able to revise or modify our economic system."

"Thomas, we have spent five or six thousand years or more in working out that economic system."

"Which doesn't mean, senator, that it is letter perfect. We made mistakes along the way."

The senator grunted. "This, I take it, will be another long-term project?"

"All of our work, or the most of it, is long-term. Most of what we get is not readily or easily adapted to our use."

"I don't like the sound of it," growled the senator. "I don't much like anything I hear. I asked you for specifics."

"I've given you specifics. I could spend the rest of the day giving you specifics."

"You've been at this business for twenty-five years?"

"On a job like this, twenty-five years is a short time."

"You tell me you're getting nowhere on FTL. You're piddling away your time teaching an economics course to some stupid jerks who are having a hard time knowing what you are talking about."

"We do what we can," said Thomas.

"It's not enough," said the senator. "The people are getting tired of seeing their taxes go into the project. They were never very much for it to start with. They were afraid of it. You could slip, you know, and give away our location."

"No one has ever asked for our location."

"They might have ways of getting it, anyhow."

"Senator, that's an old bugaboo that should long ago have been laid to rest. No one is going to attack us. No one is going to invade us. By and large, these are intelligent, and I would suspect, honorable gentlemen with whom we're dealing. Even if

they're not, what we have here would not be worth their time and effort. What we are dealing in is information. They want it from us, we want it from them. It's worth more than any other commodity that any of us may have."

"Now we're back to that again."

"But, dammit, senator, that's what it's all about."

"I hope you're not letting us be taken in by some sort of slicker out there."

"That's a chance we have to take, but I doubt it very much. As director of this branch of the project, I've had the opportunity..."

The senator cut him off. "I'll talk with you some other time."

"Any time," said Thomas, as affably as he was able. "I'll look forward to it."

They had gathered in the lounge, as was their daily custom, for a round of drinks before dinner.

Jay Martin was telling about what had happened earlier in the day.

"It shook me," he said. "Here was this voice, from far away..."

"How did you know it was far away?" asked Thomas. "Before they told you, that is."

"I can tell," said Martin. "You get so you can tell. There is a certain smell to distance."

He bent over quickly, reaching for a handkerchief, barely getting it up in time to muffle the explosive sneeze. Straightening, he mopped his face, wiped his streaming eyes.

"Your allergy again," said Mary Kay.

"I'm sorry," he said. "How in hell can a man pick up pollen out here in this desert? Nothing but sage and cactus."

"Maybe it's not pollen," said Mary Kay. "It could be mold. Or dandruff. Has anyone here got dandruff?"

"You can't be allergic to human dandruff. It has to be cat dandruff," said Jennie Sherman.

"We haven't any cats here," said Mary Kay, "so it couldn't be cat dandruff. Are you sure about human dandruff, Jennie?"

"I'm sure," said Jennie. "I read it somewhere."

"Ever see a physician about it?" asked Thomas. Martin shook his head, still mopping at his eyes.

"You should," said Thomas. "You could be given allergy tests. A battery of tests until they find what you're allergic to."

"Go ahead and tell us more," said Richard Garner, "about this guy who said the world was about to end."

"Not the world," said Martin. "The universe. He was just spreading the word. In a hurry to spread the word. As if they'd just found out. Like Chicken Little, yelling that the sky was falling. Talking for just a minute, then dropping out. I suppose going on to someone else. Trying to catch everyone he could. Sounded a little frantic. As if there was little time."

"Maybe it was a joke," suggested Jennie.

"I don't think so. It didn't sound like a joke. I don't think any of the people out there joke. If so, I've never heard of it. Maybe we're the only ones who have a sense of humor. Anyone here ever hear anything that sounded like a joke?"

They shook their heads.

"The rest of you are halfway laughing at it," said

Mary Kay. "I don't think it's funny at all. Here are these people out on the rim, trying all these years, for no one knows how many centuries, to understand the universe, then up pops someone and tells them the universe has run down and they, out at the edge of it, will be the first to go. Maybe they were very close to understanding. Maybe they needed only a few more years and now they haven't got the years."

"Would that be the way it would happen?" asked Hal Rawlins. "Jay, you're the physicist. You'd be the one to know."

"I can't be certain, Hal. We don't know enough about the structure of the universe. There might be certain conditions that we are not aware of. Entropy presupposes a spreading out, so that the total energy of a thermodynamic system is so evenly distributed that there is no energy available for work. That's not the case here, of course. Out at the rim of the universe, maybe. The energy and matter out there would be old, have had more time. Or would it? God, I don't know. I'm talking about something no one knows about."

"But you finally contacted Einstein," said Thomas.

"Yes, he came in a little later."

"Anything?"

"No, the same as ever. We both got tired after a time, I guess. And talked about something else."

"Is that the way it often goes?"

"Every now and then. Today we talked about houses. Or I think it was houses. Near as I can make out, they live in some sort of bubble. Got the impression of huge webs with bubbles scattered



through them. Do you suppose Einstein could be some sort of spider?"

"Could be," said Thomas.

"What beats the hell out of me," said Martin, "is why Einstein sticks with me. He beats his brains out trying to tell me about FTL and I beat my brains out trying to understand what he's telling me and never getting it. I swear I'm not a great deal closer than I was to start with, but he doesn't give up on me. He just keeps boring in. What I can't figure is what he's getting out of it."

"Every once in a while I get the funny feeling," said Garner, "that maybe these aren't different people who are talking to us. Not a lot of different cultures, but a lot of different individuals, maybe

different specialists, from the same society."

"I doubt that's true," said Jennie Sherman. "Mine has a personality. A real personality. And different, very different, from the personalities the rest of you talk about. This one of mine is obsessed with death . . . "

"What a doleful subject," said Rawlins. "But I guess you've told us about him before. Talking about death all this time..."

"It was depressing to start with," said Jennie, "but it's not any more. He's made a philosophy out of it. At times, he makes death sound almost beautiful."

"A decadent race," said Garner.

"It's not that at all. I thought so at first. But he's so joyful about it, so happy."

"Death, Jennie, is not a joyful or happy subject," said Thomas. "We've talked about this, you and I. Maybe you should put an end to it. Pick up someone else."

"I will if you say so, Paul. But I have a feeling that something will come out of it. Some new kind of understanding, a new philosophy, a new principle. You haven't looked at the data, have you?"

Thomas shook his head.

"I can't tell why I feel this way," she said. "But deep down, at the bottom of me, I do."

"For the moment," said Thomas, "that's good enough for me."

Rawlins said, "Jay spoke of something that bugs me, too. What are they getting out of it? What are any of them getting out of it? We're giving them nothing."

"That's your guilt talking," said Thomas.

"Perhaps it's something all of us are feeling. We must get rid of it. Wipe it from our minds. We feel intensely that we are beginners, that we're the new kid in the neighborhood. We are takers, not givers, although that's not entirely true. Dick has spent weeks trying to explain economics to his people."

Garner made a wry face. "Trying is all I do. I try to reduce the basics to the lowest common denominator. Thoughts of one syllable. Each syllable said slowly. Printed in big type. And they don't seem to get it. As if the very idea of economics was completely alien to them. As if hearing it were somehow distasteful. How in the world could a civilization develop and have any continuity without an economic system? I can't envision it. With us, economics is our life blood. We'd be nothing without an economic system. We'd be in chaos."

"Maybe that's what they're in," said Rawlins. "Maybe chaos is a way of life for them. No rules, no regulations, nothing. Although even as I say it, that doesn't sound quite right. Such a situation would be beyond our understanding, as repugnant to us as our economics seem to be to them."

"We all have our blind spots," said Thomas. "We're beginning to find that out."

"It would help though, it would help a lot," said Martin, "if we could feel we'd done something for one or two of them. It would give us a feeling of status, of having paid our dues."

"We're new at it," said Thomas. "The time will come. How are you getting along with your robot, Hal?"

"Damned if I know," said Rawlins. "I can't pin him down to anything. I can't get in a word. This

robot, if it is a robot, if it's some sort of computer system — and for the life of me, I can't tell you why I think it is. But, anyhow, it is a non-stop talker. Information, most of it trivial, I suspect, just flows out of it. Never sticks to one thing. Talks about one thing, then goes chattering off to something entirely unrelated. As if it had a memory bank filled to the brim with data and trying, as rapidly as possible, to spew out all that information. When I pick up something that seems to have some promise to it, something that could be of more than usual interest, I try to break in to talk at greater length about it, to ask some questions. Most often I can't break in, occasionally there are times I can. But when I do, this he is impatient with me. He cuts off the discussion and goes back to his chatter. There are times when I get the impression that he's not talking to me alone, but to a lot of other people. I have the idea that when I am able to break in, he uses one circuit to talk with me directly while he goes on talking to all those others through other circuits."

Thomas put his empty glass on the table beside him, rose to his feet. "The others are starting in for dinner," he said. "Shall we join them."

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Robert Allen, the project psychiatrist, rotated the brandy snifter between his palms.

"You sent word you wanted to see me, Paul. Has something come up?"

"I don't think so," Thomas said. "Not anything I can put a finger on. Maybe just a bad day, that's all.

Ben Russell was in to raise hell with me. Said we were holding back on him."

"He's always saying that."

"I know. He's probably catching heat himself. When he catches heat, he turns it back on me. A feedback mechanism. A defensive gesture. He was upset that we'd not passed FTL data on to him."

"Have we got anything to pass?"

"Just a lot of nothing. Some meaningless equations. I don't see how Jay stands up under it. He picked up that allergy of his again."

"Tension," said Allen. "Frustration. That could bring it on."

"Later in the day," said Thomas, "Brown phoned."

"The senator?"

"The senator. It was FTL again. He was all over me. The budget's coming up again."

"Faster-than-light is something that the administrative mind can understand," said Allen. "Hardware."

"Bob, I'm not too sure it's hardware. It could be something else. Jay's an astrophysicist. If it was plain physics, he would have it pegged."

"Maybe there are many kinds of physics."

"I don't think so. Physics should be basic. The same throughout the universe."

"You can be sure of that?"

"No, I can't be sure of that. But my logic rejects..."

"Paul, you're over-reacting. If I were you, I'd disregard this sudden flurry over FTL. It's something that comes periodically and then dies down again." "I can't disregard it," said Thomas. "Not this time. Brown's out to get us. His power base is slipping and he needs a new issue. We would make a good issue. Here we are, here we've been for a quarter century, gobbling up tax money that could be used for something else. That's the kind of issue the people would accept. They definitely are not with us; they have a feeling that we were crammed down their throats. They were never with us. Not only do we cost a lot, but we pose threats. What if we gave away our location, so that some barbaric, bloodthirsty alien horde could come crashing in on us? What if we find out something that would upset the apple-cart, wrecking a lot of our time-honored, comfortable concepts?"

"You mean he'd destroy us just to get elected?"

"Bob, you don't know politics. I am sure he would. Even if he believed in us, he might. I have a feeling that he doesn't believe in us. If he destroyed us, he'd be a public hero. We have to do something, come up with something in the next few months or he'll have a go at us."

"We have support," said Allen. "There are people in authority, in positions of power, who are committed to the project. Good people, reasonable people."

"Good and reasonable people don't have too much chance when they come up against a demagogue. The only way to beat Brown, if he decides to make us an issue, is to pile up some points we can make with the public."

"How can I help you, Paul?"

"Honestly, I don't know. A psychiatrist as a political adviser? No, I guess not. I suppose I only

wanted to unload on you."

"Paul, you didn't ask me in to talk about FTL. That's an administrative matter. You can handle it. Nor about the politics of the project. You know I'm a child in politics. There is something else."

Thomas frowned. "It's hard to tell you. Hard to put into words. I'm beginning to sense something that disturbs me. Nothing concrete. Fuzzy, in fact. Tonight Jennie — you know Jennie?"

"Yes, the little car-hop we picked up a few years ago. Nice girl. Smart."

"Tonight Jennie was talking about her people. They talk about death, she said. I knew it, of course. She'd been in a couple of times to talk with me about it. Depressed. Perhaps even frightened. After all, death can be a grisly subject. She had wanted to drop these people, try to pick up someone else. I urged her to hang in there a little longer. Never can tell what will happen, I told her. Tonight, when I suggested that she should drop it, she opposed me. Let me stay a while longer, she said, some worthwhile philosophy might develop out of it. I think there was something she wasn't telling me, something she is holding back."

"Maybe the discussion has advanced beyond death," said Allen. "Maybe it's getting into what happens after death — if anything happens after death."

Thomas looked in amazement at the psychiatrist. "My thought, exactly. With one qualification. If nothing happens after death, she'd be more depressed than ever. Her interest must mean that these folks do believe something happens. They may even have proof of it. Not faith, not a religious conviction. Jennie's a hard-headed little piece. She'd not buy simple faith. It would have to be more than that."

"You could pull the data. Have a look at it."

"No, I can't. Not yet. She'd know. I'd be snooping on her private project. My operators are fiercely jealous of what they are putting into their data banks. I have to give her time. She'll let me know when it's time to have a look."

"We must always keep in mind," said Allen, "that more than words, more than thoughts and ideas, come through from the aliens. Other things are transmitted. Things the operators hear but that can't be put into the banks. Fears, hopes, perceptions, residual memories, philosophical positions, moral evaluations, hungers, sorrow ..."

"I know," said Thomas, "and none of it gets into the banks. It would be easier in one way if it did, perhaps more confusing in another."

"Paul, I know how easy it must be for someone in your position to become overly concerned, overwhelmed with worry, perhaps, even at times doubtful of the wisdom of the project. But you must remember, we've been at it only a little more than twenty years. We've done well in that short space of time ..."

"The project," said Thomas, "really started about a hundred years ago. With that old gentleman who was convinced he was talking with the stars. What was his name? Do you recall it?"

"George White. The last years of his life must have been a nightmare. The government took him over, ran him through all sorts of tests. They never let him be. I suspect he might have been happier if everyone had continued not believing him. They pampered him, of course. That might have, in some measure, made it up to him. We still pamper our telepaths. Giving them a luxurious residential compound, with country club overtones, and ..."

"They have it coming to them," snapped Thomas. "They are all we have. They're our one great hope. Sure, we've made strides. Progress if you want to call it that. The world existing in a sort of loose confederation; wars a thing of the past. Colonies and industries in space. A start made on terraforming Mars and Venus. One largely abortive voyage to the nearest stars. But we have our problems. Despite expansion into space, our economy still is kicked all out of shape. We continually ride on the edge of economic disaster. Our disadvantaged are still stockpiled against that day, that probably will never come, when we will be able to do something for them. The development of synthetic molecules would give us a boost if R&D would get cracking on it instead of moaning about not having FTL. I have some hopes that Garner may get some feedback from the aliens he is trying to teach economics to, but nothing yet, maybe nothing ever. It's the only economics show we have going. I had hoped others might come up, but they haven't. The hell of it is that so much of what we have going is producing so little. Much of it is seemingly off on the wrong track. Yet you can't junk all this stuff and start grabbing out frantically for something else. Mary Kay, for example. She has found something that might be big, but she's so hooked on it that she can't look for answers. When she tries, there are no answers. No idea communications at all, apparently. Just this feeling of euphoria. Worthless as it stands, but we can't pass it by. We have to keep on trying. There may be something there that is worth waiting for."

"I think the greatest problem lies in the kind of people who turn out to be the right kind of telepaths," said Allen. "Jay is the only man trained in science that we have. The others are not equipped to handle some of the material they are getting. I still think we could try to give some of them training in certain fields."

"We tried it," said Thomas, "and it didn't work. These are a special breed of people. Sensitives. They have to be handled with kid gloves or you destroy them. And under special kinds of strain. The strange thing about it, fragile as some of their personalities may be, they stand up to these special strains. Many ordinary people would crack if they knew they were in contact with an alien mind. A few of ours have, but not many. They have stood up under it. But they occasionally need support. It's my job to try to give it to them. They come to me with their fears, their doubts, their glory and elation. They cry on my shoulder, they scream at me..."

"The one thing that astounds me," said Allen, "is that they still maintain their relationships with non-telepaths. They are, as you have said, a very special breed. To them, it might seem, the rest of us would be little better than cloddish animals. Yet that does not seem to be the case. They've retained their humanity. It has been my observation, as well, that they don't get chummy with the aliens they are working with. Books. I guess that's it. They

treat the aliens as books they'd take down off the shelf to read for information."

"All of them except Jay. He has worked up a fairly easy relationship with this last one. Calls him Einstein. None of the others have names for their aliens."

"Jay is a good man. Wasn't he the one who came up with the synthetic molecules?"

"That's right. He was one of the first successful operators. The first, if I remember rightly, who tolerated the brain implant. Others got the implant, but they had trouble with it. Some of them a lot of trouble. Of course, by the time Jay got his, there had been some improvement."

"Paul, is the implant absolutely necessary?"

"The boys upstairs think it is. I don't know enough about it, technically that is, to be sure. First, you have to find the right kind of telepath — not just a high quality telepath, but the right kind. Then the implant is made, not to increase the range, as some people will tell you, but to re-enforce the natural ability. It also has something to do, quite a bit to do, with the storage of the information. Range, as such, probably is not really important. On the face of it, it shouldn't be, for the waves or pulses or whatever they are that enable telepaths to talk to one another are instantaneous. The time and distance factors are cancelled out entirely and the pulses are immune to the restrictions of the electromagnetic spectrum. They are a phenomenon entirely outside the spectrum."

"Key, of course, to the entire project," said Allen, "lay in the development of the capability to record

and store the information that is exchanged in the telepathic communication. A development of the earlier brain-waves studies."

"You're right," said Thomas. "It would have been impossible to rely on the memories of the telepaths. Many of them, most of them, in fact, have only a marginal understanding of what they are told; they are handling information that is beyond their comprehension. They have a general idea, probably, but they miss a lot of it. Jay is an exception, of course. And that makes it easier with him. But with the others, the ones who do not fully understand, we have a record of the communications in the memory bank."

"We need more operators," said Allen. "We're barely touching all the sources out there. And we can't go skipping around a lot because if we did, we might be passing up some fairly solid material. We do our recruiting and we uncover a lot of incipient telepaths, of course, but very few of the kind we are looking for."

"At no time," said Thomas, "are there ever too many of them to find."

"We got off what we were talking about," said Allen. "Mary Kay and Jennie, wasn't it?"

"I guess it was. They're the question marks. Jay either will pin down the matter of FTL or he'll not be able to. Dick will keep on with the economics and will either get some worth-while feedback or he won't. Those are the kinds of odds we have to play. Hal will go on talking with his alien computer and we eventually may get something out of it. One of these days, we'll jerk the memory banks on that one and see what we have. I'd guess there



might be some nebulous ideas we could play around with. But Mary Kay and Jennie — Christ, they're into something that is beyond anything we ever bargained for. Mary Kay a simulation — or maybe even the actuality — of a heavenly existence, a sort of Paradise, and Jennie with overtones of an existence beyond the grave. These are the kinds of things that people have been yearning for since the world began. This is what made billions of people, over the ages, tolerate religions. It poses a problem — both of them pose problems."

"If something came of either of them," said Allen, "what would we do with it?"

"That's right. Yet, you can't go chicken on it. You can't just turn it off because you're afraid of it."

"You're afraid of it, Paul?"

"I guess I am. Not personally. Personally, like everyone else, I would like to know. But can you imagine what would happen if we dumped it on the world?"

"I think I can. A sweep of unrealistic euphoria. New cults rising and we have more cults than we can handle now. A disruptive, perhaps a destructive impact on society."

"So what do we do? It's something we may have to face."

"We play it by ear," said Allen. "We make a decision when we have to. As project manager, you can control what comes out of here. Which may make Ben Russell unhappy, but something like this business of Mary Kay and Jennie is precisely why the director was given that kind of authority."

"Sit on it?" asked Thomas.

"That's right. Sit on it. Watch it. Keep close tabs

on it. But don't fret about it. Not now at least. Fretting time may be some distance down the road."

"I don't know why I bothered you," said Thomas. "That's exactly what I intended all along."

"You bothered me," said Allen, "because you wanted someone in to help you finish up that bottle."

Thomas reached for the bottle. "Let's be about it, then."

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"If you had to invent a universe," asked Mary Kay, "if you really had to, I mean; if it was your job and you had to do it, what kind of universe would you invent?"

"A universe that went on and on," said Martin.
"A universe with no beginning and no end. Hoyle's kind of universe. Where there'd be the time and space for everything that possibly could happen, to happen."

"That entropy thing really got to you, didn't it. A voice out of the void saying it was all coming to an end."

Martin crinkled his forehead. "More now than it did to start with. Now that I've had time to think it over. Christ, think of it. We've been sitting here, us and all the people before us, thinking that there was no end, ever. Telling ourselves we had all the time there is. Not considering our own mortality, that is. Thinking racially, not of ourselves alone. Not ourselves, but all the people who come after

us. An expanding universe, we told ourselves. And maybe now it isn't. Maybe, right this minute, it is a contracting universe. Rushing back, all the old dead matter, all the played-out energy."

"It has no real bearing on us," said Mary Kay. "No physical effect. We won't be caught in the crunch, not right away at least. Our agony is intellectual. It does violence to our concept of the universe. That's what hurts. That a thing so big, so beautiful — the only thing we really know — is coming to an end."

"They could have been wrong," he said. "They might have miscalculated. Their observations might have been faulty. And it might not really be the end. There might still be another universe. Once everything retreated back as far as it could go, there might be another cosmic explosion and another universe."

"But it wouldn't be the same," she said. "It would be a different universe. Not our universe. It would give rise to different kinds of life, new kinds of intellect. Or maybe no life or intellect at all. Just the matter and the energy. Stars burning for themselves. No one to see them and to wonder. That, Jay, is what has made our universe so wonderful. Little blobs of life that held the capacity to wonder."

"Not only the wonder," Jay told her, "but the audacity to probe beyond the wonder. The grief in that warning was not that the universe was coming to an end, but that it was doing so before someone could find out what it was."

"Jay, I've been wondering ..."

"You're always wondering. What is it this time?"

"It's silly. All my wondering is silly. But, do you suppose that we can experience things in time, reach things in time as well as in space?"

"I don't know. I've never thought of it."

"You know this place I've found. So quiet. So wonderful. So happy and so holy. Have you any idea of what it might be?"

"Let's not get into that right now," said Jay. "You'll just upset yourself. Everyone else has left. Maybe we should be leaving, too."

He looked around the empty lounge, made a motion to get up. She reached for his arm and held him there.

"I've been thinking about it," she said. "I've been wondering if this place of mine is what is left after everything is gone. When the universe is gone. The few good things left over, the worthwhile things left over. The things we have never valued enough. We or any of the others out there. The peace, the love, the holiness. These are the things, I think, that will survive."

"I don't know, Mary. God, how could I know."

"I hope it is," she said. "I so hope it is. I have a feeling that it is. I go so much on feeling. In the place I found, you have to depend on what you feel. There is nothing else. Just the feeling. Do you ever depend on feeling, Jay?"

"No, I don't," he told her. He got to his feet, put out a hand to help her up. "Do you know," he said, "that you are beautiful and crazy."

Suddenly he bent double getting the handkerchief to his face barely in time to catch the sneeze.

"Poor Jay," she said. "You still have your allergy."

Martin settled himself before the console, shoved the helmet more comfortably into place. The helmet was a nuisance, but he had to wear it, for it was the mechanism that fed the information into the data banks.

- -Einstein, are you there? he asked.
- -I am here, said Einstein, ready to begin. You have your allergy again. Are you ingesting chemicals?
 - -Yes. And they don't help a lot.
 - -We sorrow for you greatly.
 - -I thank you very much, said Martin.
 - -When last we quit, we were discussing . . .
 - -A moment, Einstein. I have a question.
 - -Ask.
- -It has nothing to do with what we were discussing. It's a question I long have wanted to ask and never had the courage.
 - -Ask.
- -For a long time, we have been talking about faster-than-light and I am not understanding. You've been patient with me. You overlook my stupidity. Still willing to keep on, when at times it must seem hopeless to you. I want to ask you why. Why are you willing to keep on?
 - -Simple, Einstein said. You help us. We help you.
 - -But I haven't helped you.
- -Yes, you have. You recall occasion first we took notice of your allergy?
 - -That was a long time ago.
- -We asked you can you do anything to help it. And you say a term at the time we do not know.

- -Medicine?
- -That was it. We asked you, medicine? And you explain. Chemicals you say. Chemicals we know.
 - -Yes, I guess I did say that.
- -Medicine-chemicals entirely new to us. Never heard of them. Never thought of them.
 - -You mean you had no idea of medicine?
 - -Correct. Affirmative. Had no idea, ever.
- -But, you never asked me about it. I would have been willing to tell you.
- -We did ask. Now and then we asked. Very briefly, very carefully. So you would not know.
 - -Why? Why briefly? Why carefully?
- -So great a thing. Too big to share with others. Now I see we misjudge you. I am very sorry.
- -You should be, Martin said. I thought you were my friend.
 - -Friend, of course, but even among friends ...
 - -You were willing to tell of faster-than-light.
- -No great thing. Many others have it. Very simple, once you catch it.
- -I'm glad to hear you say so. How are you doing on medicine?
- -Slowly, but some progress. Things we need to know.
 - -So go ahead and ask, said Martin.

-9-

Thomas looked questioningly across the desk at Martin.

"You mean to tell me, Jay, that Einstein's people had never thought of medicine. That they know chemistry and had never thought of medicine?" "Well, it's not quite that simple," said Martin. "They have a hang-up. Their bodies are sacred. Temples of their souls. Einstein didn't actually say that; it is my interpretation of what he said. But, anyhow, their bodies are sacred and they don't tamper with them."

"In that case, they'll have a hell of a time selling medicine to their public."

"I suppose so. But with Einstein and some of his fellows, that's different. An elite clique, I gather, standing above the general public, perhaps a bit contemptuous of the public, not sharing all the superstitions the general public holds. Willing, even anxious, to pick up what might be considered iconoclastic ideas. Willing, at least, to have a try at them. With the forces of the old beliefs and prejudices bearing on them, however, it's not to be wondered at that they never thought of medicine."

"They're willing to let you tell them about it?"

"Anxious. Strangely excited about it — a sort of nervous excitement. As if they know they're doing wrong, but are going to do it anyhow. All I can give them, of course, is the basic thinking on medicine. They'll have to work out the details themselves, adapting them to their situation. I gave them what I could today. I'll have to bone up on the theory of medicine to give them much more. There should be material in the library."

"I'm sure there is," said Thomas.

"I thought for a while I'd lost Einstein. I told him that to develop medicine they'd have to know about their bodies ..."

"And since their bodies are sacred ..."

Martin nodded. "That's the idea, exactly. Ein-

stein asked how they'd get to know about their bodies and I said dissection. I told him what dissection was and that was when I thought I'd blown it. He was getting more than he asked for, more than he really wanted, and a lot of it he didn't like. But he was a man about it; he gulped and gagged somewhat and finally came to terms with it. It appears he is a devoted soul. Once he gets his teeth into something, he hangs onto it."

"You think he and the rest of his clique will go ahead with it?"

"I'm not sure, Paul. I think so. He tended to wax a bit philosophical about it. Trying to talk himself more firmly into the idea of going ahead with it. And while he was doing this, I was wondering how many similar hang-ups we may have that makes it hard or impossible to use some of the ideas we may get. Here is this advanced culture, a forward-looking society, and yet an old obsession that probably dates back to primordial times has made it impossible for them to come up with the concept of medicine."

"Our own history of medicine," said Thomas, "is not too dissimilar. We had to sweep away a lot of superstition and wrong thinking before we could get even a decent start in the healing art."

"I suppose so," said Martin. "But, dammit, the whole thing makes me feel good. If Einstein goes ahead with it, and I think he will, it means we've been of some use. Like I said last night, we may be beginning to pay our dues. We aren't just Cub Scouts any longer. I had no idea, you see, of what was going on. The sneaky son-of-a-bitch was trying to steal the idea of medicine from me, bit by

tiny bit."

"I'd suspect we may be doing much the same thing on our part," said Thomas. "We're handling some of those jokers out there far too gently, more than likely, than there is any need to. Going easy on them, afraid of doing something wrong and scaring them off. I would suspect this is because of our inferiority complex, brought about by the kind of company we're keeping. Get a few more deals like your medicine show under our belts and we'll no longer have it. We'll be right up there with the rest of them."

"I hesitated to ask him," said Martin, "about why he was sticking with me. Like you say, I probably was afraid of scaring him off. But it bugged me, it had bugged me for a long time. So I thought, why not? why not be honest with him? And once I was honest with him, he decided to be honest with me. It does beat hell how things sometimes turn out."

"I don't suppose you had much time to talk about FTL today. That's all right. Maybe a few days off may help. And now you'll feel less guilty at the time Einstein spends on it. You can bear down a little harder on him."

"No time on FTL today at all," said Martin. "But you may be right. I've been doing some thinking about it. I talked with Mary Kay last night and she asked me if I stuck to hard fact all the time or if I paid some attention to my feelings, how I felt about it. I suppose she was trying to say hunches and not quite making it. I told her my feelings played no part in it. I've never let them play a part. I've tried to stick to the pure science of it — if, in fact, there is any science in it. This afternoon I got

to thinking about it and maybe I was wrong ..."
"And?"

"You know, Paul, I may finally have a handle on this FTL business. Not for certain, but maybe. A new way to go. For the last several weeks, I've been telling myself time could be the key factor and that I should be paying more attention to it. Has this project ever held any talk with some of our aliens about time?"

"I think so. Ten or fifteen years ago. We still have the record. It was fairly inconclusive, but we have stacks of data."

"Except in a superficial way," said Martin, "time can't play too much of a part in any equation, although in many problems it can be a fairly critical factor. If we knew more about time. I told myself, not as a physical, but as a mental factor in FTL, we might turn the trick. Tying a mental concept of time into the equation . . ."

"You think it might work?"

"Not now. Not any more. I have a hunch that time may be a variable, that it runs differently in different sectors of the universe, or differently in the minds of different intelligences. But there is something that would be a constant. Eternity would be a constant factor. It wouldn't vary; it would be the same everywhere."

"My God, Jay, you aren't talking about ..."

"Not about arriving at an understanding of it, but I think we might work out a way it could be used as a constant. I'm going to take a shot at it. With it in mind, some of the other factors may come clear."

"But eternity, Jay. This business about the uni-

verse coming to an end."

"Mary Kay told me something else last night. Her hunch of what might be left when the universe is gone."

"I know. She was in just a while ago. She spilled it all on me."

"And what did you say?"

"Christ, Jay, what could I say? I patted her on the shoulder and told her to stay in there pitching."

"But if she's right, there'd be something beyond the end of the universe. There'd still be eternity. Maybe still infinity. Two constants. And room for something else to happen."

"You're getting me in beyond my depth, Jay."

"Maybe I'm beyond my depth, too. But it's a new approach. Maybe it can be handled. Tell Russell and Brown, when they start hassling you again, that we're going at it from a fresh angle."

Thomas sat a long time at the desk after Martin had left.

Last night, he thought, Allen had been no help when he'd talked with him. All the same old platitudes: don't worry, sit on it, hang in there tight, make a decision only when you have to. And this afternoon he, himself, had been no help when Jay and Mary Kay had sat across the desk from him. Stay in there pitching, he'd told Mary Kay.

These are special people, he had told Allen. He had been right, of course. They were special, but how special? How far beyond the ordinary run of mankind? Dime store clerks and car hops and raw farm boys. But what happened to them when they ventured out among the stars and made contacts with the intelligences who dwelt on planets orbit-

ing distant suns? Allen had said, or had it been he? that all that came through from the star-flung party line was not recorded in the memory banks — the pain, the sorrow, the doubt, the hope, the fear, the prejudices, the biases, and what else? Something beyond all human experience? Something that was soaked up, that was absorbed into the fiber and the fabric of the human telepaths who listened, who chatted and gossiped with their neighbors strung across the galaxies. A factor, or factors, that made them slightly more than human or, perhaps, a great deal more than human.

Mary Kay, with her talk of a place that would still persist after the universe was gone, quite naturally was crazy. Jay, with his talk of using eternity as a constant factor, was insane as well. But crazy and insane, of course, only by human standards. And these people, these telepaths of his (perhaps, almost certainly, undeniably) had gone far beyond humanity.

A special people, a new breed, their humanity cross pollinated by the subtle intricacies of alien contact, the hope of humankind? Ambassadors to the universe? Industrial spies? Snoopers into places where man had little right to go? Explorers

of the infinite?

Dammit, he thought, it made a man proud to be a member of the human race. Even if this special breed should finally become a race apart, they still stemmed from the same origins as all the other humans.

Might it be, he wondered, that in time some of the specialness would rub off on others such as he?

And, suddenly, without any thinking on it, with-

out due consideration, without mulling it over, without using the slow, intricate, involved process of human thought, he arrived at faith. And was convinced, as well, that his faith was justified.

Time to go for broke, he told himself.

He reached over and punched the button for Evelyn.

"Get me Senator Brown," he told her. "No, I don't know where he is. Track him down, wherever he may be. I want to tell the old bastard that we're finally on the track for FTL."



WE INVITE LETTERS

Almost since the Beginning science fiction magazines have carried letter columns. At their worst, they are nothing but paeans of exaggerated praise for the magazine and its Editor—oddly enough, the worse the magazine, the more unreserved the praise. At their best these columns are treasure troves of insight and wit, and a dash of brimstone for flavor.

Obviously we want the latter kind for DESTINIES —but for that we need *you*. Subject matter is open: the only requirement is that you feel strongly: if you do, chances are your fellow readers will too. If you have something to say, now you have a place to say it. Right here, write now!

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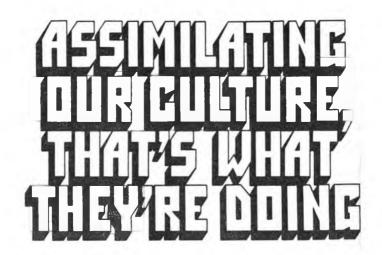
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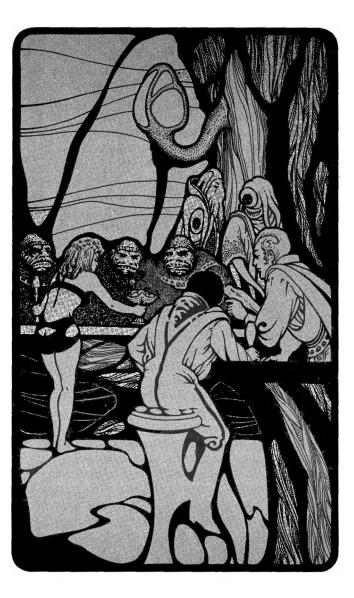
ACE SCIENCE FICTION

360 PARK AVENUE SOUTH NEW YORK, N.Y. 10010





BY LARRY NIVEN



Is it soup yet?

I was putting glasses in the dishwasher when some chirps walked in with three glig in tow. You didn't see many glig in the Draco Tavern. They were grey and compact beings, proportioned like a human linebacker, much shorter than the chirpsithtra. They wore furs against Earth's cold, fur patterned in three tones of green, quite pretty.

It was the first time I'd seen the Silent Stranger react to anything.

He was sitting alone at the bar, as usual. He was forty or so, burly and fit, with thick black hair on his head and his arms. He'd been coming in once or twice a week for at least a year. He never talked to anyone, except me, and then only to order; he'd drink alone, and leave at the end of the night in a precarious rolling walk. Normal enough for the average bar, but not for the Draco.

I have to keep facilities for a score of aliens. Liquors for humans, sparkers for chirps, flavored absolute alcohol for thtopar, spongecake soaked in cyanide solution — and I keep a damn close watch on that — lumps of what I've been calling green kryptonite, and there's never been a roseyfin in here to call for it. My customers don't tend to be loud, but the sound of half a dozen species in conversation is beyond imagination, doubled or tripled because they're all using translating widgets. I need some pretty esoteric sound-proofing.

All of which makes the Draco expensive to run. I charge twenty bucks a drink, ten for sparkers, and so forth. Why would anyone come in here to drink in privacy? I'd wondered about the Silent Stranger.

Then three glig came in, and the Silent Stranger turned his chair away from the bar, but not before I saw his face.

Gail was already on her way to the big table where the glig and the chirps were taking seats, so that was okay. I left the dishwasher half filled. I leaned across the bar and spoke close to the Silent Stranger's ear.

"It's almost surprising how few fights we get in here."

He didn't seem to know I was there.

I said, "I've only seen six in thirty-two years. Even then, nobody got badly hurt. Except once. Some nut, human, tried to shoot a chirp, and a thtopar had to crack his skull. Of course the thtopar didn't know how hard to hit him. I sometimes wish I'd gotten there faster."

He turned just enough to look me in the eye. I said, "I saw your face. I don't know what you've got against the glig, but if you think you're ready to kill them, I think I'm ready to stop you. Have a drink on the house instead."

He said, "The correct name is gligstith(click) optok."

"That's pretty good. I never get the click right."

"It should be good. I was on the first embassy ship to Gligstith(click)tcharf." Bitterly, "There won't be any fight. I can't even punch a glig in the face without making the evening news. It'd all come out."

Gail came back with orders: sparkers for the

chirps and the gligs wanted bull shots, consommé and vodka, with no ice and no flavorings. They were sitting in the high chairs that bring a human face to the level of a chirp's, and their strange hands were waving wildly. I filled the orders with half an eye on the Stranger, who watched me with a brooding look, and I got back to him as soon as I could.

He asked, "Ever wonder why there wasn't any second embassy to Gligstith(click)tcharf?"

"Not especially."

"Why not?"

I shrugged. For two million years there wasn't anything in the universe but us and the gods. Then came the chirps. Then bang, a dozen others, and news of thousands more. We're learning so much from the chirps themselves, and of course there's culture shock.

He said, "You know what we brought back. The gligs sold us some advanced medical and agricultural techniques, including templates for the equipment. The chirps couldn't have done that for us. They aren't DNA-based. Why didn't we go back for more?"

"You tell me."

He seemed to brace himself. "I will, then. You serve them in here, you should know about them. Build yourself a drink, on me."

I built two scotch-and-sodas. I asked, "Did you say sold? What did we pay them? That didn't make the news."

"It better not. Hell, where do I start? The first thing they did when we landed, they gave us a full medical checkup. Very professional. Blood samples, throat scrapings, little nicks in our ears, deep-radar for our innards. We didn't object. Why should we? The gligs are DNA-based. We could have been carrying bacteria that could live off them.

"Then we did the tourist bit. I was having the time of my life! I'd never been further than the Moon. To be in an alien star system, exploring their cities, oh, man! We were all having a ball. We made speeches. We asked about other races. The chirps may claim to own the galaxy, but they don't know everything. There are places they can't go except in special suits, because they grew up around red dwarf stars."

"I know."

"The glig sun is hotter than Sol. We did most of our traveling at night. We went through museums, with cameras following us. Public conferences. We recorded the one on art forms; maybe you saw it."

"Yeah."

"Months of that. Then they wanted us to record a permission for reproduction rights. For that they would pay us a royalty, and sell us certain things on credit against the royalties." He gulped hard at his drink. "You've seen all of that. The medical deep-radar that does what an X-ray does without giving you cancer, and the cloning techniques to grow organ transplants, and the cornucopia plant, and all the rest. And of course we were all for giving them their permission right away.

"Except, do you remember Bill Hersey? He was a reporter and a novelist before he joined the expedition. He wanted details. Exactly what rights did the glig want? Would they be selling permissions



to other species? Were there groups like libraries or institutes for the blind that got them free? And they told us. They didn't have anything to hide."

His eyes went to the glig, and mine followed his. They looked ready for another round. The most human thing about the glig was their hands, and their hands were disconcerting. Their palms were very short and their fingers were long, with an extra joint. As if a torturer had cut a human palm between the finger bones, almost to the wrist. Those hands grabbed the attention . . . but tonight I could see nothing but the wide mouths and the shark's array of teeth. Maybe I'd already guessed.

"Clones," said the Silent Stranger. "They took clones from our tissue samples. The glig grow clones from almost a hundred DNA-based life forms. They wanted us for their dinner tables, not to mention their classes in exobiology. You know, they couldn't see why we were so upset."

"I don't see why you signed."

"Well, they weren't growing actual human beings. They wanted to grow livers and muscle tissue and marrow without the bones...you know, meat. Even a f-f-f—" He had the shakes. A long pull at his scotch and soda stopped that, and he said, "Even a full suckling roast would be grown headless. But the bottom line was that if we didn't give our permissions, there would be pirate editions, and we wouldn't get any royalties. Anyway, we signed. Bill Hersey hanged himself after we came home."

I couldn't think of anything to say, so I built us two more drinks, strong, on the house. Looking back on it, that was my best answer anyway. We touched glasses and drank deep, and he said, "It's a whole new slant on the War of the Worlds. The man-eating monsters are civilized, they're cordial, they're perfect hosts. Nobody gets slaughtered, and think what they're saving on transportation costs! And ten thousand glig carved me up for dinner tonight. The UN made about half a cent per."

Gail was back. Aliens don't upset her, but she was badly upset. She kept her voice down. "The glig would like to try other kinds of meat broth. I don't know if they're kidding or not. They said they wanted — they wanted — "

"They'll take Campbell's," I told her, "and like it."

PBBT ONE

REPLITY, FIGTION, PND POINTS BETWEEN

BY POUL PINDERSON





Serendipititiously, Poul has precisely outlined the editorial philosophy of this magazine.

"No way!" I exclaimed. "Look, Jim, the subject's been gnawed to death. Even if I went ahead and repeated all the cliches, they wouldn't run to more than a few thousand words. And you're asking me for a series."

"You mean to say you can't come up with something new?" Baen replied. "Better not admit that in public. Besides, I don't want 'What Is Science Fiction?' or "The Science In Science Fiction' or anything like that, except where you have to touch on it incidentally. I'm thinking about the interaction, the philosophies, with solid examples to show how it all works."

"I don't know how it does. You're asking the impossible."

"I'll pay you money."
"Uh — "

"What about another drink?"

Editors can be quite persuasive. But I'm still not sure what I'm supposed to do.

That makes the assignment interesting, albeit perhaps in the Chinese sense. It won't be a setpiece job of writing so much as an exploration, and the exploration won't be in search of any definite goal but, rather, will ramble in any directions that look attractive. To change the metaphor, we'll not consider the scientific content of science fiction, at least not in detail, but we will look at science from the viewpoint of science fiction, as well as vice versa. The late great John Campbell often did that, of course, and I don't pretend I can equal him at it. However, no man can see everything, or find time to describe everything that he does see. If these essays entertain you, they will have served their purpose. If they give you something to think about, that will please me no end, whether or not you agree with what you've read.

The tentative plan of action is this. First we'll have to examine the nature of science fiction just a bit, in order that you may know what is meant by this term or that. Though some repetition of what others have said or I have said elsewhere is inevitable, I hope to keep it to a minimum and offer you a few fresh ideas.

Next we'll consider "hard" science fiction, since it most obviously belongs in the genre, and distinguish two kinds, science fiction proper and technological fiction. I'll give you an example of how these are, or can be, constructed, from the inside out — how they function. We'll go on to more speculative types, again using particular cases in point.

Science itself being a Leitmotiv, we'll have been making observations about it. Somewhere around

here, we'll therefore have to pause for a little systematic analysis, a very short course in the philosophy of it. That's a subject on which many learned volumes have been written; as brief and informal a piece as mine can't even skim the surface. Yet if nothing else, it can point out a few things which science is *not*, such as systematic and unambiguous.

That leads us back in a natural way to science fiction which has nothing directly to do with science, and thus to outright fantasy. It turns out that there is a considerable indirect relationship. Thus it will be worthwhile to glance at the impact of science on society as a whole. The total effect has been far more profound than just a technological revolution, though the latter has had its own consequences to the psyche as well to material existence; in many ways, we children of machine and medicine do not even feel, let alone think or live, like any of our ancestors.

Change of this kind seems likely to accelerate. Science fiction appears well suited to make suggestions as to how and in what manner that might take place. Indeed, while Freud has vastly influenced numerous writers, otherwise science fiction is almost alone in having dealt with the real human significance of science and technology; "mainstream" exceptions, such as Rudyard Kipling, Ernest Gann, and Robinson Jeffers, are few and far between. Hence the force upon it exerted by these factors has been especially great, making it perhaps a partial model of mankind in general under the same force. We'll discuss that possibility a bit.

Thus the plan, deliberately indefinite and subject to change without notice as exploration proceeds. Now let's leave these nice safe generalities and start out into the dangerous country of specifics.

There are as many definitions of "science fiction" as there are people defining it. Probably Damon Knight's is best: that the term "means what we point to when we say it." In other words (mine, not those of Mr. Knight, who may disagree), science fiction is not really a distinct type of literature and never has been; today its name covers such an enormous diversity that no single meaning will fit everything.

Still, we can look for a set of characteristics shared by all. We won't succeed, because often some of these characteristics are absent, or vestigial, in a given specimen. Nevertheless, the effort may help clarify our language. What follows is not intended to be yet another definition, although superficially it looks like one. It's merely intended to illustrate how much of science fiction operates.

Fiction in general deals with the unreal, that which does not exist and/or has not happened. This does not set it off sharply from nonfiction, for any piece of communication may use both the real and the imaginary — assuming for the moment that we can ever be sure what absolutely is real. (More on that when we come to the philosophy of science.) For instance, ancient and medieval chroniclers routinely put words in the mouths of historical figures, as if these had been recorded at the time. They considered it legitimate and even

necessary. A modern biographical novel, if responsibly written, continues that practice. In some respects, the method actually does convey a kind of truth that gets lost in scholarly treatises.

From here we may proceed to the roman à clef, which includes real people and incidents, more or less disguised. Science fiction and fantasy themselves have been known to do this. For example, a number of Fritz Leiber's stories are strongly autobiographical, and countless tales are satires.

Eventually, though, we get into the area of seemingly complete fiction, where "any resemblances to actual persons, living or dead, are purely coincidental." Just the same, we still find degrees of fictitiousness.

"Mainstream" strikes me as being as silly as any other category. Ever since Aristotle, if not earlier, critics have been putting literary works into pigeonholes, with generally pernicious results. However, since "mainstream" or "here-and-now" has long been dominant, we may as well begin by asking ourselves how the imagination functions there.

It seems to me that, while such tales do concern inventions of the authors', they contain only real classes. That is, suppose for instance that we have a novel about a waitress in a small Midwestern town. She's imaginary, the things that happen to her are, and the setting itself may be. Regardless, we know that waitresses and small Midwestern towns exist, and that under the postulated circumstances, events such as are described might well take place.

With a proper change of examples and tense,

the same is true of many historical narratives. In many more, though, not enough is known for certain about the milieus, and the authors have had to invent important details. Thus Mary Renault's fine novels about Theseus are largely conjectural. From there we can proceed into entirely archeological settings, where we may have less fact to go on than we do, nowadays, about the Moon.

Even this tenuous connection to reality would appear to snap when we move to outright fantasy. A schoolboy is supposed to have written in answer to a homework question, "A fantasy is a story about goblins, ghosts, witches, virgins, and other supernatural beings." More seriously, we might regard fantasy as fiction which involves unreal classes. Thus, an elephant walking down Market Street in San Francisco could belong in a mainstream tale, but a gremlin could not, since gremlins do not exist. Neither do blessings and curses and ever-filled purses and all the rest of magic.

Science fiction might then be regarded as a subdivision or offshoot of fantasy — fiction involving classes which are not real, as far as we know, but which might possibly be so in the future of someplace in the present, or might possibly have been real in the past.

Offhand, these criteria seem usable. A landing on the Moon was long known to be possible, and stories about such an expedition therefore counted as science fiction: until 1969, when the mere possibility became an actuality. Stories about manned landings on Mars remain science fiction, but one day — we hope — will cease to be, except

retrospectively. Likewise, we can imagine things elsewhere in space right now which could exist or be happening. We can also imagine them here at home, as in Donald Wollheim's chilling little story "Mimic," which deals with species of animals that survive by imitating us. We can base tales on more or less plausible conjectures about the past, too, which is why "caveman" yarns have appeared in science fiction magazines every once in a while.

These observations may look well and good at first glance. Yet I do not regard them as anything but observations, of limited validity. They do not establish any definitions.

To start with a minor quibble, where do they leave a writer who uses a near-future setting purely as a literary device? For instance, he may want to show party politics in action, and for that purpose describe a Presidential election campaign. Wishing the freedom that fiction affords, he makes the campaign imaginary, which requires him to set it a few years hence. His future is today with a different calendar date, no extrapolation at all. (Hm-m-m, a parallel universe is another gimmick....) Excellent though such a novel may be, it hasn't much in common with most of what's called science fiction.

More interesting and more to the point is the question: "What makes us sure that we know what is and is not possible?" Or: "How come science fiction includes so many impossibilities?"

The first of these touches on the philosophy of science. The second is involved with literary techniques and reader attitudes. We can address it right away.

Let's start by noting that concepts such as ghosts and gods and sympathetic magic are normally reckoned to belong in fantasy, while concepts such as faster-than-light travel, time travel, and parallel universes can be employed in science fiction. Then let's ask why.

After all, there is some evidence in favor of ghosts, or of life after death in general. It isn't scientifically rigorous, but it's there and cannot be dismissed out of hand, as the idea of stones falling from the sky was once dismissed. A great many sensible people believe in gods, or God, and raise arguments which are not unreasonable in support of this. (As hard-headed an ex-engineer and science fact writer as Jerry Pournelle will tell you in detail that the Resurrection of Christ is better attested than most events we take to be historical.) A case can actually be made for some kinds of magic working under some circumstances — and if we show this happening in a story, but call it "psionics," the story will rate as science fiction!

None of this is conclusive, unless one is determined to believe. A sophisticated unbeliever can take the position that the weight of experience and logic are against such ideas; not being able to track down every allegation, we do best to ignore those which, if true, would require us to change our entire picture of the universe; it's likeliest by far that all these claims arise from inadequate information, honest error, or fraud; certainly this has tended to prove true when any have been investigated in depth. The Missouri attitude and method have, indeed, been devastating when turned against things like astrology, "flying saucers," and the

"Bermuda Triangle."

Yet, while many would say the same of Velikovsky, a minority of scientifically respectable opinion maintains, with respectable arguments, that his hypotheses account for too much to be thrown out of court. This applies still more to the kind of religious and — in lesser degree — magical assertions I mentioned. So... why can't we put an out-and-out angel or spook or witch in a story and still call it science fiction?

As a matter of fact, this has been done. To cite one case, my novel Operation Chaos* (derived, be it explicitly said, from Robert Heinlein's grand old novella "Magic, Inc.") is full of entities like the above, but takes place in a continuum where the laws of nature aren't quite the same as those we know in ours.

If I'd made the setting, unequivocally, this existent Earth, the book would have counted as fantasy. Why?

Before trying to answer that, let me turn around and ask why a parallel universe is a science fiction concept — or faster-than-light travel or time travel. Not only have we far less anecdotal material in favor of these being real than we have in favor of ghosts; the average physicist holds that the overwhelming bulk of evidence is against them.

That is, the physicist might grudgingly grant that, in some far-fetched way, the personality may survive death of the body — e.g., as a pattern imposed on matter or energy, as in Peter Phillips'

^{*}Written well before I or the general public knew that the government was bumbling through a set of motions with that name!

delightful "Manna." However, the physicist will declare that faster-than-light travel of any sort is equivalent to time travel, which is absolutely impossible because it would violate causality, the most fundamental of the principles on which science itself is founded. Of parallel universes he will say that, since there is no way whatsoever in which we could interact with them, the "idea" is not an idea at all but a noise devoid of empirical meaning.

Therefore what is the reason for our assigning some concepts to fantasy and others to science fiction?

No doubt in part it's pure convention. As science appeared and progressed, ancient motifs came to be regarded as disproven, or at least as irrelevant to it. Contrasting was the unspoken assumption that anything involving a machine or a meter was necessarily scientific. (A lot of quacks, medical, automotive, and so forth, have profited from this attitude.)

That leads us straight into the origins of science fiction and its ongoing relationships with science and technology. In a way, this is a digression, because I have yet to reply fully to my own question about the classification of concepts. I do, though, think it's a necessary digression. To help you keep straight the fact that it is a detour and that presently we'll get back to where we were, I'll mark it off by asterisks.

I have no more wish to be dogmatic about the history of science fiction than I do about its defini-

tion. We can, if we like, maintain that the stories of Sinuhe and Odysseus are ancient members of the genre, that Lucian of Samosata invented the interplanetary voyage, and so on. Or we can deny this. It doesn't matter. What's important is the continuous development under the influence of science and of technological advance. Obviously that couldn't happen before these had gotten properly under way.

This isn't the place to study just when that took place. To some extent, in this area also, dating is arbitrary. Let's barely mention people like the Babylonians, Greeks, Hindus, Arabs, and medieval Europeans; the scientific revolution didn't come out of nowhere. Let's merely point to the sharp upswing in the rate of knowledge acquisition which started around the time of Copernicus. Shortly after, interplanetary stories began to proliferate from the pens of writers who included Kepler, Cyrano, and Voltaire. Science and its findings were becoming a strong stimulus to the imagination.

In his fine account of our field, Billion-Year Spree, Brian Aldiss traces science fiction back to Mary Shelley's Frankenstein. I happen to think the origins are rather older and more complex than that. Again, the argument isn't important. The point is that science fiction as we know it is essentially a child of the nineteenth century, though it has more remote ancestors too. Scientific knowledge, with all its social and philosophical implications, was starting to explode outward at that time. The Industrial Revolution was taking hold of almost everybody's life in the Western countries. In-

evitably, some writers were influenced. What is surprising is how few were.

In my opinion, the two primary sources of science fiction as we know it are Jules Verne and H. G. Wells. They had forerunners of their own, but virtually everything done since traces back to one or another of them, or to both. Verne embodied "hard" science and technophilia; he expressed the exuberance of discovery and engineering achievement. Wells generally ignored technical details, or played fast and loose with them, in order to concentrate on the effects of a changing world and changing world-view on people.

Yes, I know I'm oversimplifying. I'm well aware of Verne's somber, complex Captain Nemo and Wells' purely technological "The Land Ironclads," to mention only two exceptions. However, the purpose of this section is not to trace literary history but a set of themes and attitudes. The basic Vernean and Wellsian kinds of science fiction have been its two strands ever since, now separating, now interweaving, sometimes blending, but nearly always identifiable.

Although Wells outraged Verne by his free-andeasy story assumptions, Wells too was a son of the scientific era. He would set forth things like time travel or invisibility or Boomfood without worrying about awkward details of physics and chemistry; but he seldom postulated that wishing would make them so. (Even "The Man Who Could Work Miracles" is a sardonic commentary on that notion.) The relevant laws of nature had to be discovered first, the necessary apparatus or material prepared; if nothing else, a spontaneously occurring phenomenon remained a natural phenomenon. It was a very normal attitude for a Victorian to take. When he did not — when he returned to archaic motifs, as in "The Inexperienced Ghost" — he knew he was fantasizing, he was temporarily opting out of the scientific world-view.

The dichotomy is perhaps best illustrated in Kipling, who wrote a few marvelous hard science stories, e.g., "With the Night Mail," as meticulously detailed as the works of Heinlein were to be a couple of generations later. He also produced outright fantasies, such as "The Finest Story in the World'," which simply takes for granted that the ancient belief in reincarnation is correct. His touchstone tale may be "Wireless." In this stunning piece of art, a wretched apothecary clerk, dying of tuberculosis, becomes, for a short while, in rapport with long-dead John Keats. Yet this doesn't happen by a whim of the gods. The implication is unmistakable that it happens because, in some unknown fashion, an experimental radio set created the right conditions for it.

And thus we return to our question.

To put a complex matter into a few words, I think we accept an unreal class as "science fiction" when a certain assumption underlies it. We call it "fantasy" when the assumption does not.

What exactly is this assumption? It is the basic scientific one, that the universe makes sense, that the rational and exploratory human mind can come to an understanding of things.

In a famous though seldom read paper, Simon Newcomb "proved" that heavier-than-air flying craft were impossible, not many years before Kitty Hawk. It's worth noting that Newcomb was a distinguished astronomer who had made several valuable discoveries about the cosmos. It's also worth noting that his paper was mathematically impeccable; he just didn't foresee that more efficient powerplants would be developed. Finally, most relevant to this essay, it's worth noting that he took the trouble. He would scarcely have deigned to dispute the existence of witches. Heavier-than-air craft made enough sense that he felt they deserved an argument. In short, they amounted to a "hard" type of science fiction notion.

The growth of knowledge since then has brought home to thoughtful scientists how much we do not know. Hence far-fetched ideas like time travel and faster-than-light travel deserve at least to be refuted. They are not mere gibberish.

So, harking back to Verne, Wells, and Kipling, I think that the science fiction or fantasy character of an idea, while partly conventional, is partly—and most significantly—a matter of implicit attitude. In science fiction, however wild the story postulate, we find an implication that it ties in somehow with what we do know of science; that it's describable in rational terms. Regardless of what we may come upon in the future, it will in some way be intellectually continuous with the scientific past, much as Einstein and Bohr were intellectually continuous with Newton and Maxwell, profoundly though they changed our picture

of the universe. So, for example, when a writer gets around the light-speed limitation by sending his ship through hyperspace, he implies that a hyperspace of this kind might actually exist and we might actually learn about it.

In contrast, when James Branch Cabell sends Jurgen through Heaven and Hell and all points between, he is not in the slightest concerned with scientific laws or rationalizations; they are totally irrelevant to his story.

It might be pleasant—it would be, to people who like to think in categories—if here we had at last come upon a clear distinction between science fiction and fantasy. Unfortunately, we haven't. The shadings and interplays are infinite.

Some of them arise from science itself. The fact is that the three heretical notions I mentioned. together with several more, are, as of the last few years, no longer so disreputable. Perfectly respectable scientists have been working on them: for instance, Kerr on faster-than-light travel, Tipler on time travel, and Everett on parallel universes. I hasten to add that none of these people claim to have proven that any such things could be. I do not, repeat not, say on their behalf that they have done more than examine certain fascinating problems on the frontiers of physics. I do say on my own behalf that the discoveries which they - and others, such as Hawking, to name only one man - are making, reopen these questions, and thereby reopen fundamental questions of causality and the nature of ultimate reality.

Later on in this series, we'll look again at that. For now, let me remark that the latest scientific

investigations suggest that the wildest flights of science fiction fancy may be stodgily unimaginative compared to the cosmos itself.

Meanwhile, having discussed the semantics of the subject a little, we should come to grips with its actual characteristics. In the next installment, we'll consider "hard" science fiction and ask how hard it really is...or even can be, when genuine science is becoming fantastic.



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(continued on page one)