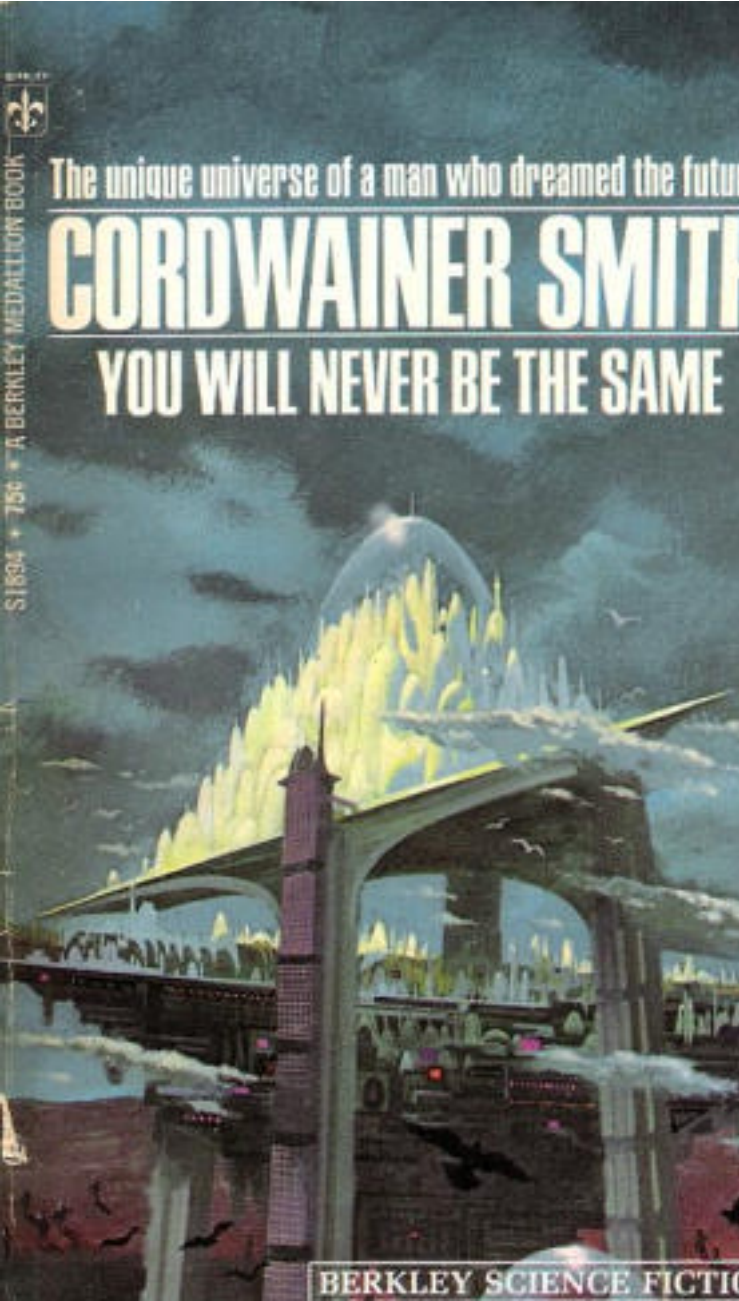
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NO, NO, NOT ROGOV!

That golden shape on the golden steps shook and fluttered like a bird gone mad—like a bird imbued with an intellect and a soul, and, nevertheless, driven mad by ecstasies and terrors beyond human understanding—ecstasies drawn momentarily down into reality by the consummation of superlative art. A thousand worlds watched.

Had the ancient calendar continued this would have been A.D. 13,582. After defeat, after disappointment, after ruin and reconstruction, mankind had leapt among the stars.

Out of meeting inhuman art, out of confronting non-human dances, mankind had made a superb esthetic effort and had leapt upon the stage of all the worlds.

The golden steps reeled before the eyes. Some eyes had retinas. Some had crystalline cones. Yet all eyes were fixed upon the golden shape which interpreted "The Glory and Affirmation of Man" *in the Inter-World Dance Festival of what might have been A.D. 13,582.*

Once again mankind was winning the contest. Music and dance were hypnotic beyond the limits of systems, compelling, shocking to human and inhuman eyes. The dance was a triumph of shock—the shock of dynamic beauty.

The golden shape on the golden steps executed shimmering intricacies of meaning. The body was gold and still human. The body was a woman, but more than a woman. On the golden steps, in the golden light, she trembled and and fluttered like a bird gone mad.

I

The Ministry of State Security had been positively shocked when they found that a Nazi agent, more heroic than prudent, had almost reached N. Rogov.

Rogov was worth more to the Soviet armed forces than any two air armies, more than three motorized divisions. His brain was a weapon, a weapon for the Soviet power.

Since the brain was a weapon, Rogov was a prisoner.

He didn't mind.

Rogov was a pure Russian type, broad-faced, sandy-haired, blue-eyed, with whimsey in his smile and amusement in the wrinkles of the tops of his cheeks.

"Of course I'm a prisoner," Rogov used to say. "I am a prisoner of State service to the Soviet peoples. But the workers and peasants are good to me. I am an academician of the All Union Academy of Sciences, a major general in the Red Air Force, a professor in the University of Kharkov, a deputy works manager of the Red Flag Combat Aircraft Production Trust. From each of these I draw a salary."

Sometimes he would narrow his eyes at his Russian scientific colleagues and ask them in dead earnest, "Would I serve capitalists?"

The affrighted colleagues would try to stammer their way out of the embarrassment, protesting their common loyalty to Stalin or Beria, or Zhukov, or Molotov, or Bulganin, as the case may have been.

Rogov would look very Russian: calm, mocking, amused. He would let them stammer.

Then he'd laugh.

Solemnity transformed into hilarity, he would explode into bubbling, effervescent, good-humored laughter: "Of course I could not serve the capitalists. My little Anastasia would not let me."

The colleagues would smile uncomfortably and would wish that Rogov did not talk so wildly, or so comically, or so freely.

Even Rogov might wind up dead.

Rogov didn't think so.

They did.

Rogov was afraid of nothing.

Most of his colleagues were afraid of each other, of the Soviet system, of the world, of life, and of death.

Perhaps Rogov had once been ordinary and mortal like other people and full of fears.

But he had become the lover, the colleague, the husband of Anastasia Fyodorovna Cherpas.

Comrade Cherpas had been his rival, his antagonist, his competitor, in the struggle for scientific eminence in the daring Slav frontiers of Russian science. Russian science could never overtake the inhuman perfection of German method, the rigid intellectual and moral discipline of German teamwork, but the Russians could and did get ahead of the Germans by giving vent to their bold, fantastic imaginations. Rogov had pioneered the first rocket launchers of 1939. Cherpas had finished the job by making the best of the rockets radio-directed.

Rogov in 1942 had developed a whole new system of photo-mapping. Comrade Cherpas had applied it to color film. Rogov, sandy-haired, blue-eyed, and smiling, had recorded his criticisms of Comrade Cherpas's naiveté and unsoundness at the top secret meetings of Russian scientists during the black winter nights of 1943. Comrade Cherpas, her butter-yellow hair flowing down like living water to her shoulders, her unpainted face gleaming with fanaticism, intelligence, and dedication, would snarl her own defiance at him, deriding his Communist theory, pinching at his pride, hitting his intellectual hypotheses where they were weakest.

By 1944 a Rogov-Cherpas quarrel had become something worth traveling to see.

In 1945 they were married.

Their courtship was secret, their wedding a surprise, their partnership a miracle in the upper ranks of Russian science.

The emigré press had reported that the great scientist,

Peter Kapitza, once remarked "Rogov and Cherpas, there is a team. They're Communists, good Communists; but they're better than that! They're *Russian,* Russian enough to beat the world. Look at them. That's the future, our Russian future!" Perhaps the quotation was an exaggeration, but it did show the enormous respect in which both Rogov and Cherpas were held by their colleagues in Soviet Science.

Shortly after their marriage strange things happened to them.

Rogov remained happy. Cherpas was radiant.

Nevertheless, the two of them began to have haunted expressions as though they had seen things which words could not express, as though they had stumbled upon secrets too important to be whispered even to the most secure agents of the Soviet State Police.

In 1947 Rogov had an interview with Stalin. As he left Stalin's office in the Kremlin, the great leader himself came to the door, his forehead wrinkled in thought, nodding, "Da, da, da."

Even his own personal staff did not know why Stalin was saying, "Yes, yes, yes," but they did see the orders that went forth marked ONLY BY SAFE HAND, and TO BE READ AND RETURNED, NOT RETAINED, and furthermore stamped FOR AUTHORIZED EYES ONLY AND UNDER NO CIRCUMSTANCES TO BE COPIED.

Into the true and secret Soviet budget that year by the direct personal order of a noncommittal Stalin an item was added for "Project Telescope." Stalin tolerated no inquiry, brooked no comment.

A village which had had a name became nameless.

A forest which had been opened to the workers and peasants became military territory.

Into the central post office in Kharkov there went a new box number for the *village of Ya. Ch.*

Rogov and Cherpas, comrades and lovers, scientists both and Russians both, disappeared from the everyday lives of their colleagues. Their faces were no longer seen at scientific meetings. Only rarely did they emerge.

On the few times they were seen, usually to and from

Moscow at the time the All Union budget was made up each year, they seemed smiling and happy. But they did not make jokes.

What the outside world did not know was that Stalin in giving them their own project, granting them a paradise restricted to themselves, had seen to it that a snake went with them in the paradise. The snake this time was not one, but two personalities—Gausgofer and Gauck.

II

Stalin died.

Beria died too—less willingly.

The world went on.

Everything went into the forgotten village of Ya. Ch. and nothing came out.

It was rumored that Bulganin himself visited Rogov and Cherpas. It was even whispered that Bulganin said as he went to the Kharkov airport to fly back to Moscow, "It's big, big, big. There'll be no cold war if they do it. There won't be any war of any kind. We'll finish capitalism before the capitalists can ever begin to fight. If they do it. If they do it." Bulganin was reported to have shaken his head slowly in perplexity and to have said nothing more but to have put his initials on the unmodified budget of Project Telescope when a trusted messenger next brought him an envelope from Rogov.

Anastasia Cherpas became a mother. Their first boy looked like his father. He was followed by a little girl. Then another little boy. The children didn't stop Cherpas's work. They had a large dacha and trained nursemaids took over the household.

Every night the four of them dined together.

Rogov, Russian, humorous, courageous, amused.

Cherpas, older, more mature, more beautiful then ever but just as biting, just as cheerful, just as sharp as she had ever been.

But then the other two, the two who sat with them across the years of all their days, the two colleagues who had been visited upon them by the all-powerful word of Stalin himself.

Gausgofer was a female: bloodless, narrow-faced, with a voice like a horse's whinny. She was a scientist and a policewoman, and competent at both jobs. In 1917 she had reported her own mother's whereabouts to the Bolshevic Terror Committee. In 1924 she had commanded her father's execution. He had been a Russian German of the old Baltic nobility and he had tried to adjust his mind to the new system, but he had failed. In 1930 she had let her lover trust her a little too much. He had been a Roumanianian Communist, very high in the Party, but he had whispered into her ear in the privacy of their bedroom, whispered with the tears pouring down his face, she had listened affectionately and quietly and had delivered his words to the police the next morning.

With that she had come to Stalin's attention.

Stalin had been tough. He had addressed her brutally, "Comrade, you have some brains. I can see you know what Communism is all about. You understand loyalty. You're going to get ahead and serve the Party and the working class, but is that all you want?" He had spat the question at her.

She had been so astonished that she gaped.

The old man had changed his expression, favoring her with leering benevolence. He had put his forefinger on her chest, "Study science, Comrade. Study science. Communism plus science equals victory. You're too clever to stay in police work."

Gausgofer took a reluctant pride in the fiendish program of her German namesake, the wicked old geographer who made geography itself a terrible weapon in the Nazi anti-Soviet struggle.

Gausgofer would have liked nothing better than to intrude on the marriage of Cherpas and Rogov.

Gausgofer fell in love with Rogov the moment she saw him.

Gausgofer fell in hate—and hate can be as spontaneous and miraculous as love—with Cherpas the moment she saw *her.*

But Stalin had guessed that too.

With the bloodless, fanatic Gausgofer he had sent a man named B. Gauck.

Gauck was solid, impassive, blank-faced. In body he was about the same height as Rogov. Where Rogov was muscular Gauck was flabby. Where Rogov's skin was fair and shot through with the pink and health of exercise, Gauck's skin was like stale lard, greasy, gray-green, sickly even on the best of days.

Gauck's eyes were black and small. His glance was as cold and sharp as death. Gauck had no friends, no enemies, no beliefs, no enthusiasm. Even Gausgofer was afraid of him.

Gauck never drank, never went out, never received mail, never sent mail, never spoke a spontaneous word. He was never rude, never kind, never friendly, never really withdrawn: he couldn't withdraw any more than the constant withdrawal of all his life.

Rogov had turned to his wife in the secrecy of their bedroom soon after Gausgofer and Gauck came and had said, "Anastasia, is that man sane?"

Cherpas intertwined the fingers of her beautiful, expressive hands. She who had been the wit of a thousand scientific meetings was now at a loss for words. She looked up at her husband with a troubled expression. "I don't know, Comrade . . . I just don't know . . ."

Rogov smiled his amused Slavic smile. "At the least then I don't think Gausgofer knows either."

Cherpas snorted with laughter and picked up her hairbrush. "That she doesn't. She really doesn't know, does she? I'll wager she doesn't even know to whom he reports."

That conversation had receded into the past. Gauck, Gausgofer, the bloodless eyes and the black eyes—they remained.

Every dinner the four sat down together.

Every morning the four met in the laboratory.

Rogov's great courage, high sanity, and keen humor kept the work going.

Cherpas's flashing genius fueled him whenever the routine overloaded his magnificent intellect.

Gausgofer spied and watched and smiled her bloodless smiles; sometimes, curiously enough, Gausgofer made genuinely constructive suggestions. She never understood the whole frame of reference of their work, but she knew enough of the mechanical and engineering details to be very useful on occasion.

Gauck came in, sat down quietly, said nothing, did nothing. He did not even smoke. He never fidgeted. He never went to sleep. He just watched.

The laboratory grew and with it there grew the immense configuration of the espionage machine.

III

In theory what Rogov had proposed and Cherpas seconded was imaginable. It consisted of an attempt to work out an integrated theory for all the electrical and radiation phenomena accompanying consciousness and to duplicate the electrical functions of mind without the use of animal material.

The range of potential products was immense.

The first product Stalin had asked for was a receiver, if possible, capable of tuning in the thoughts of a human mind and of translating those thoughts into either a punch-tape machine, an adapted German Hellschreiber machine, or phonetic speech. If the grids could be turned around and the brain-equivalent machine could serve not as a receiver but as a transmitter, it might be able to send out stunning forces which would paralyze or kill the process of thought.

At its best, Rogov's machine would be designed to confuse human thought over great distances, to select human targets to be confused, and to maintain an electronic jam-

ming system which would jam straight into the human mind without the requirement of tubes or receivers.

He had succeeded—in part. He had given himself a violent headache in the first year of work.

In the third year he had killed mice at a distance of ten kilometers. In the seventh year he had brought on mass hallucinations and a wave of suicides in a neighboring village. It was this which impressed Bulganin.

Rogov was now working on the receiver end. No one had ever explored the infinitely narrow, infinitely subtle bands of radiation which distinguished one human mind from another, but Rogov was trying, as it were, to tune in on minds far away.

He had tried to develop a telepathic helmet of some kind, but it did not work. He had then turned away from the reception of pure thought to the reception of visual and auditory images. Where the nerve ends reached the brain itself he had managed over the years to distinguish whole pockets of microphenomena, and on some of these he had managed to get a fix.

With infinitely delicate tuning he had succeeded one day in picking up the eyesight of their second chauffeur and had managed, thanks to a needle thrust in just below his own right eyelid, to "see" through the other man's eyes as the other man, all unaware, washed their Zis limousine 1600 meters away.

Cherpas had surpassed his feat later that winter and had managed to bring in an entire family having dinner over in a nearby city. She had invited B. Gauck to have a needle inserted into his cheekbone so that he could see with the eyes of an unsuspecting spied-on stranger. Gauck had refused any kind of needles, but Gausgofer had joined in the work.

The espionage machine was beginning to take form.

Two more steps remained. The first step consisted of tuning in on some remote target, such as the White House in Washington or the NATO Headquarters outside of Paris. The machine itself could obtain perfect intelligence by eavesdropping on the living minds of people far away.

The second problem consisted of finding a method of

jamming those minds at a distance, stunning them so that the subject personnel fell into tears, confusion, or sheer insanity.

Rogov had tried, but he had never gotten more than 30 kilometers from the nameless village of Ya. Ch.

One November there had been 70 cases of hysteria, most of them ending in suicide, down in the city of Kharkov several hundred kilometers away, but Rogov was not sure that his own machine was doing it.

Comrade Gausgofer dared to stroke his sleeve. Her white lips smiled and her watery eyes grew happy as she said in her high, cruel voice, "*You* can do it, Comrade. You can do it."

Cherpas looked on with contempt. Gauck said nothing.

The female agent Gausgofer saw Cherpas's eyes upon her, and for a moment an arc of living hatred leapt between the two women.

The three of them went back to work on the machine.

Gauck sat on his stool and watched them.

The laboratory workers never talked very much and the room was quiet.

IV

It was the year in which Eristratov died that the machine made a breakthrough. Eristratov died after the Soviet and People's democracies had tried to end the cold war with the Americans.

It was May. Outside the laboratory the squirrels ran among the trees. The leftovers from the night's rain dripped on the ground and kept the earth moist. It was comfortable to leave a few windows open and to let the smell of the forest into the workshop.

The smell of their oil-burning heaters and the stale smell of insulation, of ozone and the heated electronic gear was something with which all of them were much too familiar.

Rogov had found that his eyesight was beginning to

suffer because he had to get the receiver needle somewhere near his optic nerve in order to obtain visual impressions from the machine. After months of experimentation with both animal and human subjects he had decided to copy one of their last experiments, successfully performed on a prisoner boy fifteen years of age, by having the needle slipped directly through the skull, up and behind the eye. Rogov had dislike using prisoners, because Gauck, speaking on behalf of security, always insisted that a prisoner used in experiments had to be destroyed in not less than five days from the beginning of the experiment. Rogov had satisfied himself that the skull-and-needle technique was safe, but he was very tired of trying to get frightened unscientific people to carry the load of intense, scientific attentiveness required by the machine.

Rogov recapitulated the situation to his wife and to their two strange colleagues.

Somewhat ill-humored, he shouted at Gauck, "Have you ever known what this is all about? You've been here years. Do you know what we're trying to do? Don't you ever want to take part in the experiments yourself? Do you realize how many years of mathematics have gone into the making of these grids and the calculation of these wave patterns? Are you good for anything?"

Gauck said, tonelessly and without anger, "Comrade Professor, I am obeying orders. You are obeying orders, too. I've never impeded you."

Rogov almost raved, "I know you never got in my way. We're all good servants of the Soviet State. It's not a question of loyalty. It's a question of enthusiasm. Don't you ever want to glimpse the science we're making? We are a hundred years or a thousand years ahead of the capitalist Americans. Doesn't that excite you? Aren't you a human being? Why don't you take part? Will you understand me when I explain it?"

Gauck said nothing: he looked at Rogov with his beady eyes. His dirty-gray face did not change expression. Gausgofer exhaled loudly in a grotesquely feminine sigh of relief, but she too said nothing. Cherpas, her winning smile and her friendly eyes looking at her husband and

two colleagues, said, "Go ahead, Nikolai. The Comrade can follow if he wants to."

Gausgofer looked enviously at Cherpas. She seemed inclined to keep quiet, but then had to speak. She said, "Do go ahead, Comrade Professor."

Said Rogov, "*Kharosho*, I'll do what I can. The machine is now ready to receive minds over immense distances." He wrinkled his lip in amused scorn. "We may even spy into the brain of the chief rascal himself and find out what Eisenhower is planning to do today against the Soviet people. Wouldn't it be wonderful if our machine could stun him and leave him sitting addled at his desk?"

Gauck commented, "Don't try it. Not without orders."

Rogov ignored the interruption and went on. "First I receive. I don't know what I will get, who I will get, or where they will be. All I know is that this machine will reach out across all the minds of men and beasts now living and it will bring the eyes and ears of a single mind directly into mine. With the new needle going directly into the brain it will be possible for me to get a very sharp fixation of position. The trouble with that boy last week was that even though we knew he was seeing something outside of this room, he appeared to be getting sounds in a foreign language and did not know enough English or German to realize where or what the machine had taken him to see."

Cherpas laughed, "I'm not worried. I saw then it was safe. You go first, my husband. If our Comrades don't mind—?"

Gauck nodded.

Gausgofer lifted her bony hand breathlessly up to her skinny throat and said, "Of course, Comrade Rogov, of course. You did *all* the work. You *must* be the first."

Rogov sat down.

A white-smocked technician brought the machine over to him. It was mounted on three rubber-tired wheels and it resembled the small X-ray units used by dentists. In place of the cone at the head of the X-ray machine there was a long, incredibly tough needle. It had been made for them by the best surgical-steel craftsmen in Prague.

Another technician came up with a shaving bowl, a brush, and a straight razor. Under the gaze of Gauck's deadly eyes he shaved an area four centimeters square on the top of Rogov's head.

Cherpas herself then took over. She set her husband's head in the clamp and used a micrometer to get the skullfittings so tight and so clear that the needle would push through the dura mater at exactly the right point.

All this work she did deftly with kind, very strong fingers. She was gentle, but she was firm. She was his wife, but she was also his fellow scientist and his fellow colleague in the Soviet State.

She stepped back and looked at her work. She gave him one of their own very special smiles, the secret gay smiles which they usually exchanged with each other only when they were alone. "You won't want to do this every day. We're going to have to find some way of getting into the brain without using this needle. But it won't hurt you."

"Does it matter if it does hurt?" said Rogov. "This is the triumph of all our work. *Bring it down.*"

Gausgofer looked as though she would like to be invited to take part in the experiment, but she dared not interrupt Cherpas. Cherpas, her eyes gleaming with attention, reached over and pulled down the handle which brought the tough needle to within a tenth of a millimeter of the right place.

Rogov spoke very carefully: "All I felt was a little sting. You can turn the power on now."

Gausgofer could not contain herself. Timidly she addressed Cherpas. "May *I* turn on the power?"

Cherpas nodded. Gauck watched. Rogov waited. Gausgofer pulled down the bayonet switch.

The power went on.

With an impatient twist of her hand, Anastasia Cherpas ordered the laboratory attendants to the other end of the room. Two or three of them had stopped working and were staring at Rogov, staring like dull sheep. They looked embarrassed and then they huddled in a white-smocked herd at the other end of the laboratory.

The wet May wind blew in on all of them. The scent of

forest and leaves was about them.

The three watched Rogov.

Rogov's complexion began to change. His face became flushed. His breathing was so loud and heavy they could hear it several meters away. Cherpas fell on her knees in front of him, eyebrows lifted in mute inquiry.

Rogov did not dare nod, not with a needle in his brain. He said through flushed lips, speaking thickly and heavily, "Do—not—stop—now."

Rogov himself did not know what was happening. He thought he might see an American room, or a Russian room, or a tropical colony. He might see palm trees, or forests, or desks. He might see guns or buildings, washrooms or beds, hospitals, homes, churches. He might see with the eyes of a child, a woman, a man, a soldier, a philosopher, a slave, a worker, a savage, a religious one, a Communist, a reactionary, a governor, a policeman. He might hear voices; he might hear English, or French, or Russian, Swahili, Hindu, Malay, Chinese, Ukranian, Armenian, Turkish, Greek. He did not know.

Something strange was happening.

It *seemed* to him that he had left the world, that he had left time. The hours and the centuries shrank up like the meters and the machine, unchecked, reached out for the most powerful signal which any humankind had transmitted. Rogov did not know it, but the machine had conquered time.

The machine reached the dance, the human challenger and the dance festival of the year that was not A.D. 13,582, but which might have been.

Before Rogov's eyes the golden shape and the golden steps shook and fluttered in a ritual a thousand times more compelling than hypnotism. The rhythms meant nothing and everything to him. This was Russia, this was Communism. This was his life—indeed it was his soul acted out before his very eyes.

For a second, the last second of his ordinary life, he looked through flesh-and-blood eyes and saw the shabby woman whom he had once thought beautiful. He saw Anastasia Cherpas, and he did not care.

His vision concentrated once again on the dancing image, this woman, those postures, that dance!

Then the sound came in—music that would have made a Tschaikovsky weep, orchestras which would have silenced Shostakovich or Khachaturian forever, so much did it surpass the music of the twentieth century.

The people-who-were-not-people between the stars had taught mankind many arts. Rogov's mind was the best of its time, but his time was far, far behind the time of the great dance. With that one vision Rogov went firmly and completely mad. He became blind to the sight of Cherpas, Gausgofer, and Gauck. He forgot the village of Ya. Ch. He forgot himself. He was like a fish, bred in stale-fresh water which is thrown for the first time into a living stream. He was like an insect emerging from the chrysalis. His twentieth-century mind could not hold the imagery and the impact of the music and the dance.

But the needle was there and the needle transmitted into his mind more than his mind could stand.

The synapses of his brain flicked like switches. The future flooded into him.

He fainted. Cherpas leapt forward and lifted the needle. Rogov fell out of the chair.

V

It was Gauck who got the doctors. By nightfall they had Rogov resting comfortably and under heavy sedation. There were two doctors, both from the military headquarters. Gauck had obtained authorization for their services by dint of a direct telephone call to Moscow.

Both the doctors were annoyed. The senior one never stopped grumbling at Cherpas.

"You should not have done it, Comrade Cherpas. Comrade Rogov should not have done it either. You can't go around sticking things into brains. That's a medical problem. None of you people are doctors of medicine. It's all right for you to contrive devices with the prisoners, but

you can't inflict things like this on Soviet scientific personnel. I'm going to get blamed because I can't bring Rogov back. You heard what he was saying. All he did was mutter, 'That golden shape on the golden steps, that music, that me is a true me, that golden shape, that golden shape, I want to be with that golden shape,' and rubbish like that. Maybe you've ruined a first-class brain forever—" He stopped himself short as though he had said too much. After all, the problem was a security problem and apparently both Gauck and Gausgofer represented the security agencies.

Gausgofer turned her watery eyes on the doctor and said in a low, even, unbelievably poisonous voice, "Could *she* have done it, Comrade Doctor?"

The doctor looked at Cherpas, answering Gausgofer, "How? You were there. I wasn't. *How* could she have done it? *Why* should she do it? You were there."

Cherpas said nothing. Her lips were compressed tight with grief. Her yellow hair gleamed, but her hair was all that remained, at that moment, of her beauty. She was frightened and she was getting ready to be sad. She had no time to hate foolish women or to worry about security; she was concerned with her colleague, her lover, her husband Rogov.

There was nothing much for them to do except to wait. They went into a large room and tried to eat.

The servants had laid out immense dishes of cold sliced meat, pots of caviar, and an assortment of sliced breads, pure butter, genuine coffee, and liquors.

None of them ate much.

They were all waiting.

At 9:15 the sound of rotors beat against the house.

The big helicopter had arrived from Moscow.

Higher authorities took over.

VI

The higher authority was a deputy minister, a man by the name of V. Karper.

Karper was accompanied by two or three uniformed colonels, by an engineer civilian, by a man from the headquarters of the Communist Party of the Soviet Union, and by two doctors.

They dispensed with the courtesies. Karper merely said, "You are Cherpas. I have met you. You are Gausgofer. I have seen your reports. You are Gauck."

The delegation went into Rogov's bedroom. Karper snapped, "Wake him."

The military doctor who had given him sedatives said, "Comrade, you mustn't—"

Karper cut him off. "Shut up." He turned to his own physician, pointed at Rogov, "Wake him up."

The doctor from Moscow talked briefly with the senior military doctor. He too began shaking his head. He gave Karper a disturbed look. Karper guessed what he might hear. He said, "Go ahead. I know there is some danger to the patient, but I've got to get back to Moscow with a report."

The two doctors worked over Rogov. One of them asked for his bag and gave Rogov an injection. Then all of them stood back from the bed.

Rogov writhed in his bed. He squirmed. His eyes opened, but he did not see them. With childishly clear and simple words Rogov began to talk: ". . . that golden shape, the golden stairs, the music, take me back to the music, I want to be with the music, I really am the music . . ." and so on in an endless monotone.

Cherpas leaned over him so that her face was directly in his line of vision. "My darling! My darling, wake up. This is serious."

It was evident to all of them that Rogov did not hear her, because he went on muttering about golden shapes.

For the first time in many years Gauck took the ini-

tiative. He spoke directly to the man from Moscow, Karper. "Comrade, may I make a suggestion?"

Karper looked at him. Gauck nodded at Gausgofer. "We were both sent here by orders of Comrade Stalin. She is senior. She bears the responsibility. All I do is double-check."

The deputy minister turned to Gausgofer. Gausgofer had been staring at Rogov on the bed; her blue, watery eyes were tearless and her face was drawn into an expression of extreme tension.

Karper ignored that and said to her firmly, clearly, commandingly, "What do you recommend?"

Gausgofer looked at him very directly and said in a measured voice, "I do not think that the case is one of brain damage. I believe that he has obtained a communication which he must share with another human being and that unless one of us follows him there may be no answer."

Karper barked: "Very well. But what do we do?"

"Let *me* follow—into the machine."

Anastasia Cherpas began to laugh slyly and frantically. She seized Karper's arm and pointed her finger at Gausgofer. Karper stared at her.

Cherpas slowed down her laughter and shouted at Karper, "The woman's mad. She has loved my husband for many years. She has hated my presence, and now she thinks that she can save him. She thinks that she can follow. She thinks that he wants to communicate with her. That's ridiculous. I will go myself!"

Karper looked about. He selected two of his staff and stepped over into a corner of the room. They could hear him talking, but they could not distinguish the words. After a conference of six or seven minutes he returned.

"You people have been making serious security charges against each other. I find that one of our finest weapons, the mind of Rogov, is damaged. Rogov's not just a man. He is a Soviet project." Scorn entered his voice. "I find that the senior security officer, a policewoman with a notable record, is charged by another Soviet scientist with a silly infatuation. I disregard such charges. The develop-

ment of the Soviet State and the work of Soviet science cannot be impeded by personalities. Conrade Gausgofer will follow. I am acting tonight because my own staff physician says that Rogov may not live and it is very important for us to find out just what has happened to him and why."

He turned his baneful gaze on Cherpas. "You will not protest, Comrade. Your mind is the property of the Russian State. Your life and your education have been paid for by the workers. You cannot throw these things away because of personal sentiment. If there is anything to be found Comrade Gausgofer will find it for both of us."

The whole group of them went back into the laboratory. The frightened technicians were brought over from the barracks. The lights were turned on and the windows were closed. The May wind had become chilly.

The needle was sterilized.

The electronic grids were warmed up.

Gausgofer's face was an impassive mask of triumph as she sat in the receiving chair. She smiled at Gauck as an attendant brought the soap and the razor to shave a clean patch on her scalp.

Gauck did not smile back. His black eyes stared at her. He said nothing. He did nothing. He watched.

Karper walked to and fro, glancing from time to time at the hasty but orderly preparation of the experiment.

Anastasia Cherpas sat down at a laboratory table about five meters away from the group. She watched the back of Gausgofer's head as the needle was lowered. She buried her face in her hands. Some of the others thought they heard her weeping, but no one heeded Cherpas very much. They were too intent on watching Gausgofer.

Gausgofer's face became red. Perspiration poured down the flabby cheeks. Her fingers tightened on the arm of her chair.

Suddenly she shouted at them, *"That golden shape on the golden steps."*

She leapt to her feet, dragging the apparatus with her.

No one had expected this. The chair fell to the floor. The needle holder, lifted from the floor, swung its weight

sidewise. The needle twisted like a scythe in Gausgofer's brain. Neither Rogov nor Cherpas had ever expected a struggle within the chair. *They did not know that they were going to tune in on A.D. 13,582.*

The body of Gausgofer lay on the floor, surrounded by excited officials.

Karper was acute enough to look around at Cherpas.

She stood up from the laboratory table and walked toward him. A thin line of blood flowed down from her cheekbone. Another line of blood dripped down from a position on her cheek, one and a half centimeters forward of the opening of her left ear.

With tremendous composure, her face as white as fresh snow, she smiled at him, "I eavesdropped."

Karper said, "What?"

"I eavesdropped, eavesdropped," repeated Anastasia Cherpas. "I found out where my husband has gone. It is not somewhere in this world. It is something hypnotic beyond all the limitations of our science. We have made a great gun, but the gun has fired upon us before we could fire it. You may think you will change my mind, Comrade Deputy Minister, but you will not.

"I know what has happened. My husband is never coming back. And I am not going any further forward without him.

"Project Telescope is finished. You may try to get someone else to finish it, but you will not."

Karper stared at her and then turned aside.

Gauck stood in his way.

"What do you want?" snapped Karper.

"To tell you," said Gauck very softly, "to tell you, Comrade Deputy Minister, that Rogov is gone as she says he is gone, that she is finished if she says she is finished, that all this is true. I know."

Karper glared at him. "How do you know?"

Gauck remained utterly impassive. With superhuman assurance and perfect calm he said to Karper, "Comrade, I do not dispute the matter. I know these people, though I do not know their science. Rogov is done for."

At last Karper believed him. Karper sat down in a chair

beside a table. He looked up at his staff. "Is it possible?"

No one answered.

"I ask you, is it possible?"

They all looked at Anastasia Cherpas, at her beautiful hair, her determined blue eyes, and the two thin lines of blood where she had eavesdropped with small needles.

Karper turned to her. "What do we do now?"

For an answer she dropped to her knees and began sobbing, "No, no, not Rogov! No, no, not Rogov!"

And that was all that they could get out of her. Gauck looked on.

On the golden steps in the golden light, a golden shape danced a dream beyond the limits of all imagination, danced and drew the music to herself until a sigh of yearning, yearning which became a hope and a torment, went through the hearts of living things on a thousand worlds.

Edges of the golden scene faded raggedly and unevenly into black. The gold dimmed down to a pale gold-silver sheen and then to silver, last of all to white. The dancer who had been golden was now a forlorn white-pink figure standing, quiet and fatigued, on the immense white steps. The applause of a thousand worlds roared in upon her.

She looked blindly at them. The dance had overwhelmed her too. Their applause could mean nothing. The dance was an end in itself. She would have to live, somehow, until she danced again.

THE LADY WHO SAILED *THE SOUL*

I

The story ran—how did the story run? Everyone knew the reference to Helen America and Mr. Grey-no-more, but no one knew exactly how it happened. Their names were welded to the glittering timeless jewelry of romance. Sometimes they were compared to Heloise and Abelard, whose story had been found among books in a long-buried library. Other ages were to compare their life with the weird, ugly-lovely story of the Go-Captain Taliano and the lady Dolores Oh.

Out of it all, two things stood forth—their love and the image of the great sails, tissue-metal wings with which the bodies of people finally fluttered out among the stars.

Mention him, and others knew her. Mention her, and they knew him. He was the first of the inbound sailors, and she was the lady who sailed *The Soul.*

It was lucky that people lost their pictures. The romantic hero was a very young-looking man, prematurely old and still quite sick when the romance came. And Helen America, she was a freak, but a nice one: a grim, solemn, sad, little brunette who had been born amid the laughter of humanity. She was not the tall, confident heroine of the actresses who later played her.

She was, however, a wonderful sailor. That much was true. And with her body and mind she loved Mr. Grey-no-more, showing a devotion which the ages can neither surpass nor forget. History may scrape off the patina of their names and appearances, but even history can do no more than brighten the love of Helen America and Mr. Grey-no-more.

Both of them, one must remember, were sailors.

II

The child was playing with a spieltier. She got tired of letting it be a chicken, so she reversed it into the fur-bearing position. When she extended the ears to the optimum development, the little animal looked odd indeed. A light breeze blew the animal-toy on its side, but the spieltier good-naturedly righted itself and munched contentedly on the carpet.

The little girl suddenly clapped her hands and broke forth with the question,

"Mamma, what's a sailor?"

"There used to be sailors, darling, a long time ago. They were brave men who took the ships out to the stars, the very first ships that took people away from our sun. And they had big sails. I don't know how it worked, but somehow, the light pushed them, and it took them a quarter of a life to make a single one-way trip. People only lived a hundred-and-sixty years at that time, darling, and it was forty years each way, but we don't need sailors any more."

"Of course not," said the child, "we can go right away. You've taken me to Mars and you've taken me to New Earth as well, haven't you, Mamma? And we can go anywhere else soon, but that only takes one afternoon."

"That's planoforming, honey. But it was a long time before the people knew how to planoform. And they could not travel the way we could, so they made great big sails. They made sails so big that they could not build them on Earth. They had to hang them out, halfway between Earth and Mars. And you know, a funny thing happened. ... Did you ever hear about the time the world froze?"

"No, mamma, what was that?"

"Well, a long time ago, one of these sails drifted and people tried to save it because it took a lot of work to build it. But the sail was so large that it got between the Earth and the sun. And there was no more sunshine, just night all the time. And it got very cold on Earth. All the atomic

power plants were busy, and all the air began to smell funny. And the people were worried and in a few days they pulled the sail back out of the way. And the sunshine came again."

"Mamma, were there ever any girl sailors?"

A curious expression crossed over the mother's face. "There was one. You'll hear about her later on when you are older. Her name was Helen America and she sailed The Soul *out to the stars. She is the only woman that ever did it. And that is a wonderful story."*

The mother dabbed at her eyes with a handkerchief.

The child said: "Mamma, tell me now. What's the story all about?"

At this point the mother became very firm and she said: "Honey, there are some things that you are not old enough to hear yet. But when you are a big girl, I'll tell you all about them."

The mother was an honest woman. She reflected a moment, and then she added, ". . . unless you read about it yourself first."

III

Helen America was to make her place in the history of mankind, but she started badly. The name itself was a misfortune.

No one ever knew who her father was. The officials agreed to keep the matter quiet.

Her mother was not in doubt. Her mother was the celebrated she-man Mona Muggeridge, a woman who had campaigned a hundred times for the lost cause of complete identity of the two genders. She had been a feminist beyond all limits, and when Mona Muggeridge, the one and only *Miss* Muggeridge, announced to the press that she was going to have a baby, that was first-class news.

Mona Muggeridge went further. She announced her firm conviction that fathers should not be identified. She

proclaimed that no woman should have consecutive children with the same man, that women should be advised to pick different fathers for their children so as to diversify and beautify the race. She capped it all by announcing that she, Miss Muggeridge, had selected the perfect father and would inevitably produce the only perfect child.

Miss Muggeridge, a bony, pompous blonde, stated that she would avoid the nonsense of marriage and family names, and that therefore the child, if a boy, would be called John America, and if a girl, Helen America.

Thus it happened that little Helen America was born with the correspondents in the press services waiting outside the delivery room. News-screens flashed the picture of a pretty three-kilogram baby. "It's a girl." "The perfect child." "Who's the dad?"

That was just the beginning. Mona Muggeridge was belligerent. She insisted, even after the baby had been photographed for the thousandth time, that this was the finest child ever born. She pointed to the child's perfections. She demonstrated all the foolish fondness of a doting mother, but felt that she, the great crusader, had discovered this fondness for the first time.

To say that this background was difficult for the child would be an understatement.

Helen America was a wonderful example of raw human material triumphing over its tormentors. By the time she was four years old, she spoke six languages, and was beginning to decipher some of the old Martian texts. At the age of five she was sent to school. Her fellow schoolchildren immediately developed a rhyme:

Helen, Helen
Fat and dumb
Doesn't know where
Her daddy's from!

Helen took all this and perhaps it was an accident of genetics that she grew to become a compact little person—a deadly serious little brunette. Challenged by lessons, haunted by publicity, she became careful and

reserved about friendships and desperately lonely in an inner world.

When Helen America was sixteen her mother came to a bad end. Mona Muggeridge eloped with a man she announced to be the perfect husband for the perfect marriage hitherto overlooked by mankind. The perfect husband was a skilled machine polisher. He already had a wife and four children. He drank beer and his interest in Miss Muggeridge seems to have been a mixture of good-natured comradeship and a sensible awareness of her motherly bankroll. The planetary yacht on which they eloped broke the regulations with an off-schedule flight. The bridegroom's wife and children had alerted the police. The result was a collision with a robotic barge which left both bodies unidentifiable.

At sixteen Helen was already famous, and at seventeen already forgotten, and very much alone.

IV

This was the age of sailors. The thousands of photo-reconnaissance and measuring missiles had begun to come back with their harvest from the stars. Planet after planet swam into the ken of mankind. The new worlds became known as the interstellar search missiles brought back photographs, samples of atmosphere, measurements of gravity, cloud coverage, chemical make-up and the like. Of the very numerous missiles which returned from their two- or three-hundred-year voyages, three brought back reports of New Earth, an earth so much like Terra itself that it could be settled.

The first sailors had gone out almost a hundred years before. They had started with small sails not over two-thousand miles square. Gradually the size of the sails increased. The technique of adiabatic packing and the carrying of passengers in individual pods reduced the damage done to the human cargo. It was great news when a sailor returned to Earth, a man born and reared under the light

of another star. He was a man who had spent a month of agony and pain, bringing a few sleep-frozen settlers, guiding the immense light-pushed sailing craft which had managed the trip through the great interstellar deeps in an objective time-period of forty years.

Mankind got to know the look of a sailor. There was a plantigrade walk to the way he put his body on the ground. There was a sharp, stiff, mechanical swing to his neck. The man was neither young nor old. He had been awake and conscious for forty years, thanks to the drug which made possible a kind of limited awareness. By the time the psychologists interrogated him, first for the proper authorities of the Instrumentality and later for the news releases, it was plain enough that he thought the forty years were about a month. He never volunteered to sail back, because he had actually aged forty years. He was a young man, a young man in his hopes and wishes, but a man who had burnt up a quarter of a human lifetime in a single agonizing experience.

At this time Helen America went to Cambridge. Lady Joan's College was the finest woman's college in the Atlantic world. Cambridge had reconstructed its protohistoric traditions and the neo-British had recaptured that fine edge of engineering which reconnected their traditions with the earliest antiquity.

Naturally enough the language was cosmopolite Earth and not archaic English but the students were proud to live at a reconstructed university very much like the archaeological evidence showed it to have been before the period of darkness and troubles came upon the Earth. Helen shone a little in this renaissance.

The news-release services watched Helen in the cruelest possible fashion. They revived her name and the story of her mother. Then they forgot her again. She had put in for six professions, and her last choice was "sailor." It happened that she was the first woman to make the application—first because she was the only woman young enough to qualify who had also passed the scientific requirements.

Her picture was beside his on the screens before they ever met each other.

Actually, she was not anything like that at all. She had suffered so much in her childhood from *Helen, Helen, fat and dumb,* that she was competitive only on a coldly professional basis. She hated and loved and missed the tremendous mother whom she had lost, and she resolved so fiercely not to be like her mother that she became an embodied antithesis of Mona.

Her mother had been horsy, blonde, big—the kind of woman who is a feminist because she is not very feminine. Helen never thought about her own femininity. She just worried about herself. Her face would have been round if it had been plump, but she was not plump. Black-haired, dark-eyed, broad-bodied but thin, she was a genetic demonstration of her unknown father. Her teachers often feared her. She was a pale, quiet girl, and she always knew her subject.

Her fellow students had joked about her for a few weeks and then most of them had banded together against the indecency of the press. When a news-frame came out with something ridiculous about the long-dead Mona, the whisper went through Lady Joan's:

"Keep Helen away . . . those people are at it again."

"Don't let Helen look at the frames now. She's the best person we have in the non-collateral sciences and we can't have her upset just before the tripos . . ."

They protected her, and it was only by chance that she saw her own face in a news-frame. There was the face of a man beside her. He looked like a little old monkey, she thought. Then she read, "PERFECT GIRL WANTS TO BE SAILOR. SHOULD SAILOR HIMSELF DATE PERFECT GIRL?" Her cheeks burned with helpless, unavoidable embarrassment and rage, but she had grown too expert at being herself to do what she might have done in her teens—hate the man. She knew it wasn't his fault either. It wasn't even the fault of the silly pushing men and women from the news services. It was time, it was custom, it was man himself. But she had only to be herself, if she could ever find out what that really meant.

V

Their dates, when they came, had the properties of nightmares.

A news service sent a woman to tell her she had been awarded a week's holiday in New Madrid.

With the sailor from the stars.

Helen refused.

Then *he* refused too, and he was a little too prompt for her liking. She became curious about him.

Two weeks passed, and in the office of the news service a treasurer brought two slips of paper to the director. They were the vouchers for Helen America and Mr. Grey-no-more to obtain the utmost in preferential luxury at New Madrid. The treasurer said, "These have been issued and registered as gifts with the Instrumentality, sir. Should they be canceled?" The executive had his fill of stories that day, and he felt humane. On an impulse he commanded the treasurer, "Tell you what. Give those tickets to the young people. No publicity. We'll keep out of it. If they don't want us, they don't have to have us. Push it along. That's all. Go."

The ticket went back out to Helen. She had made the highest record ever reported at the university, and she needed a rest. When the news-service woman gave her the ticket, she said,

"Is this a trick?"

Assured that it was not, she then asked,

"Is that man coming?"

She couldn't say "*the* sailor"—it sounded too much like the way people had always talked about herself—and she honestly didn't remember his other name at the moment.

The woman did not know.

"Do I have to see him?" said Helen.

"Of course not," said the woman. The gift was unconditional.

Helen laughed, almost grimly. "All right, I'll take it and say thanks. But one picturemaker, mind you, just one, and

I walk out. Or I may walk out for no reason at all. Is that all right?"

It was.

Four days later Helen was in the pleasure world of New Madrid, and a master of the dances was presenting her to an odd, intense old man whose hair was black.

"Junior scientist Helen America—Sailor of the stars Mr. Grey-no-more."

He looked at them shrewdly and smiled a kindly, experienced smile. He added the empty phrase of his profession,

"I have had the honor and I withdraw."

They were alone together on the edge of the dining room. The sailor looked at her very sharply indeed, and then said:

"Who are you? Are you somebody I have already met? Should I remember you? There are too many people here on Earth. What do we do next? What are we supposed to do? Would you like to sit down?"

Helen said one "Yes" to all those questions and never dreamed that the single *yes* would be articulated by hundreds of great actresses, each one in the actress's own special way, across the centuries to come.

They did sit down.

How the rest of it happened, neither one was ever quite sure.

She had had to quiet him almost as though he were a hurt person in the House of Recovery. She explained the dishes to him and when he still could not choose, she gave the robot selections for him. She warned him, kindly enough, about manners when he forgot the simple ceremony of eating which everyone knew, such as standing up to unfold the napkin or putting the scraps into the solvent tray and the silverware into the transfer.

At last he relaxed and did not look so old.

Momentarily forgetting the thousand times she had been asked silly questions herself, she asked him.

"Why did *you* become a sailor?"

He stared at her in open-eyed inquiry as though she had spoken to him in an unknown language and expected

a reply. Finally he mumbled the answer.

"Are you—you, too—saying that—that I shouldn't have done it?"

Her hand went to her mouth in instinctive apology.

"No, no, no. You see, I myself have put in to be a sailor."

He merely looked at her, his young-old eyes open with observativeness. He did not stare, but merely seemed to be trying to understand words, each one of which he could comprehend individually but which in sum amounted to sheer madness. She did not turn away from his look, odd though it was. Once again, she had the chance to note the indescribable peculiarity of this man who had managed enormous sails out in the blind empty black between untwinkling stars. He was young as a boy. The hair which gave him his name was glossy black. His beard must have been removed permanently, because his skin was that of a middle-aged woman—well-kept, pleasant, but showing the unmistakable wrinkles of age and betraying no sign of the normal stubble which the males in her culture preferred to leave on their faces. The skin had age without experience. The muscles had grown older, but they did not show *how* the person had grown.

Helen had learned to be an acute observer of people as her mother took up with one fanatic after another; she knew full well that people carry their secret biographies written in the muscles of their faces, and that a stranger passing on the street tells us (whether he wishes to or not) all his inmost intimacies. If we but look sharply enough, and in the right light, we know whether fear or hope or amusement has tallied the hours of his days, we divine the sources and outcome of his most secret sensuous pleasure, we catch the dim but persistent reflections of those other people who have left the imprints of their personality on him in turn.

All this was absent from Mr. Grey-no-more: he had age but not the stigmata of age; he had growth without the normal markings of growth; he had lived without living, in a time and world in which most people stayed young while living too much.

He was the uttermost opposite of her mother that Helen had ever seen, and with a pang of undirected apprehension Helen realized that this man meant a great deal to her future life, whether she wished him to or not. She saw in him a young bachelor, prematurely old, a man whose love had been given to emptiness and horror, not to the tangible rewards and disappointments of human life. He had had all space for his mistress, and space had used him harshly. Still young, he was old; already old, he was young.

The mixture was one which she knew that she had never seen before, and which she suspected that no one else had ever seen, either. He had in the beginning of life the sorrow, compassion, and wisdom which most people find only at the end.

It was he who broke the silence. "You did say, didn't you, that you yourself had put in to be a sailor?"

Even to herself, her answer sounded silly and girlish. "I'm the first woman ever to qualify with the necessary scientific subjects while still young enough to pass the physical . . ."

"You must be an unusual girl," said he mildly. Helen realized, with a thrill, a sweet and bitterly real hope that this young-old man from the stars had never heard of the "perfect child" who had been laughed at in the moments of being born, the girl who had all America for a father, who was famous and unusual and alone so terribly much that she could not even imagine being ordinary, happy, decent, or simple.

She thought to herself, *It would take a wise freak who sails in from the stars to overlook who I am,* but to him she simply said, "It's no use talking about being 'unusual.' I'm tired of this Earth, and since I don't have to die to leave it, I think I would like to sail to the stars. I've got less to lose than you may think . . ." She started to tell him about Mona Muggeridge but she stopped in time.

The compassionate gray eyes were upon her, and at this point it was he, not she, who was in control of the situation. She looked at the eyes themselves. They had stayed open for forty years, in the blackness near to pitch-darkness of the tiny cabin. The dim dials had shone like

blazing suns upon his tired retinas before he was able to turn his eyes away. From time to time he had looked out at the black nothing to see the silhouettes of his sails, almost-blackness against total blackness, as the miles of their sweep sucked up the push of light itself and accelerated him and his frozen cargo at almost immeasurable speeds across an ocean of unfathomable silence. Yet, what he had done, she had asked to do.

The stare of his gray eyes yielded to a smile of his lips. In that young-old face, masculine in structure and feminine in texture, the smile had a connotation of tremendous kindness. She felt singularly much like weeping when she saw him smile in that particular way at her. Was that what people learned between the stars? To care for other people very much indeed and to spring upon them only to reveal love and not devouring to their prey?

In a measured voice he said, "I believe you. You're the first one that I have believed. All these people have said that they wanted to be sailors too, even when they looked at me. They could not know what it means, but they said it anyhow, and I hated them for saying it. You, though—you're different. Perhaps you will sail among the stars, but I hope that you will not."

As though waking from a dream, he looked around the luxurious room, with the gilt-and-enamel robot-waiters standing aside with negligent elegance. They were designed to be always present and never obtrusive: this was a difficult esthetic effect to achieve, but their designer had achieved it.

The rest of the evening moved with the inevitability of good music. He went with her to the forever-lonely beach which the architects of New Madrid had built beside the hotel. They talked a little, they looked at each other, and they made love with an affirmative certainty which seemed outside themselves. He was very tender, and he did not realize that in a genetically sophisticated society, he was the first lover she had ever wanted or had ever had. (How could the daughter of Mona Muggeridge want a lover or a mate or a child?)

On the next afternoon, she exercised the freedom of her

times and asked him to marry her. They had gone back to their private beach, which, through miracles of ultra-fine mini-weather adjustments, brought a Polynesian afternoon to the high chilly plateau of central Spain.

She asked him, *she* did, to marry her, and he refused, as tenderly and as kindly as a man of sixty-five can refuse a girl of eighteen. She did not press him; they continued the bittersweet love affair.

They sat on the artificial sand of the artificial beach and dabbled their toes in the man-warmed water of the ocean. Then they lay down against an artificial sand dune which hid New Madrid from view.

"Tell me," Helen said, "can I ask again, why did you become a sailor?"

"Not so easily answered," he said. "Adventure, maybe. That, at least in part. And I wanted to see Earth. Couldn't afford to come in a pod. Now—well, I've enough to keep me the rest of my life. I can go back to New Earth as a passenger in a month instead of forty years—be frozen in no more time than the wink of an eye, put in my adiabatic pod, linked in to the next sailing ship, and wake up home again while some other fool does the sailing."

Helen nodded. She did not bother to tell him that she knew all this. She had been investigating sailing ships since meeting the sailor.

"Out where you sail among the stars," she said, "can you tell me—can you possibly tell me anything of what it's like out there?"

His face looked inward on his soul and afterward his voice came as from an immense distance.

"There are moments—or is it weeks—you can't really tell in the sail ship—when it seems—worthwhile. You feel . . . your nerve endings reach out until they touch the stars. You feel enormous, somehow." Gradually he came back to her. "It's trite to say, of course, but you're never the same afterward. I don't mean just the obvious physical thing, but—you find yourself—or maybe you lose yourself. That's why," he continued, gesturing toward New Madrid out of sight behind the sand dune, "I can't stand this. New Earth, well, it's like Earth must have been in the

old days, I guess. There's something fresh about it. Here . . ."

"I know," said Helen America and she did. The slightly decadent, slightly corrupt, too comfortable air of Earth must have had a stifling effect on the man from beyond the stars.

"There," he said, "you won't believe this, but sometimes the ocean's too cold to swim in. We have music that doesn't come from machines, and pleasures that come from inside our own bodies without being put there. I have to get back to New Earth."

Helen said nothing for a little while, concentrating on stilling the pain in her heart.

"I . . . I . . ." she began.

"I know," he said fiercely, almost savagely turning on her. "But I can't take you. I can't! You're too young, you've got a life to live and I've thrown away a quarter of mine. No, that's not right. I didn't throw it away. I wouldn't trade it back because it's given me something inside I never had before. And it's given me you."

"But if—" she started again to argue.

"No. Don't spoil it. I'm going next week to be frozen in my pod to wait for the next sail ship. I can't stand much more of this, and I might weaken. That would be a terrible mistake. But we have this time together now, and we have our separate lifetimes to remember in. Don't think of anything else. There's nothing, nothing we can do."

Helen did not tell him—then or ever—of the child she had started to hope for, the child they would now never have. Oh, she could have used the child. She could have tied him to her, for he was an honorable man and would have married her had she told him. But Helen's love, even then in her youth, was such that she could not use this means. She wanted him to come to her of his own free will, marrying her because he could not live without her. To that marriage their child would have been an additional blessing.

There was the other alternative, of course. She could have borne the child without naming the father. But *she*

was no Mona Muggeridge. She knew too well the terrors and insecurity and loneliness of being Helen America ever to be responsible for the creation of another. And for the course she had laid out there was no place for a child. So she did the only thing she could. At the end of their time in New Madrid, she let him say a real goodbye. Wordless and without tears, she left. Then she went up to an arctic city, a pleasure city where such things are well-known and amidst shame, worry and a driving sense of regret she appealed to a confidential medical service which eliminated the unborn child. Then she went back to Cambridge and confirmed her place as the first woman to sail a ship to the stars.

VI

The Presiding Lord of the Instrumentality at that time was a man named Wait. Wait was not cruel but he was never noted for tenderness of spirit or for a high regard for the adventuresome proclivities of young people. His aide said to him, "This girl wants to sail a ship to New Earth. Are you going to let her?"

"Why not?" said Wait. "A person is a person. She is well-bred, well-educated. If she fails, we will find out something eighty years from now when the ship comes back. If she succeeds, it will shut up some of these women who have been complaining." The Lord leaned over his desk: "If she qualifies, and if she goes, though, don't give her any convicts. Convicts are too good and too valuable as settlers to be sent along on a fool trip like that. You can send her on something of a gamble. Give her all religious fanatics. We have more than enough. Don't you have twenty- or thirty-thousand who are waiting?"

He said, "Yes, sir, twenty-six-thousand, two-hundred. Not counting recent additions."

"Very well," said the Lord of the Instrumentality. "Give her the whole lot of them and give her that new ship. Have we named it?"

"No, sir," said the aide.

"Name it then."

The aide looked blank.

A contemptuous wise smile crossed the face of the senior bureaucrat. He said, "Take that ship now and name it. Name it *The Soul* and let *The Soul* fly to the stars. And let Helen America be an angel if she wants to. Poor thing, she has not got much of a life to live on this Earth, not the way she was born, and the way she was brought up. And it's no use to try and reform her, to transform her personality, when it's a lively, rich personality. It does not do any good. We don't have to punish her for being herself. Let her go. Let her have it."

Wait sat up and stared at his aide and then repeated very firmly:

"Let her have it, *only if she qualifies.*"

VII

Helen America did qualify.

The doctors and the experts tried to warn her against it.

One technician said: "Don't you realize what this is going to mean? Forty years will pour out of your life in a single month. You leave here a girl. You will get there a woman of sixty. Well, you will probably still have a hundred years to live after that. And it's painful. You will have all these people, thousands and thousands of them. You will have some Earth cargo. There will be about thirty-thousand pods strung on sixteen lines behind you. Then you will have the control cabin to live in. We will give you as many robots as you need, probably a dozen. You will have a mainsail and a foresail and you will have to keep the two of them."

"I know. I have read the book," said Helen America. "And I sail the ship with light, and if the infrared touches that sail—I go. If I get radio interference, I pull the sails in. And if the sails fail, I wait as long as I live."

The technician looked a little cross. "There is no call for you to get tragic about it. Tragedy is easy enough to con-

trive. And if you want to be tragic, you can be tragic without destroying thirty-thousand other people or without wasting a large amount of Earth property. You can drown in water right here, or jump into a volcano like the Japanese in the old books. Tragedy is not the hard part. The hard part is when you don't quite succeed and you have to keep on fighting. When you must keep going on and on and on in the face of really hopeless odds, of real temptations to despair.

"Now this is the way that the foresail works. That sail will be twenty-thousand miles at the wide part. It tapers down and the total length will be just under 80,000 miles. It will be retracted or extended by small servo-robots. The servo-robots are radio-controlled. You had better use your radio sparingly, because after all these batteries, even though they are atomic, have to last forty years. They have got to keep alive."

"Yes, sir," said Helen America very contritely.

"You've got to remember what your job is. You're going because you are cheap. You are going because a sailor takes a lot less weight than a machine. There is no all-purpose computer built that weighs as little as 150 pounds. You do. You go simply because you are expendable. Anyone that goes out to the stars takes one chance in three of never getting there. But you are not going because you are a leader, you are going because you are young. You have a life to give and a life to spare. Because your nerves are good. You understand that?"

"Yes, sir, I knew that."

"Furthermore, you are going because you'll make the trip in forty years. If we send automatic devices and have them manage the sails, they would get there—possibly. But it would take them from a hundred years to a hundred-and-twenty or more, and by that time the adiabatic pods would have spoiled, most of the human cargo would not be fit for revival and the leakage of heat, no matter how we face it, would be enough to ruin the entire expedition. So remember that the tragedy and the trouble you face is mostly work. Work, and that's all it is. That is your big job."

Helen smiled. She was a short girl with rich dark hair, brown eyes, and very pronounced eyebrows, but when Helen smiled she was almost a child again, and a rather charming one. She said: "My job is work. I understand that, sir."

VIII

In the preparation area, the make-ready was fast but not hurried. Twice the technicians urged her to take a holiday before she reported for final training. She did not accept their advice. She wanted to go forth; she knew that they knew she wanted to leave Earth forever, and she also knew they knew she was not merely her mother's daughter. She was trying, somehow, to be herself. She knew the world did not believe, but the world did not matter.

The third time they suggested a vacation, the suggestion was mandatory. She had a gloomy two months which she ended up enjoying a little bit on the wonderful islands of the Hesperides, islands which were raised when the weight of the Earthports caused a new group of small archipelagos to form below Bermuda.

She reported back, fit, healthy, and ready to go.

The senior medical officer was very blunt.

"Do you really know what we are going to do to you? We are going to make you live forty years out of your life in one month."

She nodded, white of face, and he went on, "Now to give you those forty years we've got to slow down your bodily processes. After all the sheer biological task of breathing forty years' worth of air in one month involves a factor of about five-hundred to one. No lungs could stand it. Your body must circulate water. It must take in food. Most of this is going to be protein. There will be some kind of a hydrate. You'll need vitamins.

"Now, what we are going to do is to slow the brain down, very much indeed, so that the brain will be working

at about that five-hundred to one ratio. We don't want you incapable of working. Somebody has got to manage the sails.

"Therefore, if you hesitate or you start to think, a thought or two is going to take several weeks. Meanwhile your body can be slowed down some. But the different parts can't be slowed down at the same rate. Water, for example, we brought down to about eighty to one. Food, to about three-hundred to one.

"You won't have time to drink forty years' worth of water. We circulate it, get it through, purify it, and get it back in your system, unless you break your link-up.

"So what you face is a month of being absolutely wide awake, on an operating table and *being operated on without anesthetic,* while doing some of the hardest work that mankind has ever found.

"You'll have to take observations, you'll have to watch your lines with the pods of people and cargo behind you, you'll have to adjust the sails. If there is anybody surviving at destination point, they will come out and meet you.

"At least that happens most of the times.

"I am not going to assure you you will get the ship in. If they don't meet you, take an orbit beyond the farthest planet and either let yourself die or try to save yourself. You can't get thirty-thousand people down on a planet singlehandedly.

"Meanwhile, though, you've got a real job. We are going to have to build these controls right into your body. We'll start by putting valves in your chest arteries. Then we go on, catheterizing your water. We are going to make an artificial colostomy that will go forward here just in front of your hip joint. Your water intake has a certain psychological value so that about one five-hundredth of your water we are going to leave you to drink out of a cup. The rest of it is going to go directly into your bloodstream. Again about a tenth of your food will go that way. You understand that?"

"You mean," said Helen, "I eat one-tenth, and the rest goes in intravenously?"

"That's right," said the medical technician. "We will

pump it into you. The concentrates are there. The reconstitutor is there. Now these lines have a double connection. One set of connections runs into the maintenance machine. That will become the logistic support for your body. And these lines are the umbilical cord for a human being alone among the stars. They are your life.

"And now if they should break or if you should fall, you might faint for a year or two. If that happens, your local system takes over: that's the pack on your back.

"On Earth, it weighs as much as you do. You have already been drilled with the model pack. You know how easy it is to handle in space. That'll keep you going for a subjective period of about two hours. No one has ever worked out a clock yet that would match the human mind, so instead of giving you a clock we are giving you an odometer attached to your own pulse and we mark it off in grades. If you watch it in terms of ten-thousands of pulse beats, you may get some information out of it.

"I don't know what kind of information but you may find it helpful somehow." He looked at her sharply and then turned back to his tools, picking up a shining needle with a disk on the end.

"Now, let's get back to this. We are going to have to get right into your mind. That's chemical too."

Helen interrupted. "You said you were not going to operate on my head."

"Only the needle. That's the only way we can get to the mind. Slow it down enough so that you will have this subjective mind operating at a rate that will make the forty years pass in a month." He smiled grimly, but the grimness changed to momentary tenderness as he took in her brave obstinate stance, her girlish, admirable, pitiable determination.

"I won't argue it," she said. "This is as bad as a marriage and the stars are my bridegroom." The image of the sailor went across her mind, but she said nothing of him.

The technician went on. "Now, we have already built in psychotic elements. You can't even expect to remain sane. So you'd better not worry about it. You'll have to be insane to manage the sails and to survive utterly alone and

be out there even a month. And the trouble is in that month you are going to know it's really forty years. There is not a mirror in the place but you'll probably find shiny surfaces to look at yourself.

"You won't look so good. You will see yourself aging, every time you slow down to look. I don't know what the problem is going to be on that score. It's been bad enough on men.

"Your hair problem is going to be easier than men's. The sailors we sent out we simply had to kill all the hair roots. Otherwise the men would have been swamped in their own beards. And a tremendous amount of the nutrient would be wasted if it went into raising of hair on the face which no machine in the world could cut off fast enough to keep a man working. I think what we will do is inhibit hair on the top of your head. Whether it comes out in the same color or not is something you will find for yourself later. Did you ever meet the sailor that came in?"

The doctor knew she had met him. He did not know that it was the sailor from beyond the stars who called her. Helen managed to remain composed as she smiled at him to say: "Yes, you gave him new hair. Your technician planted a new scalp on his head, remember. Somebody on your staff did. The hair came out black and he got the nickname of Mr. Grey-no-more."

"If you are ready next Tuesday, we'll be ready too. Do you think you can make it by then, my lady?"

Helen felt odd seeing this old, serious man refer to her as "lady," but she knew he was paying respect to a profession and not just to an individual.

"Tuesday is time enough." She felt complimented that he was an old-fashioned enough person to know the ancient names of the days of the week and to use them. That was a sign that he had not only learned the essentials at the University but that he had picked up the elegant inconsequentialities as well.

IX

Two weeks later was twenty-one years later by the chronometers in the cabin. Helen turned for the ten-thousand times ten-thousandth time to scan the sails.

Her back ached with a violent throb.

She could feel the steady roar of her heart like a fast vibrator as it ticked against the time-span of her awareness. She could look down at the meter on her wrist and see the hands on the watchlike dials indicate tens of thousands of pulses very slowly.

She heard the steady whistle of air in her throat as her lungs seemed shuddering with sheer speed.

And she felt the throbbing pain of a large tube feeding an immense quantity of mushy water directly into the artery of her neck.

On her abdomen, she felt as if someone had built a fire. The evacuation tube operated automatically but it burnt as if a coal had been held to her skin and a catheter, which connected her bladder to another tube, stung as savagely as the prod of a scalding-hot needle. Her head ached and her vision blurred.

But she could still see the instruments and she still could watch the sails. Now and then she could glimpse, faint as a tracery of dust, the immense skein of people and cargo that lay behind them.

She could not sit down. It hurt too much.

The only way that she could be comfortable for resting was to lean against the instrument panel, her lower ribs against the panel, her tired forehead against the meters.

Once she rested that way and realized that it was two-and-a-half months before she got up. She knew that rest had no meaning and she could see her face moving, a distorted image of her own face growing old in the reflections from the glass face of the "apparent weight" dial. She could look at her arms with blurring vision, note the skin tightening, loosening and tightening again, as changes in temperatures affected it.

She looked out one more time at the sails and decided to take in the foresail. Wearily she dragged herself over the control panel with a servo-robot. She selected the right control, and opened it for a week or so. She waited there, her heart buzzing, her throat whistling air, her fingernails breaking off gently as they grew. Finally she checked to see if it really had been the right one, pushed again, and nothing happened.

She pushed a third time. There was no response.

Now she went back to the master panel, re-read, checked the light direction, found a certain amount of infrared pressure which she should have been picking up. The sails had very gradually risen to something not far from the speed of light itself because they moved fast with the one side dulled; the pods behind, sealed against time and eternity, swam obediently in an almost perfect weightlessness.

She scanned; her reading had been correct.

The sail *was* wrong.

She went back to the emergency panel and pressed. Nothing happened.

She broke out a repair robot and sent it out to effect repairs, punching the papers as rapidly as she could to give instructions. The robot went out and an instant (three days) later it replied. The panel on the repair robot rang forth, "Does not conform."

She sent a second repair robot. That had no effect either.

She sent a third, the last. Three bright lights, "Does not conform," stared at her. She moved the servo-robots to the other side of the sails and pulled hard.

The sail was still not at the right angle.

She stood there wearied and lost in space, and she prayed: "Not for me, God, I am running away from a life that I did not want. But for this ship's souls and for the poor foolish people that I am taking who are brave enough to want to worship their own way and need the light of another star, I ask you, God, help me now." She thought she had prayed very fervently and she hoped that she would get an answer to her prayer.

It did not work out that way. She was bewildered, alone.

There was no sun. There was nothing, except the tiny cabin and herself more alone than any woman had ever been before. She sensed the thrill and ripple of her muscles as they went through days of adjustment while her mind noticed only the matter of minutes. She leaned forward, forced herself not to relax and finally she remembered that one of the official busybodies had included a weapon.

What she would use a weapon for she did not know.

It pointed. It had a range of two-hundred-thousand miles. The target could be selected automatically.

She got down on her knees trailing the abdominal tube and the feeding tube and the catheter tubes and the helmet wires, each one running back to the panel. She crawled underneath the panel for the servo-robots and she pulled out a written manual. She finally found the right frequency for the weapon's controls. She set the weapon up and went to the window.

At the last moment she thought, "Perhaps the fools are going to make me shoot the window out. It ought to have been designed to shoot through the window without hurting it. That's the way they should have done it."

She wondered about the matter for a week or two.

Just before she fired it she turned and there, next to her, stood her sailor, the sailor from the stars, Mr. Grey-no-more. He said: "It won't work that way."

He stood clear and handsome, the way she had seen him in New Madrid. He had no tubes, he did not tremble, she could see the normal rise and fall of his chest as he took one breath every hour or so. One part of her mind believed that he was real. She was mad and she was very happy to be mad at this time and she let the hallucination give her advice. She re-set the gun so that it would fire through the cabin wall and it fired a low charge at the repair mechanism out beyond the distorted and immovable sail.

The low charge did the trick. The interference had been something beyond all technical anticipation. The weapon had cleaned out the forever-unidentifiable obstruction,

leaving the servo-robots free to attack their tasks like a tribe of maddened ants. They worked again. They had had defenses built in against the minor impediments of space. All of them scurried and skipped about.

With a sense of bewilderment close to religion, she perceived the wind of starlight blowing against the immense sails. The sails snapped into position. She got a momentary touch of gravity as she sensed a little weight. *The Soul* was back on her course.

X

"It's a girl," they said to him on New Earth. "It's a girl. She must have been eighteen herself."

Mr. Grey-no-more did not believe it.

But he went to the hospital and there in the hospital he saw Helen America.

"Here I am, sailor," said she. "I sailed too." Her face was white as chalk, her expression was that of a girl of about twenty. Her body was that of a well-preserved woman of sixty.

As for him, he had not changed again, since he had returned home inside a pod.

He looked at her. His eyes narrowed and then in a sudden reversal of roles, it was he who was kneeling beside her bed and covering her hands with his tears.

Half-coherently, he babbled at her: "I ran away from you because I loved you so. I came back here where you would never follow, or if you did follow, you'd still be a young woman, and I'd still be too old. But you have sailed *The Soul* in here and you wanted me."

The nurse of New Earth did not know about the rules which should be applied to the sailors from the stars. Very quietly she went out of the room, smiling in tenderness and human pity at the love which she had seen. But she was a practical woman and she had a sense of her own advancement. She called a friend of hers at the news service and said: "I think I have got the biggest romance in history. If

you get here soon enough you can get the first telling of the story of Helen America and Mr. Grey-no-more. They just met like that. I guess they'd seen each other somewhere. They just met like that and fell in love."

The nurse did not know that they had foresworn a love on Earth. The nurse did not know that Helen America had made a lonely trip with an icy purpose and the nurse did not know that the crazy image of Mr. Grey-no-more, the sailor himself, had stood beside Helen twenty years out from nothing-at-all in the depth and blackness of space between the stars.

XI

The little girl had grown up, had married, and now had a little girl of her own. The mother was unchanged, but the spieltier was very, very old. It had outlived all its marvelous tricks of adaptability, and for some years had stayed frozen in the role of a yellow-haired, blue-eyed girl doll. Out of sentimental sense of the fitness of things, she had dressed the spieltier in a bright blue jumper with matching panties. The little animal crept softly across the floor on its tiny human hands, using its knees for hind feet. The mock-human face looked up blindly and squeaked for milk.

The young mother said, "Mom, you ought to get rid of that thing. It's all used up and it looks horrible with your nice period furniture."

"I thought you loved it," said the older woman.

"Of course," said the daughter. "It was cute, when I was a child. But I'm not a child anymore, and it doesn't even work."

The spieltier had struggled to its feet and clutched its mistress's ankle. The older woman took it away gently, and put down a saucer of milk and a cup the size of a thimble. The spieltier tried to curtsey, as it had been motivated to do at the beginning, slipped, fell, and whimpered. The mother righted it and the little old animal-toy began dip-

ping milk with its thimble and sucking the milk into its tiny toothless old mouth.

"You remember, Mom—" said the younger woman and stopped.

"Remember what, dear?"

"You told me about Helen America and Mr. Grey-no-more when that was brand-new."

"Yes, darling, maybe I did."

"You didn't tell me everything," said the younger woman accusingly.

"Of course not. You were a child."

"But it was awful. Those messy people and the horrible way sailors live. I don't see how you idealized it and called it a romance—"

"But it was. It is," insisted the other.

"Romance, my foot," said the daughter. "It's as bad as you and the worn-out spieltier." She pointed at the tiny, living, aged doll who had fallen asleep beside its milk. "I think it's horrible. You ought to get rid of it. And the world ought to get rid of sailors."

"Don't be harsh, darling," said the mother.

"Don't be a sentimental old slob," said the daughter.

"Perhaps we are," said the mother with a loving sort of laugh. Unobtrusively she put the sleeping spieltier on a padded chair where it would not be stepped on or hurt.

XII

Outsiders never knew the real end of the story.

More than a century later after their wedding, Helen lay dying: she was dying happily, because her beloved sailor was beside her. She believed that if they could conquer space, they might conquer death as well.

Her loving, happy, weary dying mind blurred over and she picked up an argument they had touched upon for decades.

"You did *so* come to *The Soul*," she said. "You did so

stand beside me when I was lost and did not know how to handle the weapon."

"If I came then, darling, I'll come again, wherever you are. You're my darling, my heart, my own true love. You're my bravest of ladies, my boldest of people. You're my own. You sailed for me. You're my lady who sailed *The Soul.*"

His voice broke, but his features stayed calm. He had never before seen anyone die so confident and so happy.

SCANNERS LIVE IN VAIN

Martel was angry. He did not even adjust his blood away from anger. He stamped across the room by judgment, not by sight. When he saw the table hit the floor, and could tell by the expression on Luci's face that the table must have made a loud crash, he looked down to see if his leg was broken. It was not. Scanner to the core, he had to scan himself. The action was reflex and automatic. The inventory included his legs, abdomen, chestbox of instruments, hands, arms, face and back with the mirror. Only then did Martel go back to being angry. He talked with his voice, even though he knew that his wife hated its blare and preferred to have him write.

"I tell you, I must cranch, I have to cranch. It's my worry, isn't it?"

When Luci answered, he saw only a part of her words as he read her lips: "Darling . . . you're my husband . . . . . right to love you . . . dangerous . . . do it . . . dangerous . . . wait . . ."

He faced her, but put sound in his voice, letting the blare hurt her again: "I tell you, I'm going to cranch."

Catching her expression, he became rueful and a little tender: "Can't you understand what it means to me? To

get out of this horrible prison in my own head? To be a man again—hearing your voice, smelling smoke? To *feel* again—to feel my feet on the ground, to feel the air move against my face? Don't you know what it means?"

Her wide-eyed worrisome concern thrust him back into pure annoyance. He read only a few words as her lips moved: ". . . love you . . . your own good . . . don't you think I want you to be human? . . . your own good . . . too much . . . he said . . . they said . . ."

When he roared at her, he realized that his voice must be particularly bad. He knew that the sound hurt her no less than did the words: "Do you think I wanted you to marry a Scanner? Didn't I tell you we're almost as low as the habermans? We're dead, I tell you. We've got to be dead to do our work. How can anybody go to the Up-and-Out? Can you dream what raw Space is? I warned you. But you married me. All right, you married a man. Please, darling, let me be a man. Let me hear your voice, let me feel the warmth of being alive, of being human. Let me!"

He saw by her look of stricken assent that he had won the argument. He did not use his voice again. Instead, he pulled his tablet up from where it hung against his chest. He wrote on it, using the pointed fingernail of his right forefinger—the talking nail of a Scanner—in quick clean-cut script: *Pls, drlng, whrs crnching wire?*

She pulled the long gold-sheathed wire out of the pocket of her apron. She let its field sphere fall to the carpeted floor. Swiftly, dutifully, with the deft obedience of a Scanner's wife, she wound the cranching wire around his head, spirally around his neck and chest. She avoided the instruments set in his chest. She even avoided the radiating scars around the instruments, the stigmata of men who had gone Up and into the Out. Mechanically he lifted a foot as she slipped the wire between his feet. She drew the wire taut. She snapped the small plug into the high-burden control next to his heartreader. She helped him to sit down, arranging his hands for him, pushing his head back into the cup at the top of the chair. She turned then, full-face toward him, so that he could read her lips easily. Her expression was composed.

She knelt, scooped up the sphere at the other end of the wire, stood erect calmly, her back to him. He scanned her, and saw nothing in her posture but grief which would have escaped the eye of anyone but a Scanner. She spoke: he could see her chest-muscles moving. She realized that she was not facing him, and turned so that he could see her lips.

"Ready at last?"

He smiled a *yes.*

She turned her back to him again. (Luci could never bear to watch him go under the wire.) She tossed the wire-sphere into the air. It caught in the force-field and hung there. Suddenly it glowed. That was all. All—except for the sudden red stinking roar of coming back to his senses. Coming back, across the wild threshold of pain.

When he awakened, under the wire, he did not feel as though he had just cranched. Even though it was the second cranching within the week, he felt fit. He lay in the chair. His ears drank in the sound of air touching things in the room. He heard Luci breathing in the next room, where she was hanging up the wire to cool. He smelt the thousand-and-one smells that are in anybody's room: the crisp freshness of the germ-burner, the sour-sweet tang of the humidifier, the odor of the dinner they had just eaten, the smells of clothes, furniture, of people themselves. All these were pure delight. He sang a phrase or two of his favorite song:

"Here's to the haberman, Up-and-Out!

"Up—oh!—and Out—oh!—Up-and-Out! . . ."

He heard Luci chuckle in the next room. He gloated over the sounds of her dress as she swished to the doorway.

She gave him her crooked little smile. "You sound all right. Are you all right, really?"

Even with this luxury of senses, he scanned. He took the flash-quick inventory which constituted his professional skill. His eyes swept in the news of the instruments. Nothing showed off scale, beyond the nerve compression hanging in the edge of *Danger.* But he could not worry

about the nerve-box. That always came through cranching. You couldn't get under the wire without having it show on the nerve-box. Some day the box would go to *Overload* and drop back down to *Dead*. That was the way a haberman ended. But you couldn't have everything. People who went to the Up-and-Out had to pay the price for Space.

Anyhow, he should worry! He was a Scanner. A good one, and he knew it. If he couldn't scan himself, who could? This cranching wasn't too dangerous. Dangerous, but not too dangerous.

Luci put out her hand and ruffled his hair as if she had been reading his thoughts, instead of just following them: "But you know you shouldn't have! You shouldn't!"

"But I did!" He grinned at her.

Her gaiety still forced, she said: "Come on, darling, let's have a good time. I have almost everything there is in the icebox—all your favorite tastes. And I have two new records just full of smells. I tried them out myself, and even I liked them. And you know me—"

"Which?"

"Which what, you old darling?"

He slipped his hand over her shoulders as he limped out of the room. (He could never go back to feeling the floor beneath his feet, feeling the air against his face, without being bewildered and clumsy. As if cranching was real, and being a haberman was a bad dream. But he *was* a haberman, and a Scanner. "You know what I meant, Luci . . . the smells, which you have. Which one did you like, on the record?"

"Well-l-l," said she, judiciously, "There were some lamb chops that were the strangest things—"

He interrupted: "What are lambtchots?"

"Wait till you smell them. Then guess. I'll tell you this much. It's a smell hundreds and hundreds of years old. They found about it in the old books."

"Is a lambtchot a Beast?"

"I won't tell you. You've got to wait," she laughed, as she helped him sit down and spread his tasting dishes before him. He wanted to go back over the dinner first, sampling all the pretty things he had eaten, and savoring

them this time with his now-living lips and tongue.

When Luci had found the music wire and had thrown its sphere up into the force-field he reminded her of the new smells. She took out the long glass records and set the first one into a transmitter.

"Now sniff!"

A queer, frightening, exciting smell came over the room. It seemed like nothing in this world, nor like anything from the Up-and-Out. Yet it was familiar. His mouth watered. His pulse beat a little faster; he scanned his heartbox. (Faster, sure enough.) But that smell, what was it? In mock perplexity, he grabbed her hands, looked into her eyes, and growled:

"Tell me, darling! Tell me, or I'll eat you up!"

"That's just right!"

"What?"

"You're right. It should make you want to eat me. It's meat."

"Meat. Who?"

"Not a person," said she, knowledgeably, "a Beast. A Beast which people used to eat. A lamb was a small sheep—you've seen sheep out in the wild, haven't you?—and a chop is part of its middle—here!" She pointed at her chest.

Martel did not hear her. All his boxes had swung over toward *Alarm,* some to *Danger.* He fought against the roar of his own mind, forcing his body into excess excitement. How easy it was to be a Scanner when you really stood outside your own body, haberman-fashion, and looked back into it with your eyes alone. Then you could manage the body, rule it coldly even in the enduring agony of Space. But to realize that you *were* a body, that this thing was ruling you, that the mind could kick the flesh and send it roaring off into panic! That was bad.

He tried to remember the days before he had gone into the haberman device, before he had been cut apart for the Up-and-Out. Had he always been subject to the rush of his emotions from his mind to his body, from his body back to his mind, confounding him so that he couldn't scan? But he hadn't been a Scanner then.

He knew what had hit him. Amid the roar of his own pulse, he knew. In the nightmare of the Up-and-Out, that smell had forced its way through to him, while their ship burned off Venus and the habermans fought the collapsing metal with their bare hands. He had scanned then: all were in *Danger.* Chestboxes went up to *Overload* and dropped to *Dead* all around him as he had moved from man to man, shoving the drifting corpses out of his way as he fought to scan each man in turn, to clamp vises on unnoticed broken legs, to snap the sleeping valve on men whose instruments showed they were hopelessly near *Overload.* With men trying to work and cursing him for a Scanner while he, professional zeal aroused, fought to do his job and keep them alive in the Great Pain of Space, he had smelled that smell. It had fought its way along his rebuilt nerves, past the haberman cuts, past all the safeguards of physical and mental discipline. In the wildest hour of tragedy, he had smelled aloud. He remembered it was like a bad cranching, connected with the fury and nightmare all around him. He had even stopped his work to scan himself, fearful that the First Effect might come, breaking past all haberman cuts and ruining him with the Pain of Space. But he had come through. His own instruments stayed and stayed at *Danger,* without nearing *Overload.* He had done his job, and won a commendation for it. He had even forgotten the burning ship.

All except the smell.

And here the smell was all over again—the smell of meat-with-fire . . .

Luci looked at him with wifely concern. She obviously thought he had cranched too much, and was about to haberman back. She tried to be cheerful: "You'd better rest, honey."

He whispered to her: "Cut—off—that—smell."

She did not question his word. She cut the transmitter. She even crossed the room and stepped up the room controls until a small breeze flitted across the floor and drove the smells up to the ceiling.

He rose, tired and stiff. (His instruments were normal,

except that heart was fast and nerves still hanging on the edge of *Danger.*) He spoke sadly:

"Forgive me, Luci. I suppose I shouldn't have cranched. Not so soon again. But darling, I have to get out from being a haberman. How can I ever be near you? How can I be a man—not hearing my own voice, not even feeling my own life as it goes through my veins? I love you, darling. Can't I ever be near you?"

Her pride was disciplined and automatic: "But you're a Scanner!"

"I know I'm a Scanner. But so what?"

She went over the words, like a tale told a thousand times to reassure herself: "You are the bravest of the brave, the most skillful of the skilled. All Mankind owes most honor to the Scanner, who unites the Earths of mankind. Scanners are the protectors of the habermans. They are the judges in the Up-and-Out. They make men live in the place where men need desperately to die. They are the most honored of mankind, and even the Chiefs of the Instrumentality are delighted to pay them homage!"

With obstinate sorrow he demurred: "Luci, we've heard that all before. But does it pay us back—"

" 'Scanners work for more than pay. They are the strong guards of mankind.' Don't you remember that?"

"But our lives, Luci. What can you get out of being the wife of a Scanner? Why did you marry me? I'm human only when I cranch. The rest of the time—you know what I am. A machine. A man turned into a machine. A man who has been killed and kept alive for duty. Don't you realize what I miss?"

"Of course, darling, of course—"

He went on: "Don't you think I remember my childhood? Don't you think I remember what it is to be a man and not a haberman? To walk and feel my feet on the ground? To feel a decent clean pain instead of watching my body every minute to see if I'm alive? How will I know if I'm dead? Did you ever think of that, Luci? How will I know if I'm dead?"

She ignored the unreasonableness of his outburst. Paci-

fyingly, she said: "Sit down, darling. Let me make you some kind of a drink. You're overwrought."

Automatically, he scanned. "No I'm not! Listen to me. How do you think it feels to be in the Up-and-Out with the crew tied-for-space all around you? How do you think it feels to watch them sleep? How do you think I like scanning, scanning, scanning month after month, when I can feel the Pain of Space beating against every part of my body, trying to get past my haberman blocks? How do you think I like to wake the men when I have to, and have them hate me for it? Have you ever seen habermans fight—strong men fighting, and neither knowing pain, fighting until one touches *Overload*? Do you think about that, Luci?" Triumphantly he added: "Can you blame me if I cranch, and come back to being a man, just two days a month?"

"I'm not blaming you, darling. Let's enjoy your cranch. Sit down now, and have a drink."

He was sitting down, resting his face in his hands, while she fixed the drink, using natural fruits out of bottles in addition to the secure alkaloids. He watched her restlessly and pitied her for marrying a Scanner; and then, though it was unjust, resented having to pity her.

Just as she turned to hand him the drink, they both jumped a little as the phone rang. It should not have rung. They had turned it off. It rang again, obviously on the emergency circuit. Stepping ahead of Luci, Martel strode over to the phone and looked into it. Vomact was looking at him.

The custom of Scanners entitled him to be brusque, even with a Senior Scanner, on certain given occasions. This was one.

Before Vomact could speak, Martel spoke two words into the plate, not caring whether the old man could read lips or not:

"Cranching. Busy."

He cut the switch and went back to Luci.

The phone rang again.

Luci said, gently, "I can find out what it is, darling.

Here, take your drink and sit down."

"Leave it alone," said her husband. "No one has a right to call when I'm cranching. He knows that. He ought to know that."

The phone rang again. In a fury, Martel rose and went to the plate. He cut it back on. Vomact was on the screen. Before Martel could speak, Vomact held up his talking nail in line with his heartbox. Martel reverted to discipline:

"Scanner Martel present and waiting, sir."

The lips moved solemnly: "Top emergency."

"Sir, I am under the wire."

"Top emergency."

"Sir, don't you understand?" Martel mouthed his words, so he could be sure that Vomact followed. "I . . . am . . . under . . . the . . . wire. Unfit . . . for . . . space!"

Vomact repeated: "Top emergency. Report to Central Tie-in."

"But, sir, no emergency like this—"

"Right, Martel. No emergency like this, ever before. Report to Tie-in." With a faint glint of kindliness, Vomact added: "No need to de-cranch. Report as you are."

This time it was Martel whose phone was cut out. The screen went gray.

He turned to Luci. The temper had gone out of his voice. She came to him. She kissed him, and rumpled his hair. All she could say was,

"I'm sorry."

She kissed him again, knowing his disappointment. "Take good care of yourself, darling. I'll wait."

He scanned, and slipped into his transparent aircoat. At the window he paused, and waved. She called, "Good luck!" As the air flowed past him he said to himself,

"This is the first time I've felt flight in—eleven years. Lord, but it's easy to fly if you can feel yourself live!"

Central Tie-in glowed white and austere far ahead. Martel peered. He saw no glare of incoming ships from the Up-and-Out, no shuddering flare of Space-fire out of control. Everything was quiet, as it should be on an off-duty night.

And yet Vomact had called. He had called an emergency higher than Space. There was no such thing. But Vomact had called it.

When Martel got there, he found about half the Scanners present, two dozen or so of them. He lifted the talking finger. Most of the Scanners were standing face to face, talking in pairs as they read lips. A few of the old, impatient ones were scribbling on their tablets and then thrusting the tablets into other people's faces. All the faces wore the dull dead relaxed look of a haberman. When Martel entered the room, he knew that most of the others laughed in the deep isolated privacy of their own minds, each thinking things it would be useless to express in formal words. It had been a long time since a Scanner showed up at a meeting cranched.

Vomact was not there: probably, thought Martel, he was still on the phone calling others. The light of the phone flashed on and off; the bell rang. Martel felt odd when he realized that of all those present, he was the only one to hear that loud bell. It made him realize why ordinary people did not like to be around groups of habermans or Scanners. Martel looked around for company.

His friend Chang was there, busy explaining to some old and testy Scanner that he did not know why Vomact had called. Martel looked farther and saw Parizianski. He walked over, threading his way past the others with a dexterity that showed he could feel his feet from the inside, and did not have to watch them. Several of the others stared at him with their dead faces, and tried to smile. But they lacked full muscular control and their faces twisted into horrid masks. (Scanners usually knew better than to show expression on faces which they could no longer govern. Martel added to himself, *I swear* I'll *never smile again unless I'm cranched.*)

Parizianski gave him the sign of the talking finger. Looking face to face, he spoke:

"You come here cranched?"

Parizianski could not hear his own voice, so the words roared like the words on a broken and screeching phone;

Martel was startled, but knew that the inquiry was well meant. No one could be better-natured than the burly Pole.

"Vomact called. Top emergency."

"You told him you were cranched?"

"Yes."

"He still made you come?"

"Yes."

"Then all this—it is not for Space? You could not go Up-and-Out? You are like ordinary men?"

"That's right."

"Then why did he call us?" Some pre-haberman habit made Parizianski wave his arms in inquiry. The hand struck the back of the old man behind them. The slap could be heard throughout the room, but only Martel heard it. Instinctively, he scanned Parizianski and the old Scanner, and they scanned him back. Only then did the old man ask why Martel had scanned him. When Martel explained that he was under the wire, the old man moved swiftly away to pass on the news that there was a cranched Scanner present at the Tie-in.

Even this minor sensation could not keep the attention of most of the Scanners from the worry about the top emergency. One young man, who had scanned his first transit just the year before, dramatically interposed himself between Parizianski and Martel. He dramatically flashed his tablet at them:

Is Vmct mad?

The older men shook their heads. Martel remembering that it had not been too long that the young man had been haberman, mitigated the dead solemnity of the denial with a friendly smile. He spoke in a normal voice, saying:

"Vomact is the Senior of Scanners. I am sure that he could not go mad. Would he not see it on his boxes first?"

Martel had to repeat the question, speaking slowly and mouthing his words before the young Scanner could understand the comment. The young man tried to make his face smile, and twisted it into a comic mask. But he took up his tablet and scribbled:

Yr rght.

Chang broke away from his friend and came over, his half-Chinese face gleaming in the warm evening. (It's strange, thought Martel, that more Chinese don't become Scanners. Or not so strange perhaps, if you think that they never fill their quota of habermans. Chinese love good living too much. The ones who do scan are all good ones.) Chang saw that Martel was cranched, and spoke with voice:

"You break precedents. Luci must be angry to lose you?"

"She took it well. Chang, that's strange."

"What?"

"I'm cranched, and I can hear. Your voice sounds all right. How did you learn to talk like—like an ordinary person?"

"I practiced with soundtracks. Funny you noticed it. I think I am the only Scanner in or between the Earths who can pass for an ordinary man. Mirrors and soundtracks. I found out how to act."

"But you don't . . . ?"

"No. I don't feel, or taste, or hear, or smell things, any more than you do. Talking doesn't do me much good. But I notice that it cheers up the people around me."

"It would make a difference in the life of Luci."

Chang nodded sagely. "My father insisted on it. He said, 'You may be proud of being a Scanner. I am sorry you are not a man. Conceal your defects.' So I tried. I wanted to tell the old boy about the Up-and-Out, and what we did here, but it did not matter. He said, 'Airplanes were good enough for Confucius, and they are for me too.' The old humbug! He tries so hard to be a Chinese when he can't even read Old Chinese. But he's got wonderful good sense, and for somebody going on two hundred he certainly gets around."

Martel smiled at the thought: "In his airplane?"

Chang smiled back. This discipline of his facial muscles was amazing; a bystander would not think that Chang was a haberman, controlling his eyes, cheeks, and lips by cold intellectual control. The expression had the spontaneity of life. Martel felt a flash of envy for Chang when he looked

at the dead cold faces of Parizianski and the others. He knew that he himself looked fine: but why shouldn't he? He was cranched. Turning to Parizianski he said,

"Did you see what Chang said about his father? The old boy uses an airplane."

Parizianski made motions with his mouth, but the sounds meant nothing. He took up his tablet and showed it to Martel and Chang.

Bzz bzz. Ha ha. Gd ol' boy.

At that moment, Martel heard steps out in the corridor. He could not help looking toward the door. Other eyes followed the direction of his glance.

Vomact came in.

The group shuffled to attention in four parallel lines. They scanned one another. Numerous hands reached across to adjust the electrochemical controls on chestboxes which had begun to load up. One Scanner held out a broken finger which his counter-Scanner had discovered, and submitted it for treatment and splinting.

Vomact had taken out his Staff of Office. The cube at the top flashed red light through the room, the lines reformed, and all Scanners gave the sign meaning,

Present and ready!

Vomact countered with the stance signifying, *I am the Senior and take command.*

Talking fingers rose in the counter-gesture, *We concur and commit ourselves.*

Vomact raised his right arm, dropped the wrist as though it were broken, in a queer searching gesture, meaning: *Any men around? Any habermans not tied? All clear for the Scanners?*

Alone of all those present, the cranched Martel heard the queer rustle of feet as they all turned completely around without leaving position, looking sharply at one another and flashing their beltlights into the dark corners of the great room. When again they faced Vomact, he made a further sign:

All clear. Follow my words.

Martel noticed that he alone relaxed. The others could not know the meaning of relaxation with the minds

blocked off up there in their skulls, connected only with the eyes, and the rest of the body connected with the mind only by controlling non-sensory nerves and the instrument boxes on their chests. Martel realized that, cranched as he was, he had expected to hear Vomact's voice: the Senior had been talking for some time. No sound escaped his lips. (Vomact never bothered with sounds.)

". . . and when the first men to go Up-and-Out went to the moon, what did they find?"

"Nothing," responded the silent chorus of lips.

"Therefore they went farther, to Mars and to Venus. The ships went out year by year, but they did not come back until the Year One of Space. Then did a ship come back with the First Effect. Scanners, I ask you, what is the First Effect?"

"No one knows. No one knows."

"No one will ever know. Too many are the variables. By what do we know the First Effect?"

"By the Great Pain of Space," came the chorus.

"And by what further sign?"

"By the need, oh the need for death."

Vomact again: "And who stopped the need for death?"

"Henry Haberman conquered the First Effect, in the Year 83 of Space."

"And, Scanners, I ask you, what did he do?"

"He made the habermans."

"How, O Scanners, are habermans made?"

"They are made with the cuts. The brain is cut from the heart, the lungs. The brain is cut from the ears, the nose. The brain is cut from the mouth, the belly. The brain is cut from desire, and pain. The brain is cut from the world. Save for the eyes. Save for the control of the living flesh."

"And how, O Scanners, is flesh controlled?"

"By the boxes set in the flesh, the controls set in the chest, the signs made to rule the living body, the signs by which the body lives."

"How does a haberman live and live?"

"The haberman lives by control of the boxes."

"Whence come the habermans?"

Martel felt in the coming response a great roar of

broken voices echoing through the room as the Scanners, habermans themselves, put sound behind their mouthings:

"Habermans are the scum of mankind. Habermans are the weak, the cruel, the credulous, and the unfit. Habermans are the sentenced-to-more-than-death. Habermans live in the mind alone. They are killed for Space but they live for Space. They master the ships that connect the earths. They live in the Great Pain while ordinary men sleep in the cold, cold sleep of the transit."

"Brothers and Scanners, I ask you now: are we habermans or are we not?"

"We are habermans in the flesh. We are cut apart, brain and flesh. We are ready to go to the Up-and-Out. All of us have gone through the haberman device."

"We are habermans then?" Vomact's eyes flashed and glittered as he asked the ritual question.

Again the chorused answer was accompanied by a roar of voices heard only by Martel: "Habermans we are, and more, and more. We are the Chosen who are habermans by our own free will. We are the Agents of the Instrumentality of Mankind."

"What must the others say to us?"

"They must say to us, 'You are the bravest of the brave, the most skillful of the skilled. All mankind owes most honor to the Scanner, who unites the Earths of Mankind. Scanners are the protectors of the habermans. They are the judges in the Up-and-Out. They make men live in the place where men need desperately to die. They are the most honored of mankind, and even the Chiefs of the Instrumentality are delighted to pay them homage!' "

Vomact stood more erect: "What is the secret duty of the Scanner?"

"To keep secret our law, and to destroy the acquirers thereof."

"How to destroy?"

"Twice to the *Overload,* back and *Dead.*"

"If habermans die, what the duty then?"

The Scanners all compressed their lips for answer. (Silence was the code.) Martel, who—long familiar with the code—was a little bored with the proceedings, noticed

that Chang was breathing too heavily; he reached over and adjusted Chang's lung-control and received the thanks of Chang's eyes. Vomact observed the interruption and glared at them both. Martel relaxed, trying to imitate the dead cold stillness of the others. It was so hard to do, when you were cranched.

"If others die, what the duty then?" asked Vomact.

"Scanners together inform the Instrumentality. Scanners together accept the punishment. Scanners together settle the case."

"And if the punishment be severe?"

"Then no ships go."

"And if Scanners not be honored?"

"Then no ships go."

"And if a Scanner goes unpaid?"

"Then no ships go."

"And if the Others and the Instrumentality are not in all ways at all times mindful of their proper obligation to the Scanners?"

"Then no ships go."

"And what, O Scanners, if no ships go?"

"The Earths fall apart. The Wild comes back in. The Old Machines and the Beasts return."

"What is the first known duty of a Scanner?"

"Not to sleep in the Up-and-Out."

"What is the second duty of a Scanner?"

"To keep forgotten the name of fear."

"What is the third duty of a Scanner?"

"To use the wire of Eustace Cranch only with care, only with moderation." Several pair of eyes looked quickly at Martel before the mouthed chorus went on. "To cranch only at home, only among friends, only for the purpose of remembering, of relaxing, or of begetting."

"What is the word of the Scanner?"

"Faithful though surrounded by death."

"What is the motto of the Scanner?"

"Awake though surrounded by silence."

"What is the work of the Scanner?"

"Labor even in the heights of the Up-and-Out, loyalty even in the depths of the Earths."

"How do you know a Scanner?"

"We know ourselves. We are dead though we live. And we talk with the tablet and the nail."

"What is this code?"

"This code is the friendly ancient wisdom of Scanners, briefly put that we may be mindful and be cheered by our loyalty to one another."

At this point the formula should have run: "We complete the code. Is there work or word for the Scanners?" But Vomact said, and he repeated:

"Top emergency. Top emergency."

They gave him the sign, *Present and ready!*

He said, with every eye straining to follow his lips:

"Some of you know the work of Adam Stone?"

Martel saw lips move, saying: "The Red Asteroid. The Other who lives at the edge of Space."

"Adam Stone has gone to the Instrumentality, claiming success for his work. He says that he has found how to screen out the Pain of Space. He says that the Up-and-Out can be made safe for ordinary men to work in, to stay awake in. He says that there need be no more Scanners."

Beltlights flashed on all over the room as Scanners sought the right to speak. Vomact nodded to one of the older men. "Scanner Smith will speak."

Smith stepped slowly up into the light, watching his own feet. He turned so that they could see his face. He spoke: "I say that this is a lie. I say that Stone is a liar. I say that the Instrumentality must not be deceived."

He paused. Then, in answer to some question from the audience which most of the others did not see, he said:

"I invoke the secret duty of the Scanners."

Smith raised his right hand for emergency attention:

"I say that Stone must die."

Martel, still cranched, shuddered as he heard the boos, groans, shouts, squeaks, grunts and moans which came from the Scanners who forgot noise in their excitement and strove to make their dead bodies talk to one another's deaf ears. Beltlights flashed wildly all over the room. There was a rush for the rostrum and Scanners milled

around at the top, vying for attention until Parizianski—by sheer bulk—shoved the others aside and down, and turned to mouth at the group.

"Brother Scanners, I want your eyes."

The people on the floor kept moving, with their numb bodies jostling one another. Finally Vomact stepped up in front of Parizianski, faced the others, and said:

"Scanners, be Scanners! Give him your eyes."

Parizianski was not good at public speaking. His lips moved too fast. He waved his hands, which took the eyes of the others away from his lips. Nevertheless, Martel was able to follow most of the message:

". . . can't do this. Stone may have succeeded. If he has succeeded, it means the end of the Scanners. It means the end of the habermans, too. None of us will have to fight in the Up-and-Out. We won't have anybody else going under the wire for a few hours or days of being human. Everybody will be Other. Nobody will have to cranch, never again. Men can be men. The habermans can be killed decently and properly, the way men were killed in the old days, without anybody keeping them alive. They won't have to work in the Up-and-Out! There will be no more Great Pain—think of it! No . . . more . . . Great . . . Pain! How do we know that Stone is a liar—" Lights began flashing directly into his eyes. (The rudest insult of Scanner to Scanner was this.)

Vomact again exercised authority. He stepped in front of Parizianski and said something which the others could not see. Parizianski stepped down from the rostum. Vomact again spoke:

"I think that some of the Scanners disagree with our Brother Parizianski. I say that the use of the rostrum be suspended till we have had a chance for private discussion. In fifteen minutes I will call the meeting back to order."

Martel looked around for Vomact when the Senior had rejoined the group on the floor. Finding the Senior, Martel wrote swift script on his tablet, waiting for a chance to thrust the tablet before the Senior's eyes. He had written:

Am crnchd. Rspctfly requst prmissn lv now, stnd by fr orders.

Being cranched did strange things to Martel. Most meetings that he attended seemed formal, hearteningly ceremonial, lighting up the dark inward eternities of habermanhood. When he was not cranched, he noticed his body no more than a marble bust notices its marble pedestal. He had stood with them before. He had stood with them effortless hours, while the long-winded ritual broke through the terrible loneliness behind his eyes, and made him feel that the Scanners, though a confraternity of the damned, were none the less forever honored by the professional requirements of their mutilation.

This time, it was different. Coming cranched, and in full possession of smell-sound-taste-feeling, he reacted more or less as a normal man would. He saw his friends and colleagues as a lot of cruelly driven ghosts, posturing out the meaningless ritual of their indefeasible damnation. What difference did anything make, once you were a haberman? Why all this talk about habermans and Scanners? Habermans were criminals or heretics, and Scanners were gentlemen-volunteers, but they were all in the same fix—except that Scanners were deemed worthy of the short-time return of the cranching wire, while habermans were simply disconnected while the ships lay in port and were left suspended until they should be awakened, in some hour of emergency or trouble, to work out another spell of their damnation. It was a rare haberman that you saw on the street—someone of special merit or bravery, allowed to look at mankind from the terrible prison of his own mechanified body. And yet, what Scanner ever pitied a haberman? What Scanner ever honored a haberman except perfunctorily in the line of duty? What had the Scanners as a guild and a class ever done for the habermans, except to murder them with a twist of the wrist whenever a haberman, too long beside a Scanner, picked up the tricks of the scanning trade and learned how to live at his own will, not the will the Scanners imposed? What could the Others, the ordinary men, know of what went on inside the ships? The Others slept in their cylinders, mercifully unconscious until they woke up on whatever other Earth they had consigned themselves to. What could the Others

know of the men who had to stay alive within the ship?

What could any Other know of the Up-and-Out? What Other could look at the biting acid beauty of the stars in open Space? What could they tell of the Great Pain, which started quietly in the marrow, like an ache, and proceeded by the fatigue and nausea of each separate nerve cell, brain cell, touchpoint in the body, until life itself became a terrible aching hunger for silence and for death?

He was a Scanner. All right, he *was* a Scanner. He had been a Scanner from the moment when, wholly normal, he had stood in the sunlight before a Subchief of the Instrumentality, and had sworn:

"I pledge my honor and my life to Mankind. I sacrificed myself willingly for the welfare of Mankind. In accepting the perilous austere honor, I yield all my rights without exception to the Honorable Chiefs of the Instrumentality and to the Honored Confraternity of Scanners."

He had pledged.

He had gone into the haberman device.

He remembered his hell. He had not had such a bad one, even though it had seemed to last a hundred-million years, all of them without sleep. He had learned to feel with his eyes. He had learned to see despite the heavy eyeplates set back of his eyeballs to insulate his eyes from the rest of him. He had learned to watch his skin. He still remembered the time he had noticed dampness on his shirt, and had pulled out his scanning mirror only to discover that he had worn a hole in his side by leaning against a vibrating machine. (A thing like that could not happen to him now; he was too adept at reading his own instruments.) He remembered the way that he had gone Up-and-Out, and the way that the Great Pain beat into him, despite the fact that his touch, smell, feeling, and hearing were gone for all ordinary purposes. He remembered killing habermans, and keeping others alive, and standing for months beside the Honorable Scanner-Pilot while neither of them slept. He remembered going ashore on Earth Four, and remembered that he had not enjoyed it, and had realized on that day that there was no reward.

Martel stood among the other Scanners. He hated their

awkwardness when they moved, their immobility when they stood still. He hated the queer assortment of smells which their bodies yielded unnoticed. He hated the grunts and groans and squawks which they emitted from their deafness. He hated them, and himself.

How could Luci stand him? He had kept his chestbox reading *Danger* for weeks while he courted her, carrying the cranch wire about with him most illegally, and going direct from one cranch to the other without worrying about the fact his indicators all crept up to the edge of *Overload.* He had wooed her without thinking of what would happen if she did say, "Yes." She had.

"And they lived happily ever after." In old books they did, but how could they, in life? He had had eighteen days under the wire in the whole of the past year! Yet she had loved him. She still loved him. He knew it. She fretted about him through the long months that he was in the Up-and-Out. She tried to make home mean something to him even when he was haberman, make food pretty when it could not be tasted, make herself lovable when she could not be kissed—or might as well not, since a haberman body meant no more than furniture. Luci was patient.

And now, Adam Stone! (He let his tablet fade: how could he leave now?)

God bless Adam Stone?

Martel could not help feeling a little sorry for himself. No longer would the high keen call of duty carry him through two-hundred or so years of the Others' time, two-million private eternities of his own. He could slouch and relax. He could forget High Space, and let the Up-and-Out be tended by Others. He could cranch as much as he dared. He could be almost normal—almost—for one year or five years or no years. But at least he could stay with Luci. He could go with her into the Wild, where there were Beasts and Old Machines still roving the dark places. Perhaps he would die in the excitement of the hunt, throwing spears at an ancient manshonyagger as it leapt from its lair, or tossing hot spheres at the tribesmen of the Unforgiven who still roamed the Wild. There was still life to live, still a good normal death to die, not the moving of a

needle out in the silence and agony of Space!

He had been walking about restlessly. His ears were attuned to the sounds of normal speech, so that he did not feel like watching the mouthings of his brethren. Now they seemed to have come to a decision. Vomact was moving to the rostrum. Martel looked about for Chang, and went to stand beside him. Chang whispered:

"You're as restless as water in mid-air! What's the matter? De-cranching?"

They both scanned Martel, but the instruments held steady and showed no sign of the cranch giving out.

The great light flared in its call to attention. Again they formed ranks. Vomact thrust his lean old face into the glare, and spoke:

"Scanners and Brothers, I call for a vote." He held himself in the stance which meant: *I am the Senior and take command.*

A beltlight flashed in protest.

It was old Henderson. He moved to the rostrum, spoke to Vomact, and—with Vomact's nod of approval—turned full-face to repeat his question:

"Who speaks for the Scanners Out in Space?"

No beltlight or hand answered.

Henderson and Vomact, face to face, conferred for a few moments. Then Henderson faced them again:

"I yield to the Senior in command. But I do not yield to a Meeting of the Confraternity. There are sixty-eight Scanners, and only forty-seven present, of whom one is cranched and U.D. I have therefore proposed that the Senior in command assume authority only over an Emergency Committee of the Confraternity, not over a Meeting. Is that agreed and understood by the Honorable Scanners?"

Hands rose in assent.

Chang murmured in Martel's ear, "Lot of difference that makes! Who can tell the difference between a meeting and a committee?" Martel agreed with the words, but was even more impressed with the way that Chang, while haberman, could control his own voice.

Vomact resumed chairmanship: "We now vote on the question of Adam Stone.

"First, we can assume that he has not succeeded, and that his claims are lies. We know that from our practical experiences as Scanners. The Pain of Space is only part of Scanning," (*But the essential part, the basis of it all,* thought Martel.) "and we can rest assured that Stone cannot solve the problem of Space Discipline."

"That tripe again," whispered Chang, unheard save by Martel.

"The Space Discipline of our Confraternity has kept High Space clean of war and dispute. Sixty-eight disciplined men control all High Space. We are removed by our oath and our haberman status from all Earthly passions.

"Therefore, if Adam Stone has conquered the Pain of Space, so that Others can wreck our Confraternity and bring to Space the trouble and ruin which afflicts Earths, I say that Adam Stone is wrong. If Adam Stone succeeds, Scanners live in vain!

"Secondly, if Adam Stone has not conquered the Pain of Space, he will cause great trouble in all the Earths. The Instrumentality and the Subchiefs may not give us as many habermans as we need to operate the ships of Mankind. There will be wild stories, and fewer recruits, and, worst of all, the Discipline of the Confraternity may relax if this kind of nonsensical heresy is spread around.

"Therefore, if Adam Stone has succeeded, he threatens the ruin of the Confraternity and should die.

"I move the death of Adam Stone."

And Vomact made the sign, *The Honorable Scanners are pleased to vote.*

Martel grabbed wildly for his beltlight. Chang, guessing ahead, had his light out and ready; its bright beam, voting *No,* shone straight up at the ceiling. Martel got his light out and threw its beam upward in dissent. Then he looked around. Out of the forty-seven present, he could see only five or six glittering.

Two more lights went on. Vomact stood as erect as a frozen corpse. Vomact's eyes flashed as he stared back and forth over the group, looking for lights. Several more went on. Finally Vomact took the closing stance:

May it please the Scanners to count the vote.

Three of the older men went up on the rostrum with Vomact. They looked over the room. (Martel thought: *These damned ghosts are voting on the life of a real man, a live man! They have no right to do it. I'll tell the Instrumentality!* But he knew that he would not. He thought of Luci and what she might gain by the triumph of Adam Stone: the heartbreaking folly of the vote was then almost too much for Martel to bear.)

All three of the tellers held up their hands in unanimous agreement on the sign of the number: *Fifteen against.*

Vomact dismissed them with a bow of courtesy. He turned and again took the stance: *I am the Senior and take command.*

Marveling at his own daring, Martel flashed his beltlight on. He knew that any one of the bystanders might reach over and twist his heartbox to *Overload* for such an act. He felt Chang's hand reaching to catch him by the aircoat. But he eluded Chang's grasp and ran, faster than a Scanner should, to the platform. As he ran, he wondered what appeal to make. It was no use talking common sense. Not now. It had to be law.

He jumped up on the rostrum beside Vomact, and took the stance: *Scanners, an Illegality!*

He violated good custom while speaking, still in the stance: "A Committee has no right to vote death by a majority vote. It takes two-thirds of a full Meeting."

He felt Vomact's body lunge behind him, felt himself falling from the rostrum, hitting the floor, hurting his knees and his touch-aware hands. He was helped to his feet. He was scanned. Some Scanner he scarcely knew took his instruments and toned him down.

Immediately Martel felt more calm, more detached, and hated himself for feeling so.

He looked up at the rostrum. Vomact maintained the stance signifying: *Order!*

The Scanners adjusted their ranks. The two Scanners next to Martel took his arms. He shouted at them, but they looked away, and cut themselves off from communication altogether.

Vomact spoke again when he saw the room was quiet: "A Scanner came here cranched. Honorable Scanners, I apologize for this. It is not the fault of our great and worthy Scanner and friend, Martel. He came here under orders. I told him not to de-cranch. I hoped to spare him an unnecessary haberman. We all know how happily Martel is married, and we wish his brave experiment well. I like Martel. I respect his judgment. I wanted him here. I knew you wanted him here. But he is cranched. He is in no mood to share in the lofty business of the Scanners. I therefore propose a solution which will meet all the requirements of fairness. I propose that we rule Scanner Martel out of order for his violation of rules. This violation would be inexcusable if Martel were not cranched.

"But at the same time, in all fairness to Martel, I further propose that we deal with the points raised so improperly by our worthy but disqualified brother."

Vomact gave the sign, *The Honorable Scanners are pleased to vote.* Martel tried to reach his own beltlight; the dead strong hands held him tightly and he struggled in vain. One lone light shone high: Chang's, no doubt.

Vomact thrust his face into the light again: "Having the approval of our worthy Scanners and present company for the general proposal, I now move that this Committee declare itself to have the full authority of a Meeting, and that this Committee further make me responsible for all misdeeds which this Committee may enact, to be held answerable before the next full Meeting, but not before any other authority beyond the closed and secret ranks of Scanners."

Flamboyantly this time, his triumph evident, Vomact assumed the *vote* stance.

Only a few lights shone: far less, patently, than a minority of one-fourth.

Vomact spoke again. The light shone on his high calm forehead, on his dead relaxed cheekbones. His lean cheeks

and chin were half-shadowed, save where the lower light picked up and spotlighted his mouth, cruel even in repose. (Vomact was said to be a descendant of some ancient lady who had traversed, in an illegitimate and inexplicable fashion, some hundreds of years of time in a single night. Her name, the Lady Vomact, has passed into legend; but her blood and her archaic lust for mastery lived on in the mute masterful body of her descendant. Martel could believe the old tales as he stared at the rostrum, wondering what untraceable mutation had left the Vomact kin as predators among Mankind.) Calling loudly with the movement of his lips, but still without sound, Vomact appealed:

"The honorable Committee is now pleased to reaffirm the sentence of death issued against the heretic and enemy, Adam Stone." Again the *vote* stance.

Again Chang's light shone lonely in its isolated protest.

Vomact then made his final move:

"I call for the designation of the Senior Scanner present as the manager of the sentence. I call for authorization to him to appoint executioners, one or many, who shall make evident the will and majesty of Scanners. I ask that I be accountable for the deed, and not for the means. The deed is a noble deed, for the protection of Mankind and for the honor of the Scanners; but of the means it must be said that they are to be the best at hand, and no more. Who knows the true way to kill an Other, here on a crowded and watchful Earth? This is no mere matter of discharging a cylindered sleeper, no mere question of upgrading the needle of a haberman. When people die down here, it is not like the Up-and-Out. They die reluctantly. Killing within the Earth is not our usual business, O brothers and Scanners, as you know well. You must choose me to choose my agent as I see fit. Otherwise the common knowledge will become the common betrayal whereas if I alone know the responsibility, I alone could betray us, and you will not have far to look in case the Instrumentality comes searching." *(What about the killer you choose?* thought Martel. *He too will know unless—unless you silence him forever.)*

Vomact went into the stance: *The Honorable Scanners are pleased to vote.*

One light of protest shone; Chang's, again.

Martel imagined that he could see a cruel joyful smile on Vomact's dead face—the smile of a man who knew himself righteous and who found his righteousness upheld and affirmed by militant authority.

Martel tried one last time to come free.

The dead hands held. They were locked like vises until their owners' eyes unlocked them: how else could they hold the piloting month by month?

Martel then shouted: "Honorable Scanners, this is judicial murder."

No ear heard him. He was cranched, and alone.

None the less, he shouted again: "You endanger the Confraternity."

Nothing happened.

The echo of his voice sounded from one end of the room to the other. No head turned. No eyes met his.

Martel realized that as they paired for talk, the eyes of the Scanners averted him. He saw that no one desired to watch his speech. He knew that behind the cold faces of his friends there lay compassion or amusement. He knew that they knew him to be cranched—absurd, normal, man-like, temporarily no Scanner. But he knew that in this matter the wisdom of Scanners was nothing. He knew that only a cranched Scanner could feel with his very blood the outrage and anger which deliberate murder would provoke among the Others. He knew that the Confraternity endangered itself, and knew that the most ancient prerogative of law was the monopoly of death. Even the ancient nations, in the times of the Wars, before the Beasts, before men went into the Up-and-Out—even the ancients had known this. How did they say it? *Only the state shall kill.* The states were gone but the Instrumentality remained, and the Instrumentality could not pardon things which occurred within the Earths but beyond its authority. Death in Space was the business, the right of the Scanners: how could the Instrumentality enforce its laws in a place where all men who wakened, wakened only to die in the

Great Pain? Wisely did the Instrumentality leave Space to the Scanners, wisely had the Confraternity not meddled inside the Earths. And now the Confraternity itself was going to step forth as an outlaw band, as a gang of rogues as stupid and reckless as the tribes of the Unforgiven!

Martel knew this because he was cranched. Had he been haberman, he would have thought only with his mind, not with his heart and guts and blood. How could the other Scanners know?

Vomact returned for the last time to the rostrum: *The Committee has met and its will shall be done.* Verbally he added: "Senior among you, I ask your loyalty and your silence."

At that point, the two Scanners let his arms go. Martel rubbed his numb hands, shaking his fingers to get the circulation back into the cold fingertips. With real freedom, he began to think of what he might still do. He scanned himself: the cranching held. He might have a day. Well, he could go even if haberman, but it would be inconvenient, having to talk with finger and tablet. He looked about for Chang. He saw his friend standing patient and immobile in a quiet corner. Martel moved slowly, so as not to attract any more attention to himself than could be helped. He faced Chang, moved until his face was in the light, and then articulated:

"What are we going to do? You're not going to let them kill Adam Stone, are you? Don't you realize what Stone's work will mean to us, if it succeeds? No more Scanners. No more habermans. No more Pain in the Up-and-Out. I tell you, if the others were all cranched, as I am, they would see it in a human way, not with the narrow crazy logic which they used in the Meeting. We've got to stop them. How can we do it? What are we going to do? What does Parizianski think? Who has been chosen?"

"Which question do you want me to answer?"

Martel laughed. (It felt good to laugh, even then; it felt like being a man.) "Will you help me?"

Chang's eye flashed across Martel's face as Chang answered: "No. No. No."

"You won't help?"

"No."

"Why not, Chang? Why not?"

"I am a Scanner. The vote has been taken. You would do the same if you were not in this unusual condition."

"I'm not in an unusual condition. I'm cranched. That merely means that I see things the way that the Others would. I see the stupidity. The recklessness. The selfishness. It is murder."

"What is murder? Have you not killed? You are not one of the Others. You are a Scanner. You will be sorry for what you are about to do, if you do not watch out."

"But why did you vote against Vomact then? Didn't you too see what Adam Stone means to all of us? Scanners will live in vain. Thank God for that! Can't you see it?"

"No."

"But you talk to me, Chang. You are my friend?"

"I talk to you. I am your friend. Why not?"

"But what are you going to do?"

"Nothing, Martel. Nothing."

"Will you help me?"

"No."

"Not even to save Stone?"

"No."

"Then I will go to Parizianski for help."

"It will do you no good."

"Why not? He's more human than you, right now."

"He will not help you, because he has the job. Vomact designated him to kill Adam Stone."

Martel stopped speaking in mid-movement. He suddenly took the stance: *I thank you, brother, and I depart.*

At the window he turned and faced the room. He saw that Vomact's eyes were upon him. He gave the stance, *I thank you, brother, and I depart,* and added the flourish of respect which is shown when Seniors are present. Vomact caught the sign, and Martel could see the cruel lips move. He thought he saw the words ". . . take good care of yourself . . ." but did not wait to inquire. He stepped backward and dropped out the window.

Once below the window and out of sight, he adjusted

his aircoat to a maximum speed. He swam lazily in the air scanning himself thoroughly, and adjusting his adrenal intake down. He then made the movement of release, and felt the cold air rush past his face like running water.

Adam Stone had to be at Chief Downport.

Adam Stone had to be there.

Wouldn't Adam Stone be surprised in the night? Surprised to meet the strangest of beings, the first renegade among Scanners. (Martel suddenly appreciated that it was of himself he was thinking. Martel the Traitor to Scanners! That sounded strange and bad. But what of Martel, the Loyal to Mankind? Was that no compensation? And if he won, he won Luci. If he lost, he lost nothing—an unconsidered and expendable haberman. It happened to be himself. But in contrast to the immense reward, to Mankind, to the Confraternity, to Luci, what did that matter?)

Martel thought to himself: "Adam Stone will have two visitors tonight. Two Scanners, who are the friends of one another." He hoped that Parizianski was still his friend.

"And the world," he added, "depends on which of us gets there first."

Multifaceted in their brightness, the lights of Chief Downport began to shine through the mist ahead. Martel could see the outer towers of the city and glimpsed the phosphorescent periphery which kept back the Wild, whether Beasts, Machines, or the Unforgiven.

Once more Martel invoked the lords of his chance: "Help me to pass for an Other!"

Within the Downport, Martel had less trouble than he thought. He draped his aircoat over his shoulder so that it concealed the instruments. He took up his scanning mirror, and made up his face from the inside, by adding tone and animation to his blood and nerves until the muscles of his face glowed and the skin gave out a healthy sweat. That way he looked like an ordinary man who had just completed a long night flight.

After straightening out his clothing, and hiding his tablet within his jacket, he faced the problem of what to do about

the talking finger. If he kept the nail, it would show him to be a Scanner. He would be respected but he would be identified. He might be stopped by the guards whom the Instrumentality had undoubtedly set around the person of Adam Stone. If he broke the nail— But he couldn't! No Scanner in the history of the Confraternity had ever willingly broken his nail. That would be Resignation, and there was no such thing. The only way *out,* was in the Up-and-Out! Martel put his finger to his mouth and bit off the nail. He looked at the now-queer finger, and sighed to himself.

He stepped toward the city gate, slipping his hand into his jacket and running up his muscular strength to four times normal. He started to scan, and then realized that his instruments were masked. *Might as well take all the chances at once,* he thought.

The watcher stopped him with a searching wire. The sphere thumped suddenly against Martel's chest.

"Are you a man?" said the unseen voice. (Martel knew that as a Scanner in haberman condition, his own field-charge would have illuminated the sphere.)

"I am a man." Martel knew that the timbre of his voice had been good; he hoped that it would not be taken for that of a manshonyagger or a Beast or an Unforgiven one, who with mimcry sought to enter the cities and ports of Mankind.

"Name, number, rank, purpose, function, time departed."

"Martel." He had to remember his old number, not Scanner 34. "Sunward 4234, 782nd Year of Space. Rank, rising Subchief." That was no lie, but his substantive rank. "Purpose, personal and lawful within the limits of this city. No function of the Instrumentality. Departed Chief Outport 2019 hours." Everything now depended on whether he was believed, or would be checked against Chief Outport.

The voice was flat and routine: "Time desired within the city."

Martel used the standard phrase: "Your honorable sufferance is requested."

He stood in the cool night air, waiting. Far above him, through a gap in the mist, he could see the poisonous glittering in the sky of Scanners. *The stars are my enemies,* he thought: *I have mastered the stars but they hate me. Ho, that sounds ancient! Like a book. Too much cranching.*

The voice returned: "Sunward 4234 dash 782 rising Subchief Martel, enter the lawful gates of the city. Welcome. Do you desire food, raiment, money, or companionship?" The voice had no hospitality in it, just business. This was certainly different from entering a city in a Scanner's role! Then the petty officers came out, and threw their beltlights in their fretful faces, and mouthed their words with preposterous deference, shouting against the stone deafness of Scanners' ears. So that was the way that a Subchief was treated: matter of fact, but not bad. Not bad.

Martel replied: "I have that which I need, but beg of the city a favor. My friend Adam Stone is here. I desire to see him, on urgent and personal lawful affairs."

The voice replied: "Did you have an appointment with Adam Stone?"

"No."

"The city will find him. What is his number?"

"I have forgotten it."

"You have forgotten it? Is not Adam Stone a Magnate of the Instrumentality? Are you truly his friend?"

"Truly." Martel let a little annoyance creep into his voice. "Watcher, doubt me and call your Subchief."

"No doubt implied. Why do you not know the number? This must go into the record," added the voice.

"We were friends in childhood. He had crossed the—" Martel started to say "the Up-and-Out" and remembered that the phrase was current only among Scanners. "He has leapt from Earth to Earth, and has just now returned. I knew him well and I seek him out. I have word of his kith. May the Instrumentality protect us!"

"Heard and believed. Adam Stone will be searched."

At a risk, though a slight one, of having the sphere sound an alarm for *non-human,* Martel cut in on his Scanner speaker within his jacket. He saw the trembling needle

of light await his words and he started to write on it with his blunt finger. *That won't work,* he thought, and had a moment's panic until he found his comb, which had a sharp enough tooth to write. He wrote: "Emergency none. Martel Scanner calling Parizianski Scanner."

The needle quivered and the reply glowed and faded out: "Parizianski Scanner on duty and D. C. Calls taken by Scanner Relay."

Martel cut off his speaker.

Parizianski was somewhere around. Could he have crossed the direct way, right over the city wall, setting off the alert, and invoking official business when the petty officers overtook him in mid-air? Scarcely. That meant that a number of other Scanners must have come in with Parizianski, all of them pretending to be in search of a few of the tenuous pleasures which could be enjoyed by a haberman, such as the sight of the newspictures or the viewing of beautiful women in the Pleasure Gallery. Parizianski was around, but he could not have moved privately, because Scanner Central registered him on duty and recorded his movements city by city.

The voice returned. Puzzlement was expressed in it. "Adam Stone is found and awakened. He has asked pardon of the Honorable, and says he knows no Martel. Will you see Adam Stone in the morning? The city will bid you welcome."

Martel ran out of resources. It was hard enough mimicking a man without having to tell lies in the guise of one. Martel could only repeat: "Tell him I am Martel. The husband of Luci."

"It will be done."

Again the silence, and the hostile stars, and the sense that Parizianski was somewhere near and getting nearer; Martel felt his heart beating faster. He stole a glimpse at his chestbox and set his heart down a point. He felt calmer, even though he had not been able to scan with care.

The voice this time was cheerful, as though an annoyance had been settled: "Adam Stone consents to see you. Enter Chief Downport, and welcome."

The little sphere dropped noiselessly to the ground and

the wire whispered away into the darkness. A bright arc of narrow light rose from the ground in front of Martel and swept through the city to one of the higher towers—apparently a hostel, which Martel had never entered. Martel plucked his aircoat to his chest for ballast, stepped heel-and-toe on the beam, and felt himself whistle through the air to an entrance window which sprang up before him as suddenly as a devouring mouth.

A tower guard stood in the doorway. "You are awaited, sir. Do you bear weapons, sir?"

"None," said Martel, grateful that he was relying on his own strength.

The guard led him past the check-screen. Martel noticed the quick flight of a warning across the screen as his instruments registered and identified him as a Scanner. But the guard had not noticed it.

The guard stopped at a door. "Adam Stone is armed. He is lawfully armed by authority of the Instrumentality and by the liberty of this city. All those who enter are given warning."

Martel nodded in understanding at the man and went in.

Adam Stone was a short man, stout and benign. His gray hair rose stiffly from a low forehead. His whole face was red and merry-looking. He looked like a jolly guide from the Pleasure Gallery, not like a man who had been at the edge of the Up-and-Out, fighting the Great Pain without haberman protection.

He stared at Martel. His look was puzzled, perhaps a little annoyed, but not hostile.

Martel came to the point. "You do not know me. I lied. My name is Martel, and I mean you no harm. But I lied. I beg the honorable gift of your hospitality. Remain armed. Direct your weapon against me—"

Stone smiled: "I am doing so," and Martel noticed the small wirepoint in Stone's capable plump hand.

"Good. Keep on guard against me. It will give you confidence in what I shall say. But do, I beg you, give us a screen of privacy. I want no casual lookers. This is a matter of life and death."

"First: whose life and death?" Stone's face remained calm, his voice even.

"Yours, and mine, and the worlds'."

"You are cryptic but I agree." Stone called through the doorway: "Privacy please." There was a sudden hum, and all the little noises of the night quickly vanished from the air of the room.

Said Adam Stone: "Sir, who are you? What brings you here?"

"I am Scanner Thirty-four."

"You a Scanner? I don't believe it."

For answer, Martel pulled his jacket open, showing his chestbox. Stone looked up at him, amazed. Martel explained:

"I am cranched. Have you never seen it before?"

"*Not with men.* On animals. Amazing! But—what do you want?"

"The truth. Do you fear me?"

"Not with this," said Stone, grasping the wirepoint. "But I shall tell you the truth."

"Is it true that you have conquered the Great Pain?"

Stone hesitated, seeking words for an answer.

"Quick, can you tell me how you have done it, so that I may believe you?"

"I have loaded the ships with life."

"Life?"

"Life. I don't know what the Great Pain is, but I did find that in the experiments, when I sent out masses of animals or plants, the life in the center of the mass lived longest. I built ships—small ones, of course—and sent them out with rabbits, with monkeys—"

"Those are Beasts?"

"Yes. With small Beasts. And the Beasts came back unhurt. They came back because the walls of the ships were filled with life. I tried many kinds, and finally found a sort of life which lives in the waters. Oysters. Oyster-beds. The outer-most oysters died in the Great Pain. The inner ones lived. The passengers were unhurt."

"But they were Beasts?"

"Not only Beasts. Myself."

"You!"

"I came through Space alone. Through what you call the Up-and-Out, alone. Awake and sleeping. I am unhurt. If you do not believe me, ask your brother Scanners. Come and see my ship in the morning. I will be glad to see you then, along with your brother Scanners. I am going to demonstrate before the Chiefs of the Instrumentality."

Martel repeated his question: "You came here alone?"

Adam Stone grew testy: "Yes, alone. Go back and check your Scanner's register if you do not believe me. You never put me in a bottle to cross Space."

Martel's face was radiant. "I believe you now. It is true. No more Scanners. No more habermans. No more cranching."

Stone looked significantly toward the door.

Martel did not take the hint. "I must tell you that—"

"Sir, tell me in the morning. Go enjoy your cranch. Isn't it supposed to be pleasure? Medically I know it well. But not in practice."

"It is pleasure. It's normality—for a while. But listen. The Scanners have sworn to destroy you, and your work."

"What!"

"They have met and have voted and sworn. You will make Scanners unnecessary, they say. You will bring the ancient wars back to the world, if scanning is lost and the Scanners live in vain!"

Adam Stone was nervous but kept his wits about him: "You're a Scanner. Are you going to kill me—or try?"

"No, you fool. I have betrayed the Confraternity. Call guards the moment I escape. Keep guards around you. I will try to intercept the killer."

Martel saw a blur in the window. Before Stone could turn, the wirepoint was whipped out of his hand. The blur solidified and took form as Parizianski.

Martel recognized what Parizianski was doing: *High speed.*

Without thinking of his cranch, he thrust his hand to his chest, set himself up to *High speed* too. Waves of fire, like the Great Pain, but hotter, flooded over him. He fought to

keep his face readable as he stepped in front of Parizianski and gave the sign,

Top emergency.

Parizianski spoke, while the normally moving body of Stone stepped away from them as slowly as a drifting cloud: "Get out of my way. I am on a mission."

"I know it. I stop you here and now. Stop. Stop. Stop. Stone is right."

Parizianski's lips were barely readable in the haze of pain which flooded Martel. (He thought: *God, God, God of the ancients! Let me hold on! Let me live under Overload just long enough!)* Parizianski was saying: "Get out of my way. By order of the Confraternity, get out of my way!" And Parizianski gave the sign, *Help I demand in the name of my duty!*

Martel choked for breath in the syrup-like air. He tried one last time: "Parizianski, friend, friend, my friend. Stop. Stop." (No Scanner had ever murdered Scanner before.)

Parizianski made the sign: *You are unfit for duty, and I will take over.*

Martel thought, *For the first time in the world!* as he reached over and twisted Parizianski's brainbox up to *Overload.* Parizianski's eyes glittered in terror and understanding. His body began to drift down toward the floor.

Martel had just strength enough to reach his own chestbox. As he faded into haberman or death, he knew not which, he felt his fingers turning on the control of speed, turning down. He tried to speak, to say, "Get a Scanner, I need help, get a Scanner . . ."

But the darkness rose about him, and the numb silence clasped him.

Martel awakened to see the face of Luci near his own.

He opened his eyes wider, and found that he was hearing—hearing the sound of her happy weeping, the sound of her chest as she caught the air back into her throat.

He spoke weakly: "Still cranched? Alive?"

Another face swam into the blur beside Luci's. It was Adam Stone. His deep voice rang across immensities of

space before coming to Martel's hearing. Martel tried to read Stone's lips, but could not make them out. He went back to listening to the voice:

". . . not cranched. Do you understand me? Not cranched!"

Martel tried to say: "But I can hear! I can feel!" The others got his sense if not his words.

Adam Stone spoke again:

"You have gone back through the haberman. I put you back first. I didn't know how it would work in practice, but I had the theory all worked out. You don't think the Instrumentality would waste the Scanners, do you? You go back to normality. We are letting the habermans die as fast as the ships come in. They don't need to live any more. But we are restoring the Scanners. You are the first. Do you understand? You are the first. Take it easy, now."

Adam Stone smiled. Dimly behind Stone, Martel thought that he saw the face of one of the Chiefs of the Instrumentality. That face, too, smiled at him, and then both faces disappeared upward and away.

Martel tried to lift his head, to scan himself. He could not. Luci stared at him, calming herself, but with an expression of loving perplexity. She said,

"My darling husband! You're back again, to stay!"

Still, Martel tried to see his box. Finally he swept his hand across his chest with a clumsy motion. There was nothing there. The instruments were gone. He was back to normality but still alive.

In the deep weak peacefulness of his mind, another troubling thought took shape. He tried to write with his finger, the way that Luci wanted him to, but he had neither pointed fingernail nor Scanner's tablet. He had to use his voice. He summoned up his strength and whispered:

"Scanners?"

"Yes, darling? What is it?"

"Scanners?"

"Scanners. Oh, yes, darling, they're all right. They had to arrest some of them for going into *High speed* and running away. But the Instrumentality caught them all—all

those on the ground—and they're happy now. Do you know, darling," she laughed, "some of them didn't want to be restored to normality. But Stone and the Chiefs persuaded them."

"Vomact?"

"He's fine, too. He's staying cranched until he can be restored. Do you know, he has arranged for Scanners to take new jobs. You're all to be Deputy Chiefs for Space. Isn't that nice? But he got himself made Chief for Space. You're all going to be pilots, so that your fraternity and guild can go on. And Chang's getting changed right now. You'll see him soon."

Her face turned sad. She looked at him earnestly and said: "I might as well tell you now. You'll worry otherwise. There has been one accident. Only one. When you and your friend called on Adam Stone, your friend was so happy that he forgot to scan, and he let himself die of *Overload*."

"Called on Stone?"

"Yes. Don't you remember? Your friend."

He still looked surprised, so she said:

"Parizianski."

THE GAME OF RAT AND DRAGON

I. THE TABLE

Pinlighting is a hell of a way to earn a living. Underhill was furious as he closed the door behind himself. It didn't make much sense to wear a uniform and look like a soldier if people didn't appreciate what you did.

He sat down in his chair, laid his head back in the

headrest, and pulled the helmet down over his forehead.

As he waited for the pin-set to warm up, he remembered the girl in the outer corridor. She had looked at it, then looked at him scornfully.

"Meow." That was all she had said. Yet it had cut him like a knife.

What did she think he was—a fool, a loafer, a uniformed nonentity? Didn't she know that for every half-hour of pinlighting, he got a minimum of two months' recuperation in the hospital?

By now the set was warm. He felt the squares of space around him, sensed himself at the middle of an immense grid, a cubic grid, full of nothing. Out in that nothingness, he could sense the hollow aching horror of space itself and could feel the terrible anxiety which his mind encountered whenever it met the faintest trace of inert dust.

As he relaxed, the comforting solidity of the sun, the clockwork of the familiar planets and the moon rang in on him. Our own solar system was as charming and as simple as an ancient cuckoo clock filled with familiar ticking and with reassuring noises. The odd little moons of Mars swung around their planet like frantic mice, yet their regularity was itself an assurance that all was well. Far above the plane of the ecliptic, he could feel half a ton of dust more or less drifting outside the lanes of human travel.

Here there was nothing to fight, nothing to challenge the mind, to tear the living soul out of a body with its roots dripping in effluvium as tangible as blood.

Nothing ever moved in on the solar system. He could wear the pin-set forever and be nothing more than a sort of telepathic astronomer, a man who could feel the hot, warm protection of the sun throbbing and burning against his living mind.

Woodley came in.

"Same old ticking world," said Underhill. "Nothing to report. No wonder they didn't develop the pin-set until they began to planoform. Down here with the hot sun around us, it feels so good and so quiet. You can feel everything spinning and turning. It's nice and sharp and

compact. It's sort of like sitting around home."

Woodley grunted. He was not much given to flights of fantasy.

Undeterred, Underhill went on, "It must have been pretty good to have been an ancient man. I wonder why they burned up their world with war. They didn't have to planoform. They didn't have to go out to earn their livings among the stars. They didn't have to dodge the Rats or play the Game. They couldn't have invented pinlighting because they didn't have any need of it, did they, Woodley?"

Woodley grunted, "Uh-huh." Wooley was twenty-six years old and due to retire in one more year. He already had a farm picked out. He had gotten through ten years of hard work pinlighting with the best of them. He had kept his sanity by not thinking very much about his job, meeting the strains of the task whenever he had to meet them and thinking nothing more about his duties until the next emergency arose.

Woodley never made a point of getting popular among the Partners. None of the Partners liked him very much. Some of them even resented him. He was suspected of thinking ugly thoughts of the Partners on occasion, but since none of the Partners ever thought a complaint in articulate form, the other pinlighters and the Chiefs of the Instrumentality left him alone.

Underhill was still full of the wonder of their job. Happily he babbled on, "What does happen to us when we planoform? Do you think it's sort of like dying? Did you ever see anybody who had his soul pulled out?"

"Pulling souls is just a way of talking about it," said Woodley. "After all these years, nobody knows whether we have souls or not."

"But I saw one once. I saw what Dogwood looked like when he came apart. There was something funny. It looked wet and sort of sticky as if it were bleeding and it went out of him—and you know what they did to Dogwood? They took him away, up in that part of the hospital where you and I never go—way up at the top part where the others are, where the others always have to go if they are alive

after the Rats of the Up-and-Out have gotten them."

Woodley sat down and lit an ancient pipe. He was burning something called tobacco in it. It was a dirty sort of habit, but it made him look very dashing and adventurous.

"Look here, youngster. You don't have to worry about that stuff. Pinlighting is getting better all the time. The Partners are getting better. I've seen them pinlight two Rats forty-six-million miles apart in one and a half milliseconds. As long as people had to try to work the pin-sets themselves, there was always the chance that with a minimum of four-hundred milliseconds for the human mind to set a pinlight, we wouldn't light the Rats up fast enough to protect our planoforming ships. The Partners have changed all that. Once they get going, they're faster than Rats. And they always will be. I know it's not easy, letting a Partner share your mind—"

"It's not easy for them, either," said Underhill.

"Don't worry about them. They're not human. Let them take care of themselves. I've seen more pinlighters go crazy from monkeying around with Partners than I have ever seen caught by the Rats. How many of them do you actually know of that got grabbed by Rats?"

Underhill looked down at his fingers, which shone green and purple in the vivid light thrown by the tuned-in pin-set, and counted ships. The thumb for the *Andromeda,* lost with crew and passengers, the index finger and the middle finger for *Release Ships 43* and *56*, found with their pin-sets burned out and every man, woman, and child on board dead or insane. The ring finger, the little finger, and the thumb of the other hand were the first three battleships to be lost to the Rats—lost as people realized that there was something out there *underneath space itself* which was alive, capricious, and malevolent.

Planoforming was sort of funny. It felt like—

Like nothing much.

Like the twinge of a mild electric shock.

Like the ache of a sore tooth bitten on for the first time.

Like a slightly painful flash of light against the eyes.

Yet in that time, a forty-thousand-ton ship lifting free above Earth disappeared somehow or other into two

dimensions and appeared half a light-year or fifty light-years off.

At one moment, he would be sitting in the Fighting Room, the pin-set ready and the familiar solar system ticking around inside his head. For a second or a year (he could never tell how long it really was, subjectively), the funny little flash went through him and then he was loose in the Up-and-Out, the terrible open spaces between the stars, where the stars themselves felt like pimples on his telepathic mind and the planets were too far away to be sensed or read.

Somewhere in this outer space, a gruesome death awaited, death and horror of a kind which Man had never encountered until he reached out for interstellar space itself. Apparently the light of the suns kept the Dragons away.

Dragons. That was what people called them. To ordinary people, there was nothing, nothing except the shiver of planoforming and the hammer blow of sudden death or the dark spastic note of lunacy descending into their minds.

But to the telepaths, they were Dragons.

In the fraction of a second between the telepaths' awareness of a hostile something out in the black, hollow nothingness of space and the impact of a ferocious, ruinous psychic blow against all living things within the ship, the telepaths had sensed entities something like the Dragons of ancient human lore, beasts more clever than beasts, demons more tangible than demons, hungry vortices of aliveness and hate compounded by unknown means out of the thin tenuous matter between the stars.

It took a surviving ship to bring back the news—a ship in which, by sheer chance, a telepath had a light beam ready, turning it out at the innocent dust so that, within the panorama of his mind, the Dragon dissolved into nothing at all and the other passengers, themselves non-telepathic, went about their way not realizing that their own immediate deaths had been averted.

From then on, it was easy—almost.

Planoforming ships always carried telepaths. Telepaths

had their sensitiveness enlarged to an immense range by the pin-sets, which were telepathic amplifiers adapted to the mammal mind. The pin-sets in turn were electronically geared into small dirigible light bombs. Light did it.

Light broke up the Dragons, allowed the ships to reform three-dimensionally, skip, skip, skip, as they moved from star to star.

The odds suddenly moved down from a hundred to one against mankind to sixty to forty in mankind's favor.

This was not enough. The telepaths were trained to become ultrasensitive, trained to become aware of the Dragons in less than a millisecond.

But it was found that the Dragons could move a million miles in just under two milliseconds and that this was not enough for the human mind to activate the light beams.

Attempts had been made to sheath the ships in light at all times.

This defense wore out.

As mankind learned about the Dragons, so too, apparently, the Dragons learned about mankind. Somehow they flattened their own bulk and came in on extremely flat trajectories very quickly.

Intense light was needed, light of sunlike intensity. This could be provided only by light bombs. Pinlighting came into existence.

Pinlighting consisted of the detonation of ultra-vivid miniature photonuclear bombs, which converted a few ounces of a magnesium isotope into pure visible radiance.

The odds kept coming down in mankind's favor, yet ships were being lost.

It became so bad that people didn't even want to find the ships because the rescuers knew what they would see. It was sad to bring back to Earth three hundred bodies ready for burial and two hundred or three hundred lunatics, damaged beyond repair, to be wakened, and fed, and cleaned, and put to sleep, wakened and fed again until their lives were ended.

Telepaths tried to reach into the minds of the psychotics who had been damaged by the Dragons, but they found nothing there beyond vivid spouting columns of fiery

terror bursting from the primordial id itself, the volcanic source of life.

Then came the Partners.

Man and Partner could do together what Man could not do alone. Men had the intellect. Partners had the speed.

The Partners rode their tiny craft, no larger than footballs, outside the spaceships. They planoformed with the ships. They rode beside them in their six-pound craft ready to attack.

The tiny ships of the Partners were swift. Each carried a dozen pinlights, bombs no bigger than thimbles.

The pinlighters threw the Partners—quite literally threw—by means of mind-to-firing relays directly at the Dragons.

What seemed to be Dragons to the human mind appeared in the form of gigantic Rats in the minds of the Partners.

Out in the pitiless nothingness of space, the Partners' minds responded to an instinct as old as life. The Partners attacked, striking with a speed faster than Man's, going from attack to attack until the Rats or themselves were destroyed. Almost all the time it was the Partners who won.

With the safety of the interstellar skip, skip, skip of the ships, commerce increased immensely, the population of the colonies went up, and the demand for trained Partners increased.

Underhill and Woodley were a part of the third generation of pinlighters and yet, to them, it seemed as though their craft had endured forever.

Gearing space into minds by means of the pin-set, adding the Partners to those minds, keying up the mind for the tension of a fight on which all depended—this was more than human synapses could stand for long. Underhill needed his two months' rest after half an hour of fighting. Woodley needed his retirement after ten years of service. They were young. They were good. But they had limitations.

So much depended on the choice of Partners, so much on the sheer luck of who drew whom.

II. THE SHUFFLE

Father Moontree and the little girl named West entered the room. They were the other two pinlighters. The human complement of the Fighting Room was now complete.

Father Moontree was a red-faced man of forty-five who had lived the peaceful life of a farmer until he reached his fortieth year. Only then, belatedly, did the authorities find he was telepathic and agree to let him late in life enter upon the career of pinlighter. He did well at it, but he was fantastically old for this kind of business.

Father Moontree looked at the glum Woodley and the musing Underhill. "How're the youngsters today? Ready for a good fight?"

"Father always wants a fight," giggled the little girl named West. She was such a little little girl. Her giggle was high and childish. She looked like the last person in the world one would expect to find in the rough, sharp dueling of pinlighting.

Underhill had been amused one time when he found one of the most sluggish of the Partners coming away happy from contact with the mind of the girl named West.

Usually the Partners didn't care much about the human minds with which they were paired for the journey. The Partners seemed to take the attitude that human minds were complex and fouled up beyond belief, anyhow. No Partner ever questioned the superiority of the human mind, though very few of the Partners were much impressed by that superiority.

The Partners liked people. They were willing to fight with them. They were even willing to die for them. But when a Partner liked an individual the way, for example, that Captain Wow or the Lady May liked Underhill, the liking had nothing to do with intellect. It was a matter of temperament, of feel.

Underhill knew perfectly well that Captain Wow regarded his, Underhill's, brains as silly. What Captain Wow liked was Underhill's friendly emotional structure, the cheerfulness and glint of wicked amusement that shot through Underhill's unconscious thought patterns, and the gaiety with which Underhill faced danger. The words, the history books, the ideas, the science—Underhill could sense all that in his own mind, reflected back from Captain Wow's mind, as so much rubbish.

Miss West looked at Underhill. "I bet you've put stickum on the stones."

"I did not!"

Underhill felt his ears grow red with embarrassment. During his novitiate, he had tried to cheat in the lottery because he got particularly fond of a special Partner, a lovely young mother named Murr. It was so much easier to operate with Murr and she was so affectionate toward him that he forgot pinlighting was hard work and that he was not instructed to have a good time with his Partner. They were both signed and prepared to go into deadly battle together.

One cheating had been enough. They had found him out and he had been laughed at for years.

Father Moontree picked up the imitation-leather cup and shook the stone dice which assigned them their Partners for the trip. By senior rights he took first draw.

He grimaced. He had drawn a greedy old character, a tough old male whose mind was full of slobbering thoughts of food, veritable oceans full of half-spoiled fish. Father Moontree had once said that he burped cod liver oil for weeks after drawing that particular glutton, so strongly had the telepathic image of fish impressed itself upon his mind. Yet the glutton was a glutton for danger as well as for fish. He had killed sixty-three Dragons, more than any other Partner in the service, and was quite literally worth his weight in gold.

The little girl West came next. She drew Captain Wow. When she saw who it was, she smiled.

"I *like* him," she said. "He's such fun to fight with. He feels so nice and cuddly in my mind."

"Cuddly, hell," said Woodley. "I've been in his mind, too. It's the most leering mind in this ship, bar none."

"Nasty man," said the little girl. She said it declaratively, without reproach.

Underhill, looking at her, shivered.

He didn't see how she could take Captain Wow so calmly. Captain Wow's mind *did* leer. When Captain Wow got excited in the middle of a battle, confused images of Dragons, deadly Rats, luscious beds, the smell of fish, and the shock of space all scrambled together in his mind as he and Captain Wow, their consciousness linked together through the pin-set, became a fantastic composite of human being and Persian cat.

That's the trouble with working with cats, thought Underhill. It's a pity that nothing else anywhere will serve as Partner. Cats were all right once you got in touch with them telepathically. They were smart enough to meet the needs of the flight, but their motives and desires were certainly different from those of humans.

They were companionable enough as long as you thought tangible images at them, but their minds just closed up and went to sleep when you recited Shakespeare or Colegrove, or if you tried to tell them what space was.

It was sort of funny realizing that the Partners who were so grim and mature out here in space were the same cute little animals that people had used as pets for thousands of years back on Earth. He had embarrassed himself more than once while on the ground saluting perfectly ordinary nontelepathic cats because he had forgotten for the moment that they were not Partners.

He picked up the cup and shook out his stone dice.

He was lucky—he drew the Lady May.

The Lady May was the most thoughtful Partner he had ever met. In her, the finely bred pedigree mind of a Persian cat had reached one of its highest peaks of development. She was more complex than any human woman, but the complexity was all one of emotions, memory, hope, and discriminated experience—experience sorted through without benefit of words.

When he had first come into contact with her mind, he

was astonished at its clarity. With her he remembered her kittenhood. He remembered every mating experience she had ever had. He saw in a half-recognizable gallery all the other pinlighters with whom she had been paired for the fight. And he saw himself radiant, cheerful, and desirable.

He even thought he caught the edge of a longing—

A very flattering and yearning thought: *What a pity he is not a cat.*

Woodley picked up the last stone. He drew what he deserved—a sullen, scarred old tomcat with none of the verve of Captain Wow, Woodley's Partner was the most animal of all the cats on the ship, a low, brutish type with a dull mind. Even telepathy had not refined his character. His ears were half chewed off from the first fights in which he had engaged. He was a serviceable fighter, nothing more.

Woodley grunted.

Underhill glanced at him oddly. Didn't Woodley ever do anything but grunt?

Father Moontree looked at the other three. "You might as well get your Partners now. I'll let the Scanner know we're ready to go into the Up-and Out."

III. THE DEAL

Underhill spun the combination lock on the Lady May's cage. He woke her gently and took her into his arms. She humped her back luxuriously, stretched her claws, started to purr, thought better of it, and licked him on the wrist instead. He did not have the pin-set on, so their minds were closed to each other, but in the angle of her mustache and in the movement of her ears, he caught some sense of the gratification she experienced in finding him as her Partner.

He talked to her in human speech, even though speech meant nothing to a cat when the pin-set was not on.

"It's a damn shame, sending a sweet little thing like you whirling around in the coldness of nothing to hunt for

Rats that are bigger and deadlier than all of us put together. You didn't ask for this kind of fight, did you?"

For answer, she licked his hand, purred, tickled his cheek with her long fluffy tail, turned around and faced him, golden eyes shining.

For a moment, they stared at each other, man squatting, cat standing erect on her hind legs, front claws digging into his knee. Human eyes and cat eyes looked across an immensity which no words could meet, but which affection spanned in a single glance.

"Time to get in," he said.

She walked docilely to her spheroid carrier. She climbed in. He saw to it that her miniature pin-set rested firmly and comfortably against the base of her brain. He made sure that her claws were padded so that she could not tear herself in the excitement of battle.

Softly he said to her, "Ready?"

For answer, she preened her back as much as her harness would permit and purred softly within the confines of the frame that held her.

He slapped down the lid and watched the sealant ooze around the seam. For a few hours, she was welded into her projectile until a workman with a short cutting arc would remove her after she had done her duty.

He picked up the entire projectile and slipped it into the ejection tube. He closed the door of the tube, spun the lock, seated himself in his chair, and put his own pin-set on.

Once again he flung the switch.

He sat in a small room, *small, small, warm, warm,* the bodies of the other three people moving close around him, the tangible lights in the ceiling bright and heavy against his closed eyelids.

As the pin-set warmed, the room fell away. The other people ceased to be people and became small glowing heaps of fire, embers, dark red fire, with the consciousness of life burning like old red coals in a country fireplace.

As the pin-set warmed a little more, he felt Earth just below him, felt the ship slipping away, felt the turning Moon as it swung on the far side of the world, felt the

planets and the hot, clear goodness of the Sun which kept the Dragons so far from mankind's native ground.

Finally, he reached complete awareness.

He was telepathically alive to a range of millions of miles. He felt the dust which he had noticed earlier high above the ecliptic. With a thrill of warmth and tenderness, he felt the consciousness of the Lady May pouring over into his own. Her consciousness was as gentle and clear and yet sharp to the taste of his mind as if it were scented oil. It felt relaxing and reassuring. He could sense her welcome of him. It was scarcely a thought, just a raw emotion of greeting.

At last they were one again.

In a tiny remote corner of his mind, as tiny as the smallest toy he had ever seen in his childhood, he was still aware of the room and the ship, and of Father Moontree picking up a telephone and speaking to a Go-Captain in charge of the ship.

His telepathic mind caught the idea long before his ears could frame the words. The actual sound followed the idea the way that thunder on an ocean beach follows the lightning inward from far out over the seas.

"The Fighting Room is ready. Clear to planoform, sir."

IV. THE PLAY

Underhill was always a little exasperated by the way that Lady May experienced things before he did.

He was braced for the quick vinegar thrill of planoforming, but he caught her report of it before his own nerves could register what happened.

Earth had fallen so far away that he groped for several milliseconds before he found the Sun in the upper rear right-hand corner of his telepathic mind.

That was a good jump, he thought. *This way we'll get there in four or five skips.*

A few hundred miles outside the ship, the Lady May thought back at him, "O warm, O generous, O gigantic

man! O brave, O friendly, O tender and huge Partner! O wonderful with you, with you so good, good, good, warm, warm, now to fight, now to go, good with you . . ."

He knew that she was not thinking words, that his mind took the clear amiable babble of her cat intellect and translated it into images which his own thinking could record and understand.

Neither one of them was absorbed in the game of mutual greetings. He reached out far beyond her range of perception to see if there was anything near the ship. It was funny how it was possible to do two things at once. He could scan space with his pin-set mind and yet at the same time catch a vagrant thought of hers, a lovely, affectionate thought about a son who had had a golden face and a chest covered with soft, incredibly downy white fur.

While he was still searching, he caught the warning from her.

We jump again!

And so they had. The ship had moved to a second planoform. The stars were different. The Sun was immeasurably far behind. Even the nearest stars were barely in contact. This was good Dragon country, this open, nasty, hollow kind of space. He reached farther, faster, sensing and looking for danger, ready to fling the Lady May at danger wherever he found it.

Terror blazed up in his mind, so sharp, so clear, that it came through as a physical wrench.

The little girl named West had found something —something immense, long, black, sharp, greedy, horrific. She flung Captain Wow at it.

Underhill tried to keep his own mind clear. "Watch out!" he shouted telepathically at the others, trying to move the Lady May around.

At one corner of the battle, he felt the lustful rage of Capain Wow as the big Persian tomcat detonated lights while he approached the streak of dust which threatened the ship and the people within.

The lights scored near misses.

The dust flattened itself, changing from the shape of a sting ray into the shape of a spear.

Not three milliseconds had elapsed.

Father Moontree was talking human words and was saying in a voice that moved like cold molasses out of a heavy jar, "C-a-p-t-a-i-n." Underhill knew that the sentence was going to be "Captain, move fast!"

The battle would be fought and finished before Father Moontree got through talking.

Now, fractions of a millisecond later, the Lady May was directly in line.

Here was where the skill and speed of the Partners came in. She could react faster than he. She could see the threat as an immense Rat coming directly at her

She could fire the light-bombs with a discrimination which he might miss.

He was connected with her mind, but he could not follow it.

His consciousness absorbed the tearing wound inflicted by the alien enemy. It was like no wound on Earth—raw, crazy pain which started like a burn at his navel. He began to writhe in his chair.

Actually he had not yet had time to move a muscle when the Lady May struck back at their enemy.

Five evenly spaced photonuclear bombs blazed out across a hundred-thousand miles.

The pain in his mind and body vanished.

He felt a moment of fierce, terrible, feral elation running through the mind of the Lady May as she finished her kill. It was always disappointing to the cats to find out that their enemies disappeared at the moment of destruction.

Then he felt her hurt, the pain and the fear that swept over both of them as the battle, quicker than the movement of an eyelid, had come and gone. In the same instant there came the sharp and acid twinge of planoform.

Once more the ship went skip.

He could hear Woodley thinking at him. "You don't have to bother much. This old son-of-a-gun and I will take over for a while."

Twice again the twinge, the skip.

He had no idea where he was until the lights of the

Caledonia space port shone below.

With a weariness that lay almost beyond the limits of thought, he threw his mind back into rapport with the pinset, fixing the Lady May's projectile gently and neatly in its launching tube.

She was half dead with fatigue, but he could feel the beat of her heart, could listen to her panting, and he grasped the grateful edge of a "Thanks" reaching from her mind to his.

V. THE SCORE

They put him in the hospital at Caledonia.

The doctor was friendly but firm. "You actually got touched by that Dragon. That's as close a shave as I've ever seen. It's all so quick that it'll be a long time before we know what happened scientifically, but I suppose you'd be ready for the insane asylum now if the contact had lasted several tenths of a millisecond longer. What kind of cat did you have out in front of you?"

Underhill felt the words coming out of him slowly. Words were such a lot of trouble compared with the speed and the joy of thinking, fast and sharp and clear, mind to mind! But words were all that could reach ordinary people like this doctor.

His mouth moved heavily as he articulated words. "Don't call our Partners cats. The right thing to call them is Partners. They fight for us in a team. You ought to know we call them Partners, not cats. How is mine?"

"I don't know," said the doctor contritely. "We'll find out for you. Meanwhile, old man, you take it easy. There's nothing but rest than can help you. Can you make yourself sleep, or would you like us to give you some kind of sedative?"

"I can sleep," said Underhill. "I just want to know about the Lady May."

The nurse joined in. She was a little antagonistic. "Don't you want to know about the other people?"

"They're okay," said Underhill. "I knew that before I came in here."

He stretched his arms and sighed and grinned at them. He could see they were relaxing and were beginning to treat him as a person instead of a patient.

"I'm all right," he said. "Just let me know when I can go see my Partner."

A new thought struck him. He looked wildly at the doctor. "They didn't send her off with the ship, did they?"

"I'll find out right away," said the doctor. He gave Underhill a reassuring squeeze of the shoulder and left the room.

The nurse took a napkin off a goblet of chilled fruit juice.

Underhill tried to smile at her. There seemed to be something wrong with the girl. He wished she would go away. First she had started to be friendly and now she was distant again. *It's a nuisance being telepathic,* he thought. *You keep trying to reach even when you are not making contact.*

Suddenly she swung around on him.

"You pinlighters! You and your damn cats!"

Just as she stamped out, he burst into her mind. He saw himself a radiant hero, clad in his smooth suède uniform, the pin-set crown shining like ancient royal jewels around his head. He saw his own face, handsome and masculine, shining out of her mind. He saw himself very far away and he saw himself as she hated him.

She hated him in the secrecy of her own mind. She hated him because he was—she thought—proud and strange and rich, better and more beautiful than people like her.

He cut off the sight of her mind and, as he buried his face in the pillow, he caught an image of the Lady May.

"She *is* a cat," he thought "That's all she is—a *cat!*"

But that was not how his mind saw her—quick beyond all dreams of speed, sharp, clever, unbelievably graceful, beautiful, wordless and undemanding.

Where would he ever find a woman who could compare with her?

THE BURNING OF THE BRAIN

I. DOLORES OH

I tell you, it is sad, it is more than sad, it is fearful—for it is a dreadful thing to go into the Up-and-Out, to fly without flying, to move between the stars as a moth may drift among the leaves on a summer night.

Of all the men who took the great ships into planoform none was braver, none stronger, than Captain Magno Taliano.

Scanners had been gone for centuries and the jonasoidal effect had become so simple, so manageable, that the traversing of light-years was no more difficult to most of the passengers of the great ships than to go from one room to the other.

Passengers moved easily.

Not the crew.

Least of all the captain.

The captain of a jonasoidal ship which had embarked on an interstellar journey was a man subject to rare and overwhelming strains. The art of getting past all the complications of space was far more like the piloting of turbulent waters in ancient days than like the smooth seas which legendary men once traversed with sails alone.

Go-Captain on the *Wu-Feinstein,* finest ship of its class, was Magno Taliano.

Of him it was said, "He could sail through hell with the muscles of his left eye alone. He could plow space with his living brain if the instruments failed . . ."

Wife to the Go-Captain was Dolores Oh. The name was Japonical, from some nation of the ancient days. Dolores

Oh had been once beautiful, so beautiful that she took men's breath away, made wise men into fools, made young men into nightmares of lust and yearning. Wherever she went men had quarreled and fought over her.

But Dolores Oh was proud beyond all common limits of pride. She refused to go through the ordinary rejuvenescence. A terrible yearning a hundred or so years back must have come over her. Perhaps she said to herself, before that hope and terror which a mirror in a quiet room becomes to anyone,

"Surely I am me. There must be a *me* more than the beauty of my face, there must be a something other than the delicacy of skin and the accidental lines of my jaw and my cheekbone.

"What have men loved if it wasn't me? Can I ever find out who I am or what I am if I don't let beauty perish and live on in whatever flesh age gives me?"

She had met the Go-Captain and had married him in a romance that left forty planets talking and half the ship lines stunned.

Magno Taliano was at the very beginning of his genius. Space, we can tell you, is rough—rough like the wildest of storm-driven waters, filled with perils which only the most sensitive, the quickest, the most daring of men can surmount.

Best of them all, class for class, age for age, out of class, beating the best of his seniors, was Magno Taliano.

For him to marry the most beautiful beauty of forty worlds was a wedding like Heloise and Abelard's or like the unforgettable romance of Helen America and Mr. Grey-no-more.

The ships of the Go-Captain Magno Taliano became more beautiful year by year, century by century.

As ships became better he always obtained the best. He maintained his lead over the other Go-Captains so overwhelmingly that it was unthinkable for the finest ship of mankind to sail out amid the roughness and uncertainties of two-dimensional space without himself at the helm.

Stop-Captains were proud to sail space beside him. (Though the Stop-Captains had nothing more to do than to

check the maintenance of the ship, its loading and unloading when it was in normal space, they were still more than ordinary men in their own kind of world, a world far below the more majestic and adventurous universe of the Go-Captains.)

Magno Taliano had a niece who in the modern style used a place instead of a name: she was called "Dita from the Great South House."

When Dita came aboard the *Wu-Feinstein* she had heard much of Dolores Oh, her aunt by marriage who had once captivated the men in many worlds. Dita was wholly unprepared for what she found.

Dolores greeted her civilly enough, but the civility was a sucking pump of hideous anxiety, the friendliness was the driest of mockeries, the greeting itself an attack.

What's the matter with the woman? thought Dita.

As if to answer her thought, Dolores said aloud and in words: "It's nice to meet a woman who's not trying to take Taliano from me. I love him. Can you believe that? Can you?"

"Of course," said Dita. She looked at the ruined face of Dolores Oh, at the dreaming terror in Dolores's eyes, and she realized that Dolores had passed all limits of nightmare and had become a veritable demon of regret, a possessive ghost who sucked the vitality from her husband, who dreaded companionship, hated friendship, rejected even the most casual of acquaintances, because she feared forever and without limit that there was really nothing to herself, and feared that without Magno Taliano she would be more lost than the blackest of whirlpools in the nothing between the stars.

Magno Taliano came in.

He saw his wife and niece together.

He must have been used to Dolores Oh. In Dita's eyes Dolores was more frightening than a mud-caked reptile raising its wounded and venomous head with blind hunger and blind rage. To Magno Taliano the ghastly woman who stood like a witch beside him was somehow the beautiful girl he had wooed and had married one-hundred-sixty-four years before.

He kissed the withered cheek, he stroked the dried and stringy hair, he looked into the greedy terror-haunted eyes as though they were the eyes of a child he loved. He said, lightly and gently,

"Be good to Dita, my dear."

He went on through the lobby of the ship to the inner sanctum of the planoforming room.

The Stop-Captain waited for him. Outside on the world of Sherman the scented breezes of that pleasant planet blew in through the open windows of the ship.

Wu-Feinstein, finest ship of its class, had no need for metal walls. It was built to resemble an ancient, prehistoric estate named Mount Vernon, and when it sailed between the stars it was encased in its own rigid and self-renewing field of force.

The passengers went through a few pleasant hours of strolling on the grass, enjoying the spacious rooms, chatting beneath a marvelous simulacrum of an atmosphere-filled sky.

Only in the planoforming room did the Go-Captain know what happened. The Go-Captain, his pinlighters sitting beside him, took the ship from one compression to another, leaping hotly and frantically through space, sometimes one light-year, sometimes a hundred light-years, jump, jump, jump, jump until the ship, the light touches of the captain's mind guiding it, passed the perils of millions upon millions of worlds, came out at its appointed destination and settled as lightly as one feather resting upon others, settled into an embroidered and decorated countryside where the passengers could move as easily away from their journey as if they had done nothing more than to pass an afternoon in a pleasant old house by the side of a river.

II. THE LOST LOCKSHEET

Magno Taliano nodded to his pinlighters. The Stop-Captain bowed obsequiously from the doorway of the

planoforming room. Taliano looked at him sternly, but with robust friendliness. With formal and austere courtesy he asked,

"Sir and colleague, is everything ready for the jonasoidal effect?"

The Stop-Captain bowed even more formally. "Truly ready, sir and master."

"The locksheets in place?"

"Truly in place, sir and master."

"The passengers secure?"

"The passengers are secure, numbered, happy and ready, sir and master."

Then came the last and most serious of questions. "Are my pinlighters warmed with their pin-sets and ready for combat?"

"Ready for combat, sir and master." With these words the Stop-Captain withdrew. Magno Taliano smiled to his pinlighters. Through the minds of all of them there passed the same thought.

How could a man that pleasant stay married all those years to a hag like Dolores Oh? How could that witch, that horror, have ever been a beauty? How could that beast have ever been a woman, particularly the divine and glamorous Dolores Oh whose image we still see in four-di every now and then?

Yet pleasant he was, though long he may have been married to Dolores Oh. Her loneliness and greed might suck at him like a nightmare, but his strength was more than enough strength for two.

Was he not the captain of the greatest ship to sail between the stars?

Even as the pinlighters smiled their greetings back to him, his right hand depressed the golden ceremonial lever of the ship. This instrument alone was mechanical. All other controls in the ship had long since been formed telepathically or electronically.

Within the planoforming room the black skies became visible and the tissue of space shot up around them like boiling water at the base of a waterfall. Outside that one

room the passengers still walked sedately on scented lawns.

From the wall facing him, as he sat rigid in his Go-Captain's chair, Magno Taliano sensed the forming of a pattern which in three or four hundred milliseconds would tell him where he was and would give him the next clue as to how to move.

He moved the ship with the impulses of his own brain, to which the wall was a superlative complement.

The wall was a living brickwork of locksheets, laminated charts, one-hundred-thousand charts to the inch, the wall preselected and preassembled for all imaginable contingencies of the journey which, each time afresh, took the ship across half-unknown immensities of time and space. The ship leapt, as it had before.

The new star focused.

Magno Taliano waited for the wall to show him where he was, expecting (in partnership with the wall) to flick the ship back into the pattern of stellar space, moving it by immense skips from source to destination.

This time nothing happened.

Nothing?

For the first time in a hundred years his mind knew panic.

It couldn't be nothing. Not *nothing*. Something had to focus. The locksheets always focused.

His mind reached into the locksheets and he realized with a devastation beyond all limits of ordinary human grief that they were lost as no ship had ever been lost before. By some error never before committed in the history of mankind, the entire wall was made of duplicates of the same locksheet.

Worst of all, the Emergency Return sheet was lost. They were amid stars none of them had ever seen before, perhaps as little as five-hundred-million miles, perhaps as far as forty parsecs.

And the locksheet was lost.

And they would die.

As the ship's power failed coldness and blackness and

death would crush in on them in a few hours at the most. That then would be all, all of the *Wu-Feinstein,* all of Dolores Oh.

III. THE SECRET OF THE OLD DARK BRAIN

Outside of the planoforming room of the *Wu-Feinstein* the passengers had no reason to understand that they were marooned in the nothing-at-all.

Dolores Oh rocked back and forth in an ancient rocking chair. Her haggard face looked without pleasure at the imaginary river that ran past the edge of the lawn. Dita from the Great South House sat on a hassock by her aunt's knees.

Dolores was talking about a trip she had made when she was young and vibrant with beauty, a beauty which brought trouble and hate wherever it went.

". . . so the guardsman killed the captain and then came to my cabin and said to me, 'You've got to marry me now. I've given up everything for your sake,' and I said to him, 'I never said that I loved you. It was sweet of you to get into a fight, and in a way I suppose it is a compliment to my beauty, but it doesn't mean that I belong to you the rest of my life. What do you think I am, anyhow?' "

Dolores Oh sighed a dry, ugly sigh, like the crackling of subzero winds through frozen twigs. "So you see, Dita, being beautiful the way you are is no answer to anything. A woman has got to be herself before she finds out what she is. I know that my lord and husband, the Go-Captain, loves me because my beauty is gone, and with my beauty gone there is nothing but *me* to love, is there?"

An odd figure came out on the verandah. It was a pinlighter in full fighting costume. Pinlighters were never supposed to leave the planoforming room, and it was most extraordinary for one of them to appear among the passengers.

He bowed to the two ladies and said with the utmost courtesy.

"Ladies, will you please come into the planoforming room? We have need that you should see the Go-Captain now."

Dolores's hand leapt to her mouth. Her gesture of grief was as automatic as the striking of a snake. Dita sensed that her aunt had been waiting a hundred years and more for disaster, that her aunt had craved ruin for her husband the way that some people crave love and others crave death.

Dita said nothing. Neither did Dolores, apparently at second thought, utter a word.

They followed the pinlighter silently into the planoforming room.

The heavy door closed behind them.

Magno Taliano was still rigid in his Captain's chair.

He spoke very slowly, his voice sounding like a record played too slowly on an ancient parlophone.

"We are lost in space, my dear," said the frigid, ghostly, voice of the Captain, still in his Go-Captain's trance. *"We are lost in space and I thought that perhaps if your mind aided mine we might think of a way back."*

Dita started to speak.

A pinlighter told her: "Go ahead and speak, my dear. Do you have any suggestion?"

"Why don't we just go back? It would be humiliating, wouldn't it? Still it would be better than dying. Let's use the Emergency Return Locksheet and go on right back. The world will forgive Magno Taliano for a single failure after thousands of brilliant and successful trips."

The pinlighter, a pleasant enough young man, was as friendly and calm as a doctor informing someone of a death or of a mutilation. "The impossible has happened, Dita from the Great South House. All the locksheets are wrong. They are all the same one. And not one of them is good for emergency return."

With that the two women knew where they were. They knew that space would tear into them like threads being pulled out of a fiber so that they would either die bit by bit as the hours passed and as the material of their bodies faded away a few molecules here and a few there. Or, al-

ternatively, they could die all at once in a flash if the Go-Captain chose to kill himself and the ship rather than to wait for a slow death. Or, if they believed in religion, they could pray.

The pinlighter said to the rigid Go-Captain, "We think we see a familiar pattern at the edge of your own brain. May we look in?"

Taliano nodded very slowly, very gravely.

The pinlighter stood still.

The two women watched. Nothing visible happened, but they knew that beyond the limits of vision and yet before their eyes a great drama was being played out. The minds of the pinlighters probed deep into the mind of the frozen Go-Captain, searching amid the synapses for the secret of the faintest clue to their possible rescue.

Minutes passed. They seemed like hours.

At last the pinlighter spoke. "We can see into your mid-brain, Captain. At the edge of your paleocortex there is a star pattern which resembles the upper left rear of our present location."

The pinlighter laughed nervously. "We want to know can you fly the ship home on your brain?"

Magno Taliano looked with deep tragic eyes at the inquirer. His slow voice came out at them once again since he dared not leave the half-trance which held the entire ship in stasis. *"Do you mean can I fly the ship on a brain alone? It would burn out my brain and the ship would be lost anyhow . . ."*

"But we're lost, lost, lost," screamed Dolores Oh. Her face was alive with hideous hope, with a hunger for ruin, with a greedy welcome of disaster. She screamed at her husband, "Wake up, my darling, and let us die together. At least we can belong to each other that much, that long, forever!"

"Why die?" said the pinlighter softly. "You tell him, Dita."

Said Dita, "Why not try, sir and uncle?"

Slowly Magno Taliano turned his face toward his niece. Again his hollow voice sounded. *"If I do this I shall be a fool or a child or a dead man but I will do it for you."*

Dita had studied the work of the Go-Captains and she knew well enough that if the paleocortex was lost the personality became intellectually sane, but emotionally crazed. With the most ancient part of the brain gone the fundamental controls of hostility, hunger and sex disappeared. The most ferocious of animals and the most brilliant of men were reduced to a common level—a level of infantile friendliness in which lust and playfulness and gentle, unappeasable hunger became the eternity of their days.

Magno Taliano did not wait.

He reached out a slow hand and squeezed the hand of Dolores Oh. *"As I die you shall at last be sure I love you."*

Once again the women saw nothing. They realized they had been called in simply to give Magno Taliano a last glimpse of his own life.

A quiet pinlighter thrust a beam-electrode so that it reached square into the paleocortex of Captain Magno Taliano.

The planoforming room came to life. Strange heavens swirled about them like milk being churned in a bowl.

Dita realized that her partial capacity of telepathy was functioning even without the aid of a machine. With her mind she could feel the dead wall of the locksheets. She was aware of the rocking of the *Wu-Feinstein* as it leapt from space to space, as uncertain as a man crossing a river by leaping from one ice-covered rock to the other.

In a strange way she even knew that the paleocortical part of her uncle's brain was burning out at last and forever, that the star patterns which had been frozen in the locksheets lived on in the infinitely complex pattern of his own memories, and that with the help of his own telepathic pinlighters he was burning out his brain cell by cell in order for them to find a way to the ship's destination. This indeed was his last trip.

Dolores Oh watched her husband with a hungry greed surpassing all expression.

Little by little his face became relaxed and stupid.

Dita could see the midbrain being burned blank, as the

ship's controls with the help of the pinlighters searched through the most magnificent intellect of its time for a last course into harbor.

Suddenly Dolores Oh was on her knees, sobbing by the hand of her husband.

A pinlighter took Dita by the arm.

"We have reached destination," he said.

"And my uncle?"

The pinlighter looked at her strangely.

She realized he was speaking to her without moving his lips—speaking mind-to-mind with pure telepathy.

"Can't you see it?"

She shook her head dazedly.

The pinlighter thought his emphatic statement at her once again.

"As your uncle burned out his brain, you picked up his skills. Can't you sense it? You are a Go-Captain yourself and one of the greatest of us."

"And he?"

The pinlighter thought a merciful comment at her.

Magno Taliano had risen from his chair and was being led from the room by his wife and consort, Dolores Oh. He had the amiable smile of an idiot, and his face for the first time in more than a hundred years trembled with shy and silly love.

GOLDEN THE SHIP WAS—OH! OH! OH!

Aggression started very far away.

War with Raumsog came about twenty years after the great Cat Scandal which, for a while, threatened to cut the entire planet Earth from the desperately essential santaclara drug. It was a short war and a bitter one.

Corrupt, wise, weary old Earth fought with masked weapons, since only hidden weapons could maintain so ancient a sovereignty—sovereignty which had long since lapsed into a titular paramountcy among the communities of mankind. Earth won and the others lost, because the leaders of Earth never put other considerations ahead of survival. And this time, they thought, they were finally and really threatened.

The Raumsog war was never known to the general public except for the revival of wild old legends about golden ships.

I

On Earth the Lords of the Instrumentality met. The presiding chairman looked about and said, "Well gentlemen, all of us have been bribed by Raumsog. We have all been paid off individually. I myself received six ounces of stroon in pure form. Will the rest of you show better bargains?"

Around the room, the councilors announced the amounts of their bribes.

The chairman turned to the secretary. "Enter the bribes in the record and then mark the record off-the-record."

The others nodded gravely.

"Now we must fight. Bribery is not enough. Raumsog has been threatening to attack Earth. It's been cheap enough to let him threaten, but obviously we don't mean to let him do it."

"How are you going to stop him, lord chairman?" growled a gloomy old member. "Get out the golden ships?"

"Exactly that." The chairman looked deadly serious.

There was a murmurous sigh around the room. The golden ships had been used against an inhuman life-form many centuries before. They were hidden somewhere in non-space and only a few officials of Earth knew how much reality there was to them. Even at the level of the

Lords of the Instrumentality the council did not know precisely what they were.

"One ship," said the chairman of the Lords of the Instrumentality, "will be enough."

It was.

II

The dictator Lord Raumsog on his planet knew the difference some weeks later.

"You can't mean that," he said. "You can't mean it. There is no such ship that size. The golden ships are just a story. No one ever saw a picture of one."

"Here is a picture, My Lord," said the subordinate.

Raumsog looked at it. "It's a trick. Some piece of trick photography. They distorted the size. The dimensions are wrong. Nobody has a ship that size. You could not build it, or if you did build it, you could not operate it. There just is not any such thing—" He babbled on for a few more sentences before he realized that his men were looking at the picture and not at him.

He calmed down.

The boldest of the officers resumed speaking. "That one ship is ninety million miles long, Your Highness. It shimmers like fire, but moves so fast that we cannot approach it. But it came into the center of our fleet almost touching our ships, stayed there twenty- or thirty-thousandths of a second. There it was, we thought. We saw the evidence of life on board: light beams waved; they examined us and then, of course, it lapsed back into nonspace. Ninety million miles, Your Highness. Old Earth has some stings yet and we do not know what the ship is doing."

The officers stared with anxious confidence at their overlord.

Raumsog sighed. "If we must fight, we'll fight. We can destroy that too. After all, what is size in the spaces between the stars? What difference does it make whether it is

nine miles or nine million or ninety million?" He sighed again. "Yet I must say ninety million miles is an awful big size for a ship. I don't know what they are going to do with it."

He did not.

III

It is strange—strange and even fearful—what the love of Earth can do to men. Tedesco, for example.

Tedesco's reputation was far-flung. Even among the Go-Captains whose thoughts were rarely on such matters, Tedesco was known for his raiment, the foppish arrangement of his mantle of office and his bejeweled badges of authority. Tedesco was known too for his languid manner and his luxurious sybaritic living. When the message came, it found Tedesco in his usual character.

He was lying on the air-draft with his brain pleasure centers plugged into the triggering current. So deeply lost in pleasure was he that the food, the women, the clothing, the books of his apartments were completely neglected and forgotten. All pleasure save the pleasure of electricity acting on the brain was forgotten.

So great was the pleasure that Tedesco had been plugged into the current for twenty hours without interruption—a manifest disobedience of the rule which set six hours as maximum pleasure.

And yet, when the message came—relayed to Tedesco's brain by the infinitesimal crystal set there for the transmittal of messages so secret that even thought was too vulnerable to interception—when the message came Tedesco struggled through layer after layer of bliss and unconsciousness.

The ships of gold—the golden ships—for Earth is in danger.

Tedesco struggled. *Earth is in danger.* With a sigh of bliss he made the effort to press the button which turned off the current. And with a sigh of cold reality he took a

look at the world about him and turned to the job at hand. Quickly he prepared to wait upon the Lords of the Instrumentality.

The chairman of the Lords of the Instrumentality sent out the Lord Admiral Tedesco to command the golden ship. The ship itself, larger than most stars, was an incredible monstrosity. Centuries before it had frightened away nonhuman aggressors from a forgotten corner of the galaxies.

The Lord Admiral walked back and forth on his bridge. The cabin was small, twenty feet by thirty. The control area of the ship measured nothing over a hundred feet. All the rest was a golden bubble of the feinting ship, nothing more than thin and incredibly rigid foam with tiny wires cast across it so as to give the illusion of a hard metal and strong defenses.

The ninety million miles of length were right. Nothing else was.

The ship was a gigantic dummy, the largest scarecrow ever conceived by the human mind.

Century after century it had rested in non-space between the stars, waiting for use. Now it proceeded helpless and defenseless against the militant and crazy dictator Raumsog and his horde of hard-fighting and very real ships.

Raumsog had broken the disciplines of space. He had killed the pinlighters. He had emprisoned the Go-Captains. He had used renegades and apprentices to pillage the immense interstellar ships and had armed the captive vessels to the teeth. In a system which had not known real war, and least of all war against Earth, he had planned well.

He had bribed, he had swindled, he had propagandized. He expected Earth to fall before the threat iself. Then he launched his attacked.

With the launching of the attack, Earth itself changed. Corrupt rascals became what they were in title: the leaders and the defenders of mankind.

Tedesco himself had been an elegant fop. War changed him into an aggressive captain, swinging the largest vessel

of all time as though it were a tennis bat.

He cut in on the Raumsog fleet hard and fast.

Tedesco shifted his ship right, north, up, over.

He appeared before the enemy and eluded them—down, forward, right, over.

He appeared before the enemy again. One successful shot from them could destroy an illusion on which the safety of mankind itself depended. It was his business not to allow them that shot.

Tedesco was not a fool. He was fighting his own strange kind of war, but he could not help wondering where the real war was proceeding.

IV

Prince Lovaduck had obtained his odd name because he had had a Chinesian ancestor who did love ducks, ducks in their Peking form—succulent duck skins brought forth to him ancestral dreams of culinary ecstasy.

His ancestress, an English Lady, had said, "Lord Lovaduck, that fits you!"—and the name had been proudly taken as a family name. Lord Lovaduck had a small ship. The ship was tiny and had a very simple and threatening name: *Anybody*.

The ship was not listed in the space register and he himself was not in the Ministry of Space Defense. The craft was attached only to the Office of Statistics and Investigation—under the listing, "vehicle"—for the Earth treasury. He had very elementary defenses. With him on the ship went one chronopathic idiot essential to his final and vital maneuvers.

With him also went a monitor. The monitor, as always, sat rigid, catatonic, unthinking, unaware—except for the tape recorder of his living mind which unconsciously noted every imminent mechanical movement of the ship and was prepared to destroy Lovaduck, the chronopathic idiot, and the ship itself should they attempt to escape the authority of Earth or should they turn against Earth. The

life of a monitor was a difficult one but was far better than execution for crime, its usual alternative. The monitor made no trouble. Lovaduck also had a very small collection of weapons, weapons selected with exquisite care for the atmosphere, the climate and the precise conditions of Raumsog's planet.

He also had a psionic talent, a poor crazy little girl who wept, and whom the Lords of the Instrumentality had cruelly refused to heal, because her talents were better in unshielded form than they would have been had she been brought into the full community of mankind. She was a class-three etiological interference.

V

Lovaduck brought his tiny ship near the atmosphere of Raumsog's planet. He had paid good money for his captaincy of this ship and he meant to recover it. Recover it he would, and handsomely, if he succeeded in his adventurous mission.

The Lords of the Instrumentality were the corrupt rulers of a corrupt world, but they had learned to make corruption serve their civil and military ends, and they were in no mind to put up with failures. If Lovaduck failed he might as well not come back at all. No bribery could save him from this condition. No monitor could let him escape. If he succeeded, he might be almost as rich as an Old North Australian or a stroon merchant.

Lovaduck materialized his ship just long enough to hit the planet by radio. He walked across the cabin and slapped the girl. The girl became frantically excited. At the height of her excitement he slapped a helmet on her head, plugged in the ship's communication system, and flung her own peculiar emotional psionic radiations over the entire planet.

She was a luck-changer. She succeeded: for a few moments, at every place on that planet, under the water and on it, on the land and over it, luck went wrong just a little.

Quarrels did occur, accidents did happen, mischances moved just within the limits of sheer probability. They all occurred within the same minute. The uproar was reported just as Lovaduck moved his ship to another position. This was the most critical time of all. He dropped down into the atmosphere. He was immediately detected. Ravening weapons reached for him, weapons sharp enough to scorch the very air and to bring every living being on the planet into a condition of screaming alert.

No weapons possessed by Earth could defend against such an attack.

Lovaduck did not defend. He seized the shoulders of his chronopathic idiot. He pinched the poor defective; the idiot fled taking the ship with him. The ship moved back three, four seconds in time to a period slightly earlier than the first detection. All the instruments on Raumsog's planet went off. There was nothing on which they could act.

Lovaduck was ready. He discharged the weapons. The weapons were not noble.

The Lords of the Instrumentality played at being chivalrous and did love money, but when life and death were at stake, they no longer cared much about money, or credit, or even about honor. They fought like the animals of Earth's ancient past—they fought to kill. Lovaduck had discharged a combination of organic and inorganic poisons with a high dispersion rate. Seventeen-million people; nine-hundred-and-fifty-thousandths of the entire population, were to die within that night.

He slapped the chronopathic idiot again. The poor freak whimpered. The ship moved back two more seconds in time.

As he unloaded more poison, he could feel the mechanical relays reach for him.

He moved to the other side of the planet, moving backward one last time, dropped a final discharge of virulent carcinogens and snapped his ship in to non-space, into the outer reaches of nothing. Here he was far beyond the reach of Raumsog.

VI

Tedesco's golden ship moved serenely toward the dying planet, Raumsog's fighters closing on it. They fired—it evaded, surprisingly agile for so immense a craft, a ship larger than any sun seen in the heavens of that part of space. But while the ships closed in their radios reported:

"The capital has blanked out."

"Raumsog himself is dead."

"There is no response from the north."

"People are dying in the relay stations."

The fleet moved, intercommunicated, and began to surrender. The golden ship appeared once more and then it disappeared, apparently forever.

VII

The Lord Tedesco returned to his apartments and to the current for plugging into the centers of pleasure in his brain. But as he arranged himself on the air-jet his hand stopped on its mission to press the button which would start the current. He realized, suddenly, that he had pleasure. The contemplation of the golden ship and of what he had accomplished—alone, deceptive, without the praise of all the worlds for his solitary daring—gave even greater pleasure than that of the electric current. And he sank back on the jet of air and thought of the golden ship, and his pleasure was greater than any he had ever experienced before.

VIII

On Earth, the Lords of the Instrumentality gracefully acknowledged that the golden ship had destroyed all life

on Raumsog's planet. Homage was paid to them by the many worlds of mankind. Lovaduck, his idiot, his little girl, and the monitor were taken to hospitals. Their minds were erased of all recollection of their accomplishments.

Lovaduck himself appeared before the Lords of the Instrumentality. He felt that he had served on the golden ship and he did not remember what he had done. He knew nothing of a chronopathic idiot. And he remembered nothing of his little "vehicle." Tears poured down his face when the Lords of the Instrumentality gave him their highest decorations and paid him an immense sum of money. They said: "You have served well and you are discharged. The blessings and the thanks of mankind will forever rest upon you . . ."

Lovaduck went back to his estates wondering that his service should have been so great. He wondered, too, in the centuries of the rest of his life, how any man—such as himself—could be so tremendous a hero and never quite remember how it was accomplished.

IX

On a very remote planet, the survivors of a Raumsog cruiser were released from internment. By special orders, direct from Earth, their memories had been discoördinated so that they would not reveal the pattern of defeat. An obstinate reporter kept after one spaceman. After many hours of hard drinking the survivor's answer was still the same,

"Golden the ship was—oh! oh! oh! Golden the ship was—oh! oh! oh!"

ALPHA RALPHA BOULEVARD

We were drunk with happiness in those early years. Everybody was, especially the young people. These were the first years of the rediscovery of Man, when the Instrumentality dug deep in the treasury, reconstructing the old cultures, the old languages, and even the old troubles. The nightmare of perfection had taken our forefathers to the edge of suicide. Now under the leadership of the Lord Jestocost and the Lady Alice More, the ancient civilizations were rising like great land masses out of the sea of the past.

I myself was the first man to put a postage stamp on a letter after fourteen-thousand years. I took Virginia to hear the first piano recital. We watched at the eye-machine when cholera was released in Tasmania, and we saw the Tasmanians dancing in the streets, now that they did not have to be protected anymore. Everywhere, things became exciting. Everywhere, men and women worked with a wild will to build a more imperfect world.

I myself went into a hospital and came out French. Of course I remembered my early life; I remembered it, but it did not matter. Virginia was French, too, and we had the years of our future lying ahead of us like ripe fruit hanging in an orchard of perpetual summers. We had no idea when we would die. Formerly, I would be able to go to bed and think, "The government has given me four hundred years. Three-hundred-and-seventy-four years from now, they will stop the stroon injections and I will then die." Now I knew anything could happen. The safety devices had been turned off. The diseases ran free. With luck, and hope, and love, I might live a thousand years. Or I might die tomorrow. I was free.

We reveled in every moment of the day.

Virginia and I bought the first French newspaper to appear since the Most Ancient World fell. We found delight in the news, even in the advertisements. Some parts of the culture were hard to reconstruct. It was difficult to talk about foods of which only the names survived, but the homunculi and the machines, working tirelessly in Downdeep-downdeep, kept the surface of the world filled with enough novelties to fill anyone's heart with hope. We knew that all of this was make-believe, and yet it was not. We knew that when the diseases had killed the statistically correct number of people, they would be turned off; when the accident rate rose too high, it would stop without our knowing why. We knew that over us all, the Instrumentality watched. We had confidence that the Lord Jestocost and the Lady Alice More would play with us as friends and not use us as victims of a game.

Take, for example, Virginia. She had been called Menerima, which represented the coded sounds of her birth number. She was small, verging on chubby; she was compact; her head was covered with tight brown curls; her eyes were a brown so deep and so rich that it took sunlight, with her squinting against it, to bring forth the treasures of her irises. I had known her well, but never known her. I had seen her often, but never seen her with my heart, until we met just outside the hospital, after becoming French.

I was pleased to see an old friend and started to speak in the Old Common Tongue, but the words jammed, and as I tried to speak it was not Menerima any longer, but someone of ancient beauty, rare and strange—someone who had wandered into these latter days from the treasure worlds of time past. All I could do was to stammer:

"What do you call yourself now?" And I said it an ancient French.

She answered in the same language, "Je m'appelle Virginie."

Looking at her and falling in love was a single process. There was something strong, something wild in her, wrapped and hidden by the tenderness and youth of her

girlish body. It was as though destiny spoke to me out of the certain brown eyes, eyes which questioned me surely and wonderingly, just as we both questioned the fresh new world which lay about us.

"May I?" said I, offering her my arm, as I had learned in the hours of hypnopedia. She took my arm and we walked away from the hospital.

I hummed a tune which had come into my mind, along with the ancient French language.

She tugged gently on my arm, and smiled up at me.

"What is it," she asked, "or don't you know?"

The words came soft and unbidden to my lips and I sang it very quietly, muting my voice in her curly hair, half-singing half-whispering the popular song which had poured into my mind with all the other things which the Rediscovery of Man had given me:

"She wasn't the woman I went to seek.
I met her by the merest chance.
She did not speak the French of France,
But the surded French of Martinique.

"She wasn't rich. She wasn't chic.
She had a most entrancing glance,
And that was all . . ."

Suddenly I ran out of words, "I seem to have forgotten the rest of it. It's called 'Macouba' and it has something to do with a wonderful island which the ancient French called Martinique."

"I know where that is," she cried. She had been given the same memories that I had. "You can see it from the Earthport!"

This was a sudden return to the world we had known. Earthport stood on its single pedestal, twelve miles high, at the eastern edge of the small continent. At the top of it, the Lords worked amid machines which had no meaning anymore. There the ships whispered their way in from the stars. I had seen pictures of it, but I had never been there. As a matter of fact, I had never known anyone who had

actually been up Earthport. Why should we have gone? We might not have been welcome, and we could always see it just as well through the pictures on the eye-machine. For Menerima—familiar, dully pleasant, dear little Menerima—to have gone there was uncanny. It made me think that in the Old Perfect World things had not been as plain or forthright as they seemed.

Virginia, the new Menerima, tried to speak in the Old Common Tongue, but she gave up and used French instead:

"My aunt," she said, meaning a kindred lady, since no one had had aunts for thousands of years, "was a Believer. She took me to the Abba-dingo. To get holiness and luck."

The old me was a little shocked; the French me was disquieted by the fact that this girl had done something unusual even before mankind itself turned to the unusual. The Abba-dingo was a long-obsolete computer set part way up the column of Earthport. The homunculi treated it as a god, and occasionally people went to it. To do so was tedious and vulgar.

Or had been. Till all things became new again.

Keeping the annoyance out of my voice, I asked her,

"What was it like?"

She laughed lightly, yet there was a trill to her laughter which gave me a shiver. If the old Menerima had had secrets, what might the new Virginia do? I almost hated the fate which made me love her, which made me feel that the touch of her hand on my arm was a link between me and time-forever.

She smiled at me instead of answering my question. The surfaceway was under repair; we followed a ramp down to the level of the top underground, where it was legal for true persons and hominids and homunculi to walk.

I did not like the feeling; I had never gone more than twenty minutes' trip from my birthplace. This ramp looked safe enough. There were few hominids around these days, men from the stars who (though of true human stock) had been changed to fit the conditions of a thousand worlds. The homunculi were morally repulsive, though many of

them looked like very handsome people; bred from animals into the shape of men, they took over the tedious chores of working with machines where no real man would wish to go. It was whispered that some of them had even bred with actual people, and I would not want my Virginia to be exposed to the presence of such a creature.

She had been holding my arm. When we walked down the ramp to the busy passage, I slipped my arm free and put it over her shoulders, drawing her closer to me. It was light enough, bright enough to be clearer than the daylight which we had left behind, but it was strange and full of danger. In the old days, I would have turned around and gone home rather than expose myself to the presence of such dreadful beings. At this time, in this moment, I could not bear to part from my new-found love, and I was afraid that if I went back to my own apartment in the tower, she might go to hers. Anyhow, being French gave a spice to danger.

Actually, the people in the traffic looked commonplace enough. There were many busy machines, some in human form and some not. I did not see a single hominid. Other people, whom I knew to be homunculi because they yielded the right of way to us, looked no different from the real human beings on the surface. A brilliantly beautiful girl gave me a look which I did not like—saucy, intelligent, provocative beyond all limits of flirtation. I suspected her of being a dog by origin. Among the hominids, d'persons are the ones most apt to take liberties. They even have a dog-man philosopher who once produced a tape arguing that since dogs are the most ancient of men's allies, they have the right to be closer to man than any other form of life. When I saw the tape, I thought it amusing that a dog should be bred into the form of a Socrates; here, in the top underground, I was not so sure at all. What would I do if one of them became insolent? Kill him? That meant a brush with the law and a talk with the Subcommissioners of the Instrumentality.

Virginia noticed none of this.

She had not answered my question, but was asking me questions about the top underground instead. I had been

there only once before, when I was small, but it was flattering to have her wondering, husky voice murmuring in my ear.

Then it happened.

At first I thought he was a man, foreshortened by some trick of the underground light. When he came closer, I saw that he was not. He must have been five feet across the shoulders. Ugly red scars on his forehead showed where the horns had been dug out of his skull. He was a homunculus, obviously derived from cattle stock. Frankly, I had never known that they left them that ill-formed.

And he was drunk.

As he came closer I could pick up the buzz of his mind. *. . . they're not people, they're not hominids, and they're not Us—what are they doing here? The words they think confuse me.* He had never telepathed French before.

This was bad. For him to talk was common enough, but only a few of the homunculi were telepathic—those with special jobs, such as in the Downdeep-downdeep, where only telepathy could relay instructions.

Virginia clung to me.

Thought I, in clear Common Tongue: *True men are we. You must let us pass.*

There was no answer but a roar. I do not know where he got drunk, or on what, but he did not get my message.

I could see his thoughts forming up into panic, helplessness, hate. Then he charged, almost dancing toward us, as though he could crush our bodies.

My mind focused and I threw the stop order at him.

It did not work.

Horror-stricken, I realized that I had thought French at him.

Virginia screamed.

The bull-man was upon us.

At the last moment he swerved, passed us blindly, and let out a roar which filled the enormous passage. He had raced beyond us.

Still holding Virginia, I turned around to see what had made him pass us.

What I beheld was odd in the extreme.

Our figures ran down the corridor away from us—my black-purple cloak flying in the still air as my image ran, Virginia's golden dress swimming out behind her as she ran with me. The images were perfect and the bull-man pursued them.

I stared around in bewilderment. We had been told that the safeguards no longer protected us.

A girl stood quietly next to the wall. I had almost mistaken her for a statue. Then she spoke,

"Come no closer. I am a cat. It was easy enough to fool him. You had better get back to the surface."

"Thank you," I said, "thank you. What is your name?"

"Does it matter?" said the girl. "I'm not a person."

A little offended, I insisted, "I just wanted to thank you." As I spoke to her I saw that she was as beautiful and as bright as a flame. Her skin was clear, the color of cream, and her hair—finer than any human hair could possibly be—was the wild golden orange of some Persian cats.

"I'm C'mell," said the girl, "and I work at Earthport."

That stopped both Virginia and me. Cat-people were below us, and should be shunned, but Earthport was above us, and had to be respected. Which was C'mell?

She smiled, and her smile was better suited for my eyes than for Virginia's. It spoke a whole world of voluptuous knowledge. I knew she wasn't trying to do anything to me; the rest of her manner showed that. Perhaps it was the only smile she knew.

"Don't worry," she said, "about the formalities. You'd better take these steps here. I hear him coming back."

I spun around, looking for the drunken bull-man. He was not to be seen.

"Go up here," urged C'mell. "They are emergency steps and you will be back on the surface. I can keep him from following. Was that French you were speaking?"

"Yes," said I. "How did you—?"

"Get along," she said. "Sorry I asked. Hurry!"

I entered the small door. A spiral staircase went to the surface. It was below our dignity as true people to use steps, but with C'mell urging me, there was nothing else I

could do. I nodded goodbye to C'mell and drew Virginia after me up the stairs.

At the surface we stopped.

Virginia gasped, "Wasn't it horrible?"

"We're safe now," said I.

"It's not safety," she said. "It's the dirtiness of it. Imagine having to talk to her!"

Virginia meant that C'mell was worse than the drunken bull-man. She sensed my reserve because she said,

"The sad thing is, you'll see her again . . ."

"What! How do you know that?"

"I don't know it," said Virginia. "I guess it. But I guess good, very good. After all, I went to the Abba-dingo."

"I asked you, darling, to tell me what happened there."

She shook her head mutely and began walking down the streetway. I had no choice but to follow her. It made me a little irritable.

I asked again, more crossly, "What was it like?"

With hurt girlish dignity she said, "Nothing, nothing. It was a long climb. The old woman made me go with her. It turned out that the machine was not talking that day, anyhow, so we got permission to drop down a shaft and to come back on the rolling road. It was just a wasted day."

She had been talking straight ahead, not to me, as though the memory were a little ugly.

Then she turned her face to me. The brown eyes looked into my eyes as though she were searching for my soul. (Soul. There's a word we have in French, and there is nothing quite like it in the Old Common Tongue.) She brightened and pleaded with me:

"Let's not be dull on the new day. Let's be good to the new us, Paul. Let's do something really French, if that's what we are to be."

"A café," I cried. "We need a café. And I know where one is."

"Where?"

"Two undergrounds over. Where the machines come out and where they permit the homunculi to peer in the window." The thought of homunculi peering at us struck the new-me as amusing, though the old-me had taken them as

much for granted as windows or tables. The old-me never met any, but knew that they weren't exactly people, since they were bred from animals, but they looked just about like people, and they could talk. It took a Frenchman like the new-me to realize that they could be ugly, or beautiful, or picturesque. More than picturesque: romantic.

Evidently Virginia now thought the same, for she said, "But they're *nette,* just adorable. What is the café called?"

"The Greasy Cat," said I.

The Greasy Cat. How was I to know that this led to a nightmare between high waters, and to the winds which cried? How was I to suppose that this had anything to do with Alpha Ralpha Boulevard?

No force in the world could have taken me there, if I had known.

Other new-French people had gotten to the café before us.

A waiter with a big brown moustache took our order. I looked closely at him to see if he might be a licensed homunculus, allowed to work among people because his services were indispensable; but he was not. He was pure machine, though his voice rang out with old-Parisian heartiness, and the designers had even built into him the nervous habit of mopping the back of his hand against his big moustache, and had fixed him so that little beads of sweat showed high up on his brow, just below the hairline.

"Mamselle? M'sieu? Beer? Coffee? Red wine next month. The sun will shine in the quarter after the hour and after the half-hour. At twenty minutes to the hour it will rain for five minutes so that you can enjoy these umbrellas. I am a native of Alsace. You may speak French or German to me."

"Anything," said Virginia. "You decide, Paul."

"Beer, please," said I. "Blonde beer for both of us."

"But certainly, m'sieu," said the waiter.

He left, waving his cloth wildly over his arm.

Virginia puckered up her eyes against the sun and said, "I wish it would rain now. I've never seen real rain."

"Be patient, honey."

She turned earnestly to me. "What is 'German,' Paul?"

"Another language, another culture. I read they will bring it to life next year. But don't you like being French?"

"I like it fine," she said. "Much better than being a number. But Paul—" And then she stopped, her eyes blurred with perplexity.

"Yes, darling?"

"Paul," she said, and the statement of my name was a cry of hope from some depth of her mind beyond new-me, beyond old-me, beyond even the contrivances of the Lords who molded us. I reached for her hand.

Said I, "You can tell me, darling."

"Paul," she said, and it was almost weeping, "Paul, why does it all happen so fast? This is our first day, and we both feel that we may spend the rest of our lives together. There's something about marriage, whatever that is, and we're supposed to find a priest, and I don't understand that, either. Paul, Paul, Paul, why does it happen so fast? I want to love you. I do love you. But I don't want to be *made* to love you. I want it to be the real me," and as she spoke, tears poured from her eyes though her voice remained steady enough.

Then it was that I said the wrong thing.

"You don't have to worry, honey. I'm sure that the Lords of the Instrumentality have programmed everything well."

At that, she burst into tears, loudly and uncontrollably. I had never seen an adult weep before. It was strange and frightening.

A man from the next table came over and stood beside me, but I did not so much as glance at him.

"Darling," said I, reasonably, "darling, we can work it out—"

"Paul, let me leave you, so that I may be yours. Let me go away for a few days or a few weeks or a few years. Then, if—if—if I *do* come back, you'll know it's me and not some program ordered by a machine. For God's sake, Paul—for God's sake!" In a different voice she said, "What is God, Paul? They gave us the words to speak, but

I do not know what they mean."

The man beside me spoke. "I can take you to God," he said.

"Who are you?" said I. "And who asked you to interfere?" This was not the kind of language that we had ever used when speaking the Old Common Tongue—when they had given us a new language they had built in temperament as well.

The stranger kept his politeness—he was as French as we but he kept his temper well.

"My name," he said, "is Maximilien Macht, and I have been a Believer."

Virginia's eyes lit up. She wiped her face absentmindedly while staring at the man. He was tall, lean, sunburned. (How could he have gotten sunburned so soon?) He had reddish hair and a moustache almost like that of the robot waiter.

"You asked about God, mamselle," said the stranger. "God is where he has always been—around us, near us, in us."

This was strange talk from a man who looked worldly. I rose to my feet to bid him goodbye. Virginia guessed what I was doing and she said:

"That's nice of you, Paul. Give him a chair."

There was warmth in her voice.

The machine waiter came back with two conical beakers made of glass. They had a golden fluid in them with a cap of foam on top. I had never seen or heard of beer before, but I knew exactly how it would taste. I put imaginary money on the tray, received imaginary change, paid the waiter an imaginary tip. The Instrumentality had not yet figured out how to have separate kinds of money for all the new cultures, and of course you could not use real money to pay for food or drink. Food and drink are free.

The machine wiped his moustache, used his serviette (checked red and white) to dab the sweat off his brow, and then looked inquiringly at Monsieur Macht.

"M'sieu, you will sit here?"

"Indeed," said Macht.

"Shall I serve you here?"

"But why not?" said Macht. "If these good people permit."

"Very well," said the machine, wiping his moustache with the back of his hand. He fled to the dark recesses of the bar.

All this time Virginia had not taken her eyes off Macht.

"You are a Believer?" she asked. "You are still a Believer, when you have been made French like us? How do you know you're you? Why do I love Paul? Are the Lords and their machines controlling everything in us? I want to be *me*. Do you know how to be *me*?"

"Not you, mamselle," said Macht, "that would be too great an honor. But I am learning how to be myself. You see," he added, turning to me, "I have been French for two weeks now, and I know how much of me is myself, and how much has been added by this new process of giving us language and danger again."

The waiter came back with a small beaker. It stood on a stem, so that it looked like an evil little miniature of Earthport. The fluid it contained was milky white.

Macht lifted his glass to us. "Your health!"

Virginia stared at him as if she were going to cry again. When he and I sipped, she blew her nose and put her handkerchief away. It was the first time I have ever seen a person perform that act of blowing the nose, but it seemed to go well with our new culture.

Macht smiled at both of us, as if he were going to begin a speech. The sun came out, right on time. It gave him a halo, and made him look like a devil or a saint.

But it was Virginia who spoke first.

"You have been there?"

Macht raised his eyebrows a little, frowned, and said, "Yes," very quietly.

"Did you get a word?" she persisted.

"Yes." He looked glum, and a little troubled.

"What did it say?"

For answer, he shook his head at her, as if there were

things which should never be mentioned in public.

I wanted to break in, to find out what this was all about.

Virginia went on, heeding me not at all: "But it did say something!"

"Yes," said Macht.

"Was it important?"

"Mamselle, let us not talk about it."

"We must," she cried. "It's life or death." Her hands were clenched so tightly together that her knuckles showed white. Her beer stood in front of her, untouched, growing warm in the sunlight.

"Very well," said Macht, "you may ask . . . I cannot guarantee to answer."

I controlled myself no longer. "What's all this about?"

Virginia looked at me with scorn, but even her scorn was the scorn of a lover, not the cold remoteness of the past. "Please, Paul, you wouldn't know. Wait a while. What did it say to you, M'sieu Macht?"

"That I, Maximilien Macht, would live or die with a brown-haired girl who was already betrothed." He smiled wrily, "And I do not even quite know what 'betrothed' means."

"We'll find out," said Virginia. "When did it say this?"

"Who is 'it'?" I shouted at them. "For God's sake, what is this all about?"

Macht looked at me and dropped his voice when he spoke: "The Abba-dingo." To her he said, "Last week."

Virginia turned white. "So it does work, it does, it does. Paul darling, it said nothing to me. But it said to my aunt something which I can't ever forget!"

I held her arm firmly and tenderly and tried to look into her eyes, but she looked away. Said I, "What did it say?"

"Paul and Virginia."

"So what?" said I.

I scarcely knew her. Her lips were tense and compressed. She was not angry. It was something different, worse. She was in the grip of tension. I suppose we had not seen that for thousands of years, either. "Paul, seize this simple fact, if you can grasp it. The machine gave that

woman our names—but it gave them to her twelve years ago."

Macht stood up so suddenly that his chair fell over, and the waiter began running toward us.

"That settles it," he said. "We're all going back."

"Going where?" I said.

"To the Abba-dingo."

"But why now?" said I; and "Will it work?" said Virginia, both at the same time.

"It always works," said Macht, "if you go on the northern side."

"How do you get there?" said Virginia.

Macht frowned sadly, "There's only one way. By Alpha Ralpha Boulevard." Virginia stood up. And so did I.

Then, as I rose, I remembered. Alpha Ralpha Boulevard. It was a ruined street hanging in the sky, faint as a vapor trail. It had been a processional highway once, where conquerors came down and tribute went up. But it was ruined, lost in the clouds, closed to mankind for a hundred centuries.

"I know it," said I. "It's ruined."

Macht said nothing, but he stared at me as if I were an outsider . . .

Virginia, very quiet and white of countenance, said, "Come along."

"But why?" said I. "Why?"

"You fool," she said, "if we don't have a God, at least we have a machine. This is the only thing left on or off the world which the Instrumentality doesn't understand. Maybe it tells the future. Maybe it's an un-machine. It certainly comes from a different time. Can't you use it, darling? If it says we're us, we're *us*."

"And if it doesn't?"

"Then we're not." Her face was sullen with grief.

"What do you mean?"

"If we're not us," she said, "we're just toys, dolls, puppets that the Lords have written on. You're not you and I'm not me. But if the Abba-dingo, which knew the names Paul and Virginia twelve years before it happened—if the Abba-dingo says that we are us, I don't care if it's a pre-

dicting machine or a god or a devil or a what. I don't care, but I'll have the truth."

What could I have answered to that? Macht led, she followed, and I walked third in single file. We left the sunlight of the Greasy Cat; just as we left, a light rain began to fall. The waiter, looking momentarily like the machine that he was, stared straight ahead. We crossed the lip of the underground and went down to the fast expressway.

When we came out, we were in a region of fine homes. All were in ruins. The trees had thrust their way into the buildings. Flowers rioted across the lawn, through the open doors, and blazed in the roofless rooms. Who needed a house in the open, when the population of Earth had dropped so that the cities were commodious and empty?

Once I thought I saw a family of homunculi, including little ones, peering at me as we trudged along the soft gravel road. Maybe the faces I had seen at the edge of the house were fantasies.

Macht said nothing.

Virginia and I held hands as we walked beside him. I could have been happy at this odd excursion, but her hand was tightly clenched in mine. She bit her lower lip from time to time. I knew it mattered to her—she was on a pilgrimage. (A pilgrimage was an ancient walk to some powerful place, very good for body and soul.) I didn't mind going along. In fact, they could not have kept me from coming, once she and Macht decided to leave the café. But I didn't have to take it seriously. Did I?

What did Macht want?

Who was Macht? What thoughts had that mind learned in two short weeks? How had he preceded us into a new world of danger and adventure? I did not trust him. For the first time in my life I felt alone. Always, always, up to now, I had only to think about the Instrumentality and some protector leaped fully armed into my mind. Telepathy guarded against all dangers, healed all hurts, carried each of us forward to the one-hundred-and-forty-six-

thousand-and-ninety-seven days which had been allotted us. Now it was different. I did not know this man, and it was on him that I relied, not on the powers which had shielded and protected us.

We turned from the ruined road into an immense boulevard. The pavement was so smooth and unbroken that nothing grew on it, save where the wind and dust had deposited random little pockets of earth.

Macht stopped.

"This is it," he said. "Alpha Ralpha Boulevard."

We fell silent and looked at the causeway of forgotten empires.

To our left the boulevard disappeared in a gentle curve. It led far north of the city in which I had been reared. I knew that there was another city to the north, but I had forgotten its name. Why should I have remembered it? It was sure to be just like my own.

But to the right—

To the right the boulevard rose sharply, like a ramp. It disappeared into the clouds. Just at the edge of the cloudline there was a hint of disaster. I could not see for sure, but it looked to me as though the whole boulevard had been sheared off by unimaginable forces. Somewhere beyond the clouds there stood the Abba-dingo, the place where all questions were answered . . .

Or so they thought.

Virginia cuddled close to me.

"Let's turn back," said I. "We are city people. We don't know anything about ruins."

"You can if you want to," said Macht. "I was just trying to do you a favor."

We both looked at Virginia.

She looked up at me with those brown eyes. From the eyes there came a plea older than woman or man, older than the human race. I knew what she was going to say before she said it. She was going to say that she *had* to know.

Macht was idly crushing some soft rocks near his foot.

At last Virginia spoke up: "Paul, I don't want danger

for its own sake. But I meant what I said back there. Isn't there a chance that we were *told* to love each other? What sort of a life would it be if our happiness, our own selves, depended on a thread in a machine or on a mechanical voice which spoke to us when we were asleep and learning French? It may be fun to go back to the old world. I guess it is. I know that you give me a kind of happiness which I never even suspected before this day. If it's really us, we have something wonderful, and we ought to know it. But if it isn't—" She burst into sobs.

I wanted to say, "If it isn't, it will seem just the same," but the ominous sulky face of Macht looked at me over Virginia's shoulder as I drew her to me. There was nothing to say.

I held her close.

From beneath Macht's foot there flowed a trickle of blood. The dust drank it up.

"Macht," said I, "are you hurt?"

Virginia turned around, too.

Macht raised his eyebrows at me and said with unconcern, "No. Why?"

"The blood. At your feet."

He glanced down. "Oh, those," he said, "they're nothing. Just the eggs of some kind of an un-bird which does not even fly."

"Stop it!" I shouted telepathically, using the Old Common Tongue. I did not even try to think in our new-learned French.

He stepped back a pace in surprise.

Out of nothing there came to me a message: *thankyou thankyou goodgreat gohomeplease thankyou goodgreat goaway manbad manbad manbad* . . . Somewhere an animal or bird was warning me against Macht. I thought a casual *thanks* to it and turned my attention to Macht.

He and I stared at each other. Was this what *culture* was? Were we now men? Did freedom always include the freedom to mistrust, to fear, to hate?

I liked him not at all. The words of forgotten crimes came into my mind: *assassination, murder, abduction, insanity, rape, robbery* . . .

We had known none of these things and yet I felt them all.

He spoke evenly to me. We had both been careful to guard our minds against being read telepathically, so that our only means of communication were empathy and French. "It's your idea," he said, most untruthfully, "or at least your lady's . . ."

"Has lying already come into the world," said I, "so that we walk into the clouds for no reason at all?"

"There is a reason," said Macht.

I pushed Virginia gently aside and capped my mind so tightly that the anti-telepathy felt like a headache.

"Macht," said I, and I myself could hear the snarl of an animal in my own voice, "tell me why you have brought us here or I will kill you."

He did not retreat. He faced me, ready for a fight. He said, "Kill? You mean, to make me dead?" but his words did not carry conviction. Neither one of us knew how to fight, but he readied for defense and I for attack.

Underneath my thought shield an animal thought crept in: *goodman goodman take him by the neck no-air he-aaah no-air he-aadh like broken egg . . .*

I took the advice without worrying where it came from. It was simple. I walked over to Macht, reached my hands around his throat and squeezed. He tried to push my hands away. Then he tried to kick me. All I did was hang on to his throat. If I had been a Lord or a Go-Captain, I might have known about fighting. But I did not, and neither did he.

It ended when a sudden weight dragged at my hands.

Out of surprise, I let go.

Macht had become unconscious. Was that *dead*?

It could not have been, because he sat up. Virginia ran to him. He rubbed his throat and said with a rough voice:

"You should not have done that."

This gave me courage. "Tell me," I spat at him, "tell me why you wanted us to come, or I will do it again."

Macht grinned weakly. He leaned his head against Virginia's arm. "It's fear," he said. "Fear."

"Fear?" I knew the word—*peur*—but not the meaning.

Was it some kind of disquiet or animal alarm?

I had been thinking with my mind open; he thought back *yes.*

"But why do you like it?" I asked.

It is delicious, he thought. *It makes me sick and thrilly and alive. It is like strong medicine, almost as good as stroon. I went there before. High up, I had much fear. It was wonderful and bad and good, all at the same time. I lived a thousand years in a single hour. I wanted more of it, but I thought it would be even more exciting with other people.*

"Now I will kill you," said I in French. "You are very—very . . ." I had to look for the word. "You are very evil."

"No," said Virginia, "let him talk."

He thought at me, not bothering with words. *This is what the Lords of the Instrumentality never let us have. Fear. Reality. We were born in a stupor and we died in a dream. Even the underpeople, the animals, had more life than we did. The machines did not have fear. That's what we were. Machines who thought they were men. And now we are free.*

He saw the edge of raw, red anger in my mind, and he changed the subject. *I did not lie to you. This is the way to the Abba-dingo. I have been there. It works. On this side, it always works.*

"It works," cried Virginia. "You see he says so. It works! He is telling the truth. Oh, Paul, do let's go on!"

"All right," said I, "we'll go."

I helped him rise. He looked embarrassed, like a man who has shown something of which he is ashamed.

We walked onto the surface of the indestructible boulevard. It was comfortable to the feet.

At the bottom of my mind the little unseen bird or animal babbled its thoughts at me: *goodman goodman make him dead take water take water . . .*

I paid no attention as I walked forward with her and him, Virginia between us. I paid no attention.

I wish I had.

We walked for a long time.

The process was new to us. There was something exhilarating in knowing that no one guarded us, that the air was free air, moving without benefit of weather machines. We saw many birds, and when I thought at them I found their minds startled and opaque; they were natural birds, the like of which I had never seen before. Virginia asked me their names, and I outrageously applied all the bird-names which we had learned in French without knowing whether they were historically right or not.

Maximilien Macht cheered up, too, and he even sang us a song, rather off key, to the effect that we would take the high road and he the low one, but that he would be in Scotland before us. It did not make sense, but the lilt was pleasant. Whenever he got a certain distance ahead of Virginia and me, I made up variations on "Macouba" and sang-whispered the phrases into her pretty ear:

"She wasn't the woman I went to seek.
I met her by the merest chance.
She did not speak the French of France,
But the surded French of Martinique."

We were happy in adventure and freedom, until we became hungry. Then our troubles began.

Virginia stepped up to a lamp-post, struck it lightly with her fist and said, "Feed me." The post should either have opened, serving us a dinner, or else told us where, within the next few hundred yards, food was to be had. It did neither. It did nothing. It must have been broken.

With that, we began to make a game of hitting every single post.

Alpha Ralpha Boulevard had risen about half a kilometer above the surrounding countryside. The wild birds wheeled below us. There was less dust on the pavement, and fewer patches of weeds. The immense road, with no pylons below it, curved like an unsupported ribbon into the clouds.

We wearied of beating posts and there was neither food nor water.

Virginia became fretful: "It won't do any good to go back now. Food is even farther the other way. I do wish you'd brought something."

How should I have thought to carry food? Who ever carries food? Why would they carry it, when it is everywhere? My darling was unreasonable, but she was my darling and I loved her all the more for the sweet imperfections of her temper.

Macht kept tapping pillars, partly to keep out of our fight, and obtained an unexpected result.

At one moment I saw him leaning over to give the pillar of a large lamp the usual hearty but guarded *whop*—in the next instant he yelped like a dog and was sliding uphill at a high rate of speed. I heard him shout something, but could not make out the words, before he disappeared into the clouds ahead.

Virginia looked at me. "Do you want to go back now? Macht is gone. We can say that I got tired."

"Are you serious?"

"Of course, darling."

I laughed, a little angrily. She had insisted that we come, and now she was ready to turn around and give it up, just to please me.

"Never mind," said I. "It can't be far now. Let's go on."

"Paul . . ." She stood close to me. Her brown eyes were troubled, as though she were trying to see all the way into my mind through my eyes. I thought to her, *Do you want to talk this way?*

"No," said she, in French. "I want to say things one at a time. Paul, I do want to go to the Abba-dingo. I need to go. It's the biggest need in my life. But at the same time, I don't want to go. There is something wrong up there. I would rather have you on the wrong terms than not have you at all. Something could happen."

Edgily, I demanded, "Are you getting this 'fear' that Macht was talking about?"

"Oh, no, Paul, not at all. This feeling isn't exciting. It feels like something broken in a machine—"

"Listen!" I interrupted her.

From far ahead, from within the clouds, there came a sound like an animal wailing. There were words in it. It must have been Macht. I thought I heard "take care." When I sought him with my mind, the distance made circles and I got dizzy.

"Let's follow, darling," said I.

"Yes, Paul," said she, and in her voice there was an unfathomable mixture of happiness, resignation, and despair . . .

Before we moved on, I looked carefully at her. She *was* my girl. The sky had turned yellow and the lights were not yet on. In the yellow rich sky her brown curls were tinted with gold, her brown eyes approached the black in their irises, her young and fate-haunted face seemed more meaningful than any other human face I had ever seen.

"You *are* mine," I said.

"Yes, Paul," she answered me and then smiled brightly. "*You* said it! That is doubly nice."

A bird on the railing looked sharply at us and then left. Perhaps he did not approve of human nonsense, so flung himself downward into dark air. I saw him catch himself, far below, and ride lazily on his wings.

"We're not as free as birds, darling," I told Virginia, "but we are freer than people have been for a hundred centuries."

For answer she hugged my arm and smiled at me.

"And now," I added, "to follow Macht. Put your arms around me and hold me tight. I'll try hitting that post. If we don't get dinner we may get a ride."

I felt her take hold tightly and then I struck the post.

Which post? An instant later the posts were sailing by us in a blur. The ground beneath our feet seemed steady, but we were moving at a fast rate. Even in the service underground I had never seen a roadway as fast as this. Virginia's dress was blowing so hard that it made snapping sounds like the snap of fingers. In no time at all we were in the cloud and out of it again.

A new world surrounded us. The clouds lay below and above. Here and there blue sky shone through. We were steady. The ancient engineers must have devised the walk-

way cleverly. We rode up, up, up without getting dizzy.

Another cloud.

Then things happened so fast that the telling of them takes longer than the event.

Something dark rushed at me from up ahead. A violent blow hit me in the chest. Only much later did I realize that this was Macht's arm trying to grab me before we went over the edge. Then we went into another cloud. Before I could even speak to Virginia a second blow struck me. The pain was terrible. I had never felt anything like that in all my life. For some reason, Virginia had fallen over me and beyond me. She was pulling at my hands.

I tried to tell her to stop pulling me, because it hurt, but I had no breath. Rather than argue, I tried to do what she wanted. I struggled toward her. Only then did I realize that there was nothing below my feet—no bridge, no jetway, nothing.

I was on the edge of the boulevard, the broken edge of the upper side. There was nothing below me except for some looped cables, and, far underneath them, a tiny ribbon which was either a river or a road.

We had jumped blindly across the great gap and I had fallen just far enough to catch the upper edge of the roadway on my chest.

It did not matter, the pain.

In a moment the doctor-robot would be there to repair me.

A look at Virginia's face reminded me there was no doctor-robot, no world, no Instrumentality, nothing but wind and pain. She was crying. It took a moment for me to hear what she was saying,

"I did it, I did it, darling, are you dead?"

Neither one of us was sure what "dead" meant, because people always went away at their appointed time, but we knew that it meant a cessation of life. I tried to tell her that I was living, but she fluttered over me and kept dragging me farther from the edge of the drop.

I used my hands to push myself into a sitting position.

She knelt beside me and covered my face with kisses.

At last I was able to gasp, "Where's Macht?"

She looked back. "I don't see him."

I tried to look too. Rather than have me struggle, she said, "You stay quiet. I'll look again."

Bravely she walked to the edge of the sheared-off boulevard. She looked over toward the lower side of the gap, peering through the clouds which drifted past us as rapidly as smoke sucked by a ventilator. Then she cried out:

"I see him. He looks so funny. Like an insect in the museum. He is crawling across the cables."

Struggling to my hands and knees, I neared her and looked too. There he was, a dot moving along a thread, with the birds soaring by beneath him. It looked very unsafe. Perhaps he was getting all the "fear" that he needed to keep himself happy. I did not want that "fear," whatever it was. I wanted food, water, and a doctor-robot.

None of these were here.

I struggled to my feet. Virginia tried to help me but I was standing before she could do more than touch my sleeve.

"Let's go on."

"On?" she said.

"On to the Abba-dingo. There may be friendly machines up there. Here there is nothing but cold and wind, and the lights have not yet gone on."

She frowned. "But Macht . . . ?"

"It will be hours before he gets here. We can come back."

She obeyed.

Once again we went to the left of the boulevard. I told her to squeeze my waist while I struck the pillars, one by one. Surely there must have been a reactivating device for the passengers on the road.

The fourth time, it worked.

Once again the wind whipped our clothing as we raced upward on Alpha Ralpha Boulevard.

We almost fell as the road veered to the left. I caught my balance, only to have it veer the other way.

And then we stopped.

This was the Abba-dingo.

A walkway littered with white objects—knobs and rods and imperfectly formed balls about the size of my head.

Virginia stood beside me, silent.

About the size of my head? I kicked one of the objects aside and then knew, knew for sure, what it was. It was people. The inside parts. I had never seen such things before. And that, that on the ground, must once have been a hand. There were hundreds of such things along the wall.

"Come, Virginia," said I, keeping my voice even, and my thoughts hidden.

She followed without saying a word. She was curious about the things on the ground, but she did not seem to recognize them.

For my part, I was watching the wall.

At last I found them—the little doors of Abba-dingo.

One said METEOROLOGICAL. It was not Old Common Tongue, nor was it French, but it was so close that I knew it had something to do with the behavior of air. I put my hand against the panel of the door. The panel became translucent and ancient writing showed through. There were numbers which meant nothing, words which meant nothing, and then:

Typhoon coming.

My French had not taught me what a "coming" was, but "typhoon" was plainly *typhon,* a major air disturbance. Thought I, *Let the weather machines take care of the matter.* It had nothing to do with us.

"That's no help," said I.

"What does it mean?" she said.

"The air will be disturbed."

"Oh," said she. "That couldn't matter to us, could it?"

"Of course not."

I tried the next panel, which said FOOD. When my hand touched the little door, there was an aching creak inside the wall, as though the whole tower retched. The door opened a little bit and a horrible odor came out of it. Then the door closed again.

The third door said HELP and when I touched it nothing happened. Perhaps it was some kind of tax-

collecting device from the ancient days. It yielded nothing to my touch. The fourth door was larger and already partly open at the bottom. At the top, the name of the door was PREDICTIONS. Plain enough, that one was, to anyone who knew Old French. The name at the bottom was more mysterious: PUT PAPER HERE, it said, and I could not guess what it meant.

I tried telepathy. Nothing happened. The wind whistled past us. Some of the calcium balls and knobs rolled on the pavement. I tried again, trying my utmost for the imprint of long-departed thoughts. A scream entered my mind, a thin long scream which did not sound much like people. That was all.

Perhaps it did upset me. I did not feel "fear," but I was worried about Virginia.

She was staring at the ground.

"Paul," she said, "isn't that a man's coat on the ground among those funny things?"

Once I had seen an ancient X-ray in the museum, so I knew that the coat still surrounded the material which had provided the inner structure of the man. There was no ball there, so that I was quite sure he was *dead*. How could that have happened in the old days? Why did the Instrumentality let it happen? But then, the Instrumentality had always forbidden this side of the tower. Perhaps the violators had met their own punishment in some way I could not fathom.

"Look, Paul," said Virginia. "I can put my hand in."

Before I could stop her, she had thrust her hand into the flat open slot which said PUT PAPER HERE.

She screamed.

Her hand was caught.

I tried to pull at her arm, but it did not move. She began gasping with pain. Suddenly her hand came free.

Clear words were cut into the living skin. I tore my cloak off and wrapped her hand.

As she sobbed beside me I unbandaged her hand. As I did so she saw the words on her skin.

The words said, in clear French: *You will love Paul all your life.*

Virginia let me bandage her hand with my cloak and then she lifted her face to be kissed. "It was worth it," she said; "it was worth all the trouble, Paul. Let's see if we can get down. Now I know."

I kissed her again and said, reassuringly, "You do know, don't you?"

"Of course," she smiled through her tears. "The Instrumentality could not have contrived this. What a clever old machine! Is it a god or a devil, Paul?"

I had not studied those words at that time, so I patted her instead of answering. We turned to leave.

At the last minute I realized that I had not tried PREDICTIONS myself.

"Just a moment, darling. Let me tear a little piece off the bandage."

She waited patiently. I tore a piece the size of my hand, and then I picked up one of the ex-person units on the ground. It may have been the front of an arm. I returned to push the cloth into the slot, but when I turned to the door, an enormous bird was sitting there.

I used my hand to push the bird aside, and he cawed at me. He even seemed to threaten me with his cries and his sharp beak. I could not dislodge him.

Then I tried telepathy. *I am a true man. Go away!*

The bird's dim mind flashed back at me nothing but *no-no-no-no-no!*

With that I struck him so hard with my fist that he fluttered to the ground. He righted himself amid the white litter on the pavement and then, opening his wings, he let the wind carry him away.

I pushed in the scrap of cloth, counted to twenty in my mind, and pulled the scrap out.

The words were plain, but they meant nothing: *You will love Virginia twenty-one more minutes.*

Her happy voice, reassured by the prediction but still unsteady from the pain in her written-on hand, came to me as though it were far away. "What does it say, darling?"

Accidentally on purpose, I let the wind take the scrap. It fluttered away like a bird. Virginia saw it go.

"Oh," she cried disappointed. "We've lost it! What did it say?"

"Just what yours did."

"But what words, Paul? How did it say it?"

With love and heartbreak and perhaps a little "fear," I lied to her and whispered gently,

"It said, 'Paul will always love Virginia.' "

She smiled at me radiantly. Her stocky, full figure stood firmly and happily against the wind. Once again she was the chubby, pretty Menerima whom I had noticed in our block when we both were children. And she was more than that. She was my new-found love in our new-found world. She was my mademoiselle from Martinique. The message was foolish. We had seen from the food-slot that the machine was broken.

"There's no food or water here," said I. Actually, there was a puddle of water near the railing, but it had been blown over the human structural elements on the ground, and I had no heart to drink it.

Virginia was so happy that, despite her wounded hand, her lack-of-water and her lack-of-food, she walked vigorously and cheerfully.

Thought I to myself, *Twenty-one minutes. About six hours have passed. If we stay here we face unknown dangers.*

Vigorously we walked downward, down Alpha Ralpha Boulevard. We had met the Abba-dingo and were still "alive." I did not think that I was "dead," but the words had been meaningless so long that it was hard to think them.

The ramp was so steep going down that we pranced like horses. The wind blew into our faces with incredible force. That's what it was, wind, but I looked up the word *vent* only after it was all over.

We never did see the whole tower—just the wall at which the ancient jetway had deposited us. The rest of the tower was hidden by clouds which fluttered like torn rags as they raced past the heavy material.

The sky was red on one side and a dirty yellow on the other.

Big drops of water began to strike at us.

"The weather machines are broken," I shouted to Virginia.

She tried to shout back to me but the wind carried her words away. I repeated what I had said about the weather machines. She nodded happily and warmly, though the wind was by now whipping her hair past her face and the pieces of water which fell from up above were spotting her flame-golden gown. It did not matter. She clung to my arm. Her happy face smiled at me as we stamped downward, bracing ourselves against the decline in the ramp. Her brown eyes were full of confidence and life. She saw me looking at her and she kissed me on the upper arm without losing step. She was my own girl forever, and she knew it.

The water-from-above, which I later knew was actual "rain," came in increasing volume. Suddenly it included birds. A large bird flapped his way vigorously against the whistling air and managed to stand still in front of my face, though his air speed was many leagues per hour. He cawed in my face and then was carried away by the wind. No sooner had that one gone than another bird struck me in the body. I looked down at it but it too was carried away by the racing current of air. All I got was a telepathic echo from its bright blank mind: *no-no-no-no!*

Now what? thought I. A bird's advice is not much to go upon.

Virginia grabbed my arm and stopped.

I too stopped.

The broken edge of Alpha Ralpha Boulevard was just ahead. Ugly yellow clouds swam through the break like poisonous fish hastening on an inexplicable errand.

Virginia was shouting.

I could not hear her, so I leaned down. That way her mouth could almost touch my ear.

"Where is Macht?" she shouted.

Carefully I took her to the left side of the road, where the railing gave us some protection against the heavy racing air, and against the water commingled with it. By now neither of us could see very far. I made her drop to her knees. I got down beside her. The falling water pelted our

backs. The light around us had turned to a dark dirty yellow.

We could still see, but we could not see much.

I was willing to sit in the shelter of the railing, but she nudged me. She wanted us to do something about Macht. What anyone could do, that was beyond me. If he had found shelter, he was safe, but if he was out on those cables, the wild pushing air would soon carry him off and then there would be no more Maximilien Macht. He would be "dead" and his interior parts would bleach somewhere on the open ground.

Virginia insisted.

We crept to the edge.

A bird swept in, true as a bullet, aiming for my face. I flinched. A wing touched me. It stung against my cheek like fire. I did not know that feathers were so tough. The birds must all have damaged mental mechanisms, thought I, if they hit people on Alpha Ralpha. That is not the right way to behave toward true people.

At last we reached the edge, crawling on our bellies. I tried to dig the fingernails of my left hand into the stonelike material of the railing, but it was flat, and there was nothing much to hold to, save for the ornamental fluting. My right arm was around Virginia. It hurt me badly to crawl forward that way, because my body was still damaged from the blow against the edge of the road, on the way coming up. When I hesitated, Virginia thrust herself forward.

We saw nothing.

The gloom was around us.

The wind and the water beat at us like fists.

Her gown pulled at her like a dog worrying its master. I wanted to get her back into the shelter of the railing, where we could wait for the air disturbance to end.

Abruptly, the light shone all around us. It was wild electricity, which the ancients called *lightning*. Later I found that it occurs quite frequently in the areas beyond the reach of the weather machines.

The bright quick light showed us a white face staring at us. He hung on the cables below us. His mouth was open,

so he must have been shouting. I shall never know whether the expression on his face showed "fear" or great happiness. It was full of excitement. The bright light went out and I thought that I heard the echo of a call. I reached for his mind telepathically and there was nothing there. Just some dim, obstinate bird thinking at me, *no-no-no-no-no!*

Virginia tightened in my arms. She squirmed around. I shouted at her in French. She could not hear.

Then I called with my mind.

Someone else was there.

Virginia's mind blazed at me, full of revulsion, *The cat-girl. She is going to touch me!*

She twisted. My right arm was suddenly empty. I saw the gleam of a golden gown flash over the edge, even in the dim light. I reached with my mind, and I caught her cry:

"Paul, Paul, I love you. Paul . . . help me!"

The thoughts faded as her body dropped.

The someone else was C'mell, whom we had first met in the corridor.

I came to get you both, she thought at me; *not that the birds cared about her.*

What have the birds got to do with it?

You saved them. You saved their young, when the red-topped man was killing them all. All of us have been worried about what you true people would do to us when you were free. We found out. Some of you are bad and kill other kinds of life. Others of you are good and protect life.

Thought I, *is that all there is to* good *and* bad?

Perhaps I should not have left myself off guard. People did not have to understand fighting, but the homunculi did. They were bred amidst battle and they served through troubles. C'mell, cat-girl that she was, caught me on the chin with a pistonlike fist. She had no anesthesia, and the only way—cat or no cat—that she could carry me across the cables in the "typhoon" was to have me unconscious and relaxed.

I awakened in my own room. I felt very well indeed. The robot-doctor was there. Said he:

"You've had a shock. I've already reached the Subcommissioner of the Instrumentality, and I can erase the memories of the last full day, if you want me to."

His expression was pleasant.

Where was the racing wind? The air falling like stone around us? The water driving where no weather machines controlled it? Where was the golden gown and the wild fear-hungry face of Maximilien Macht?

I thought these things, but the robot-doctor, not being telepathic, caught none of it. I stared hard at him.

"Where," I cried, "is my own true love?"

Robots cannot sneer, but this one attempted to do so. "The naked cat-girl with the blazing hair? She left to get some clothing."

I stared at him.

His fuddy-duddy little machine mind cooked up its own nasty little thoughts, "I must say, sir, you 'free people' change very fast indeed . . ."

Who argues with a machine? It wasn't worth answering him.

But that other machine? Twenty-one minutes. How could that work out? How could it have known? I did not want to argue with that other machine either. It must have been a very powerful left-over machine—perhaps something used in ancient wars. I had no intention of finding out. Some people might call it a god. I call it nothing. I do not need "fear" and I do not propose to go back to Alpha Ralpha Boulevard again.

But hear, oh heart of mine!—how can you ever visit the café again?

C'mell came in and the robot-doctor left.

MARK ELF

The years rolled by; the earth lived on, even when a stricken and haunted mankind crept through the glorious ruins of an immense past.

I. DESCENT OF A LADY

Stars wheeled silently over an early summer sky, even though men had long ago forgotten to call such nights by the name of June.

Laird tried to watch the stars with his eyes closed. It was a ticklish and terrifying game for a telepath: at any moment he might feel the heavens opening up and might, as his mind touched the image of the nearer stars, plunge himself into a nightmare of perpetual falling. Whenever he had this sickening shocking ghastly suffocating feeling of limitless fall, he had to close his mind against telepathy long enough to let his powers heal.

He was reaching with his mind for objects just above the Earth, burnt-out space stations which flitted in their multiplex orbits, spinning forever, left over from the wreckage of ancient atomic wars.

He found one.

Found one so ancient it had no surviving cryotronic controls. Its design was archaic beyond belief, chemical tubes had apparently once lifted it out of Earth's atmosphere.

He opened his eyes and promptly lost it.

Closing his eyes he groped again with his seeking mind until he found the ancient derelict. As his mind reached for

it again the muscles of his jaw tightened. He sensed life within it, life as old as the archaic machine itself.

In an instant he made contact with his friend Tong Computer.

He poured his knowledge into Tong's mind. Keenly interested, Tong shot back at him an orbit which would cut the mildly parabolic pattern of the old device and bring it back down into earth's atmosphere.

Laird made a supreme effort.

Calling on his unseen friends to aid him, he searched once more through the rubbish that raced and twinkled unseen just above the sky. Finding the ancient machine he managed to give it a push.

In this fashion, about sixteen-thousand years after she left Hitler's Reich, Carlotta vom Acht began her return to the Earth of men.

In all those years she had not changed.

Earth had.

The ancient rocket tipped. Four hours later it had begun to graze the stratosphere, and its ancient controls, preserved by cold and time against all change, went back into effect. As they thawed they became activated.

The course flattened out.

Fifteen hours later the rocket was seeking a destination.

Electronic controls which had really been dead for thousands of years, out in the changeless time of space itself, began to look for German territory, seeking the territory by feedbacks which selected characteristic Nazi patterns of electronic communications scramblers.

There were none.

How could the machine know this? The machine had left the town of Pardubice on April 2, 1945, just as the last German hideouts were being mopped up by the Red Army. How could the machine know that there was no Hitler, no Reich, no Europe, no America, no nations? The machine was keyed to German codes. Only German codes.

This did not affect the feedback mechanisms.

They looked for German codes anyway. There were none. The electronic computer in the rocket began to go

mildly neurotic. It chattered to itself like an angry monkey, rested, chattered again, and then headed the rocket for something which seemed to be vaguely electrical. The rocket descended and the girl awoke.

She knew she was in the box in which her daddy had placed her. She knew that she was not a cowardly swine like the Nazis whom her father despised. She was a good Prussian girl of noble military family. She had been ordered to stay in the box by her father. What daddy told her to do she had always done. That was the first kind of rule for her kind of girl, a sixteen-year-old of the Junker class. The noise increased.

The electronic chattering flared up into a wild medley of clicks.

She could smell something perfectly dreadful burning, something awful and rotten like flesh. She was afraid that it was herself, but she felt no pain.

"*Vadi, Vadi,* what is happening to me?" she cried to her father.

(Her father had been dead sixteen-thousand and more years. Obviously enough he did not answer.)

The rocket began to spin. The ancient leather harness holding her broke loose. Even though her section of the rocket was no bigger than a coffin she was cruelly bruised.

She began to cry.

She vomited, even though very little came up. Then she slid in her own vomit and felt nasty and ashamed because of something which was a terribly simple human reaction.

The noises all met in a screaming shrieking climax. The last thing she remembered was the firing of the forward decelerators. The metal had become fatigued so that the tubes not only fired forward; they blew themselves to pieces sidewise as well.

She was unconscious when the rocket crashed. Perhaps that saved her life, since the least muscular tension would have led to the ripping of muscle and the crack of bone.

II. A MORON FOUND HER

His metals and plumes beamed in the moonlight as he scampered about the dark forest in his gorgeous uniform. The government of the world had long since been left to the Morons by the true men, who had no interest in such things as politics or administration.

Carlotta's weight, not her conscious will, had tripped the escape handle.

Her body lay half in, half out of the rocket.

She had gotten a bad burn on her left arm where her skin touched the hot outer surface of the rocket.

The Moron parted the bushes and approached.

"I am the Lord High Administrator of Area 73," he said, identifying himself according to the rules.

The unconscious girl did not answer. He rose up close to the rocket, crouching low lest the dangers of the night devour him, and listened intently to the radiation counter built in under the skin of his skull behind his left ear. He lifted the girl dextrously, flung her gently over his shoulder, turned about, ran back into the bushes, made a right-angle turn, ran a few paces, looked about him undecidedly, and then ran (still uncertain, still rabbitlike) down to the brook.

He reached into his pocket and found a burn-balm. He applied a thick coating to the burn on her arm. It would stay, killing the pain and protecting the skin until the burn was healed.

He splashed cool water on her face. She awakened.

"Wo bin ich?" said she in German.

On the other side of the world Laird, the telepath, had forgotten for the moment about the rocket. He might have understood her, but he was not there. The forest was around her and the forest was full of life, fear, hate, and pitiless destruction.

The Moron babbled in his own language.

She looked at him and thought that he was a Russian.

Said she in German, "Are you a Russian? Are you a German? Are you part of General Vlasov's army? How far are we from Prague? You must treat me courteously. I am an important girl . . ."

The Moron stared at her.

His face began to grin with innocent and consummate lust. (The true men had never felt it necessary to inhibit the breeding habits of Morons between the Beasts, the Unforgiven, and the Menschenjagers. It was hard for any kind of human being to stay alive. The true men wanted the Morons to go on breeding, to carry reports, to gather up a few necessaries, and to distract the other inhabitants of the world enough to let the true men have the quiet and contemplation which their exalted but weary temperaments demanded.)

This Moron was typical of his kind. To him food meant eat, water meant drink, woman meant lust.

He did not discriminate.

Weary, confused, and bruised though she was, Carlotta still recognized his expression.

Sixteen-thousand years ago she had expected to be raped or murdered by the Russians. This soldier was a fantastic little man, plump and grinning, with enough medals for a Soviet colonel general. From what she could see in the moonlight, he was clean-shaven and pleasant, but he looked innocent and stupid to be so high-ranking an officer. Perhaps the Russians were all like that, she thought.

He reached for her.

Tired as she was, she slapped him.

The Moron was mixed up in his thoughts. He knew that he had the right to capture any Moron woman whom he might find. Yet he also knew that it was worse than death to touch any woman of the true men. Which was this—this thing—this power—this entity who had descended from the stars?

Pity is as old and emotional as lust. As his lust receded, his elemental human pity took over. He reached in his jerkin pocket for a few scraps of food.

He held them out to her.

She ate, looking at him trustfully, very much the child.

Suddenly there was a crashing in the woods.

Carlotta wondered what had happened.

When she first saw him his face had been full of concern. Then he had grinned and had talked. Later he had become lustful. Finally he had acted very much the gentleman. Now he looked blank, brain and bone and skin all concentrated into the act of listening—listening for something else, beyond the crashing, which she could not hear. He turned back to her.

"You must run. You must run. Get up and run. I tell you, run!"

She listened to his babble without comprehension.

Once again he crouched to listen.

He looked at her with blank horror on his face. Carlotta tried to understand what was the matter, but she could not riddle his meaning.

Three more strange little men dressed exactly like him came crashing out of the woods.

They ran like elk or deer before a forest fire. Their faces were blank with the exertion of running. Their eyes looked straight ahead so that they seemed almost blind. It was a wonder that they evaded the trees. They came crashing down the slope scattering leaves as they ran. They splashed the waters of the brook as they stomped recklessly through it. With a half-animal cry Carlotta's Moron joined them.

The last she saw of him, he was running away into the woods, his plumes grinning ridiculously as his head nodded with the exertion of running.

From the direction from which the Morons had come an unearthly creepy sound whistled through the woods. It was whistling, stealthy and low, accompanied by the very quiet sound of machinery.

The noise sounded like all the tanks in the world compressed into the living ghost of a tank, into the heart of a machine which survived its own destruction and spirit-like, haunted the scenes of old battles.

As the sound approached Carlotta turned toward it. She tried to stand up and could not. She faced the danger. (All

Prussian girls, destined to be the mothers of officers, were taught to face danger and never to turn their backs on it.) As the noise came close to her she could hear the high crazy inquiry of soft electronic chatter. It resembled the sonar she had once heard in her father's laboratory at the Reichs-secret offices project of Nordnacht.

The machine came out of the woods.

And it did look like a ghost.

III. THE DEATH OF ALL MEN

Carlotta stared at the machine. It had legs like a grasshopper, a body like a ten-foot turtle, and three heads which moved restlessly in the moonlight.

From the forward edge of the top shell a hidden arm leapt forth, seeming to strike at her, deadlier than a cobra, quicker than a jaguar, more silent than a bat flitting across the face of the moon.

"Don't!" Carlotta screamed in German. The arm stopped suddenly in the moonlight.

The stop was so sudden that the metal twanged like the string of a bow.

The heads of the machine all turned toward her.

Something like surprise seemed to overtake the machine. The whistling dropped down to a soothing purr. The electronic chatter burst up to a crescendo and then stopped. The machine dropped to its knees.

Carlotta crawled over to it.

Said she in German, "What are you?"

"I am the death of all men who oppose the Sixth German Reich," said the machine in fluted singsong German. "If the Reichsangehoeriger wishes to identify me, my model and number are written on my carapace."

The machine knelt at a height so low that Carlotta could seize one of the heads and look in the moonlight at the edge of the top shell. The head and neck, though made of metal, felt much more weak and brittle than she ex-

pected. There was about the machine an air of immense age.

"I can't see," wailed Carlotta, "I need a light."

There was the ache and grind of long unused machinery. Another mechanical arm appeared, dropping flakes of near-crystallized dirt as it moved. The tip of the arm exuded light, blue, penetrating and strange.

Brook, forest, small valley, machine, even herself, were all lit up by the soft penetrating blue light which did not hurt her eyes. The light even gave her a sense of well-being. With the light she could read. Traced on the carapace just above the three heads was this inscription:

WAFFENAMT DES SECHSTEN DEUTSCHEN REICHES
BURG EISENHOWER, A.D. 2495.

And then below it in much larger Latin letters:

MENSCHENJAGER MARK ELF.

"What does 'Man-hunter, Model Eleven' mean?"

"That's me," whistled the machine. "How is it you don't know me if you are a German?"

"Of course, I'm a German, you fool!" said Carlotta. "Do I look like a Russian?"

"What is a Russian?" said the machine.

Carlotta stood in the blue light wondering, dreaming, dreading—dreading the unknown which had materialized around her.

When her father, Heinz Horst Ritter vom Acht, professor and doctor of mathematical physics at project Nordnacht, had fired her into the sky before he himself awaited a gruesome death at the hands of the Soviet soldiery, he had told her nothing about the Sixth Reich, nothing about what she might meet, nothing about the future. It came to her mind that perhaps the world was dead, that the strange little men were not near Prague, that she was in Heaven or Hell, herself being dead, or if herself alive, was in some other world, or her own world in the future, or things beyond all human ken, or problems which no mind could solve . . .

She fainted again.

The Menschenjäger could not know that she was un-

conscious and addressed her in serious high-pitched singsong German, "German citizen, have confidence that I will protect you. I am built to identify German thoughts and to kill all men who do not have true German thoughts."

The machine hesitated. A loud chatter of electronic clicks echoed across the silent woods while the machine tried to compute its own mind. It was not easy to select from the long-unused store of words for so ancient and so new a situation. The machine stood in its own blue light. The only sound was the sound of the brook moving irresistibly about its gentle and unliving business. Even the birds in the trees and the insects round about were hushed into silence by the presence of the dreaded whistling machine.

To the sound-receptors of the Menschenjäger the running of the Morons, by now some two miles distant, came as a very faint pitter-patter.

The machine was torn between two duties, the long-current and familiar duty of killing all men who were not German, and the ancient and forgotten duty of succoring all Germans, whoever they might be. After another period of electronic chatter the machine began to speak again. Beneath the grind of its singsong German there was a curious warning, a reminder of the whistle which it made as it moved, a sound of immense mechanical and electronic effort.

Said the machine, "You are German. It has been long since there has been any German anywhere. I have gone around the world two-thousand-three-and-twenty-eight times. I have killed seventeen-thousand-four-hundred-and-sixty-nine enemies of the Sixth German Reich for sure, and I have probably killed forty-two-thousand-and-seven additional ones. I have been back to the automatic restoration center eleven times. The enemies who call themselves the true men always elude me. One of them I have not killed for more than three-thousand years. The ordinary men whom some call the Unforgiven are the ones I kill most of all, but frequently I catch Morons and kill them, too. I am fighting for Germany, but I cannot find

Germany anywhere. There are no Germans in Germany. There are no Germans anywhere. I accept orders from no one but a German. Yet there have been no Germans anywhere, no Germans anywhere, no Germans anywhere . . ."

The machine seemed to get a catch in its electronic brain because it went on repeating *no Germans anywhere* three- or four-hundred times.

Carlotta came to as the machine was dreamily talking to itself, repeating with sad and lunatic intensity *no Germans anywhere.*

Said she, "I'm a German."

". . . no Germans anywhere, no Germans anywhere, except you, except you, except you."

The mechanical voice ended in a thin screech.

Carlotta tried to come to her feet.

At last the machine found words again. "What—do—I—do—now?"

"Help me," said Carlotta firmly.

This command seemed to tap an operable feedback in the ancient cybernetic assembly: "I cannot help you, member of the Sixth German Reich. For that you need a rescue machine. I am not a rescue machine. I am a hunter of men, designed to kill all the enemies of the German Reich."

"Get me a rescue machine then," said Carlotta.

The blue light went off, leaving Carlotta standing blinded in the dark. She was shaky on her legs. The voice of the Menschenjäger came to her,

"I am not a rescue machine. There are no rescue machines. There are no rescue machines anywhere. There is no Germany anywhere. There are no Germans anywhere, no Germans anywhere, no Germans anywhere, except you. You must ask a rescue machine. Now I go. I must kill men. Men who are enemies of the Sixth German Reich. That is all I can do. I can fight forever. I shall find a man and kill him. Then I shall find another man and kill him. I depart on the work of the Sixth German Reich."

The whistling and clicking resumed.

With incredible daintiness the machine stepped as

lightly as a cat across the brook. Carlotta listened intently in the darkness. Even the dry leaves of last year did not stir as the Menschenjäger moved through the shadow of the fresh leafy trees.

Abruptly there was silence.

Carlotta could hear the agonized clickety-clack of the computers in the Menschenjäger. The forest became a weird silhouette as the blue light went back on.

The machine returned.

Standing on the far side of the brook it spoke to her in the dry, high-fluted singing German voice,

"Now that I have found a German I will report to you once every hundred years. That is correct. Perhaps that is correct. I do not know. I was built to report to officers. You are not an officer. Nevertheless you are a German. So I will report every hundred years. Meanwhile watch out for the Kaskaskia Effect."

Carlotta, sitting again, was chewing some of the dry cubic food scraps which the Moron had left behind. They tasted like a mockery of chocolate. With her mouth full she tried to shout to the Menschenjäger, *"Was ist das?"*

Apparently the machine understood, because it answered, "The Kaskaskia Effect is an American weapon. The Americans are all gone. There are no Americans anywhere, no Americans anywhere, no Americans anywhere—"

"Stop repeating yourself," said Carlotta. "What is that effect you are talking about?"

"The Kaskaskia Effect stops the Menschenjägers, stops the true men, stops the Beasts. It can be sensed, but it cannot be seen or measured. It moves like a cloud. Only simple men with clean thoughts and happy lives can live inside it. Birds and ordinary beasts can live inside it, too. The Kaskaskia Effect moves about like clouds. There are more than twenty-one and less than thirty-four Kaskaskia Effects moving slowly about this planet Earth. I have carried other Menschenjagers back for restoration and rebuilding, but the restoration center can find no fault. The Kaskaskia Effect ruins us. Therefore, we run away even though the officers told us to run from nothing. If we did

not run away we would cease to exist. You are a German. I think the Kaskaskia Effect would kill you. Now I go to hunt a man. When I find him I will kill him."

The blue light went off.

The machine whistled and clicked its way into the dark silence of the wooded night.

IV. CONVERSATION WITH THE MIDDLE-SIZED BEAR

Carlotta was completely adult.

She had left the screaming uproar of Hitler Germany as it fell to ruins in its Bohemian outposts. She had obeyed her father, the Ritter vom Acht, as he passed her and her sisters into missiles which had been designed as personnel and supply carriers for the First German National Socialist Moon Base.

He and his medical brother, Professor Doctor Joachim vom Acht, had harnessed the girls securely in their missiles.

Their uncle the Doctor had given them shots.

Karla had gone first, then Juli, and then Carlotta.

Then the barbed-wire fortress of Pardubice and the monotonous grind of Wermacht trucks trying to escape the air strikes of the Red Air Force and the American fighter-bombers died in the one night and this mysterious "forest in the middle of nothing-at-all" was born in the next night.

Carlotta was completely dazed.

She found a smooth-looking place at the edge of the brook. The old leaves were heaped high here. Without regard for further danger, she slept.

She had not been asleep more than a few minutes before the bushes parted again.

This time it was a bear. The bear stood at the edge of the darkness and looked into the moonlit valley with the brook running through it. He could hear no sound of

Morons, no whistle of manshonyagger, as he and his kind called the hunting machines. When he was sure all was safe, he twitched his claws and reached delicately into a leather bag which was hanging from his neck by a thong. Gently he took out a pair of spectacles and fitted them slowly and carefully in front of his tired old eyes.

He then sat down next to the girl and waited for her to wake up.

She did not wake until dawn.

Sunlight and birdsong awakened her.

(Could it have been the probing of Laird's mind, whose far-reaching senses told him that a woman had magically and mysteriously emerged from the archaic rocket and that there was a human being unlike all the other kinds of mankind waking at a brookside in a place which had once been called Maryland?)

Carlotta awoke, but she was sick.

She had a fever.

Her back ached.

Her eyelids were almost stuck together with foam. The world had had time to develop all sorts of new allergenic substances since she had last walked on the surface of the Earth. Four civilizations had come and vanished. They and their weapons were sure to leave membrane-inflaming residua behind.

Her skin itched.

Her stomach felt upset.

Her arm was numb and covered with some kind of sticky black. She did not know it was a burn covered by the salve which the Moron had given her the previous night.

Her clothes were dry and seemed to be falling off her in shreds.

She felt so bad that when she noticed the bear she did not even have strength to run.

She just closed her eyes again.

Lying there with her eyes closed she wondered all over again where she was.

Said the bear in perfect German. "You are at the edge of the Unselfing Zone. You have been rescued by a Moron.

You have stopped a Menschenjager very mysteriously. For the first time in my own life I can see into a German mind and I see that the word manshonyagger should really be Menschenjager, a hunter of men. Allow me to introduce myself. I am the Middle-Sized Bear who lives in these woods."

The voice not only spoke German, but it spoke exactly the right kind of German. The voice sounded like the German which Carlotta had heard throughout her life from her father. It was a masculine voice, confident, serious, reassuring. With her eyes still closed she realized that it was a bear who was doing the talking. With a start, she recalled that the bear had been wearing spectacles.

Said she, sitting up, "What do *you* want?"

"Nothing," said the bear mildly.

They looked at each other for a while.

Then said Carlotta, "Who are you? Where did you learn German? What's going to happen to me?"

"Does the Fräulein," asked the bear, "wish me to answer the questions in order?"

"Don't be silly," said Carlotta. "I don't care what order. Anyhow, I'm hungry. Do you have anything I could eat?"

The bear responded gently, "You wouldn't like hunting for insect grubs. I have learned German by reading your mind. Bears like me are friends of the true men and we are good telepaths. The Morons are afraid of us, but we are afraid of the manshonyaggers. Anyhow, you don't have to worry very much because your husband is coming soon."

Carlotta had been walking down toward the brook to get a drink. His last words stopped her in her tracks.

"My husband?" she gasped.

"So probably that it is certain. There is a true man named Laird who has brought you down. He already knows what you are thinking, and I can see his pleasure in finding a human being who is wild and strange, but not really wild and not really strange. At this moment he is thinking that you may have left the centuries to bring the gift of vitality back among mankind. He is thinking that

you and he will have wonderful children. Now he is telling me not to tell you what I think he thinks, for fear that you will run away." The bear chuckled.

Carlotta stood, her mouth agape.

"You may sit in my chair," said the Middle-Sized Bear, "or you can wait here until Laird comes to get you. Either way you will be taken care of. Your sickness will heal. Your ailments will go away. You will be happy again. I know this because I am one of the wisest of all known bears."

Carlotta was angry, confused, frightened, and sick again. She started to run.

Something as solid as a blow hit her.

She knew without being told that it was the bear's mind reaching out and encompassing hers.

It hit—boom!—and that was all.

She had never before stopped to think of how comfortable a bear's mind was. It was like lying in a great big bed and having mother take care of one when one was a very little girl, glad to be petted and sure of getting well.

The anger poured out of her. The fear left her. The sickness began to lighten. The morning seemed beautiful.

She herself felt beautiful as she turned—

Out of the blue sky, dropping swiftly but gracefully, came the figure of a bronze young man. A happy thought pulsed against her mind, *That is Laird, my beloved. He is coming. He is coming. I shall be happy forever after.*

It *was* Laird.

And so she was.