

NEBULA

SCIENCE FICTION

BI-MONTHLY

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NUMBER 18



SIX TOP-LINE SCIENCE FICTION STORIES

15th March

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NEBULA

SCIENCE FICTION

Edited by PETER HAMILTON

Issue Number Eighteen

Novel:

RELUCTANT FARMER E. C. Tubb 60

Novelette:

OUTSIDE POSITION ... William F. Temple 3

Short Stories:

T Brian W. Aldiss 20
HOPE DEFERRED John Brunner 26
MORE THAN HORMONE Dan Morgan 37
ARMISTICE Arthur Sellings 51

Special Features:

Look Here The Editor 2
Gotterdammerung John Newman 99
Something To Read Kenneth F. Slater 104
Fanorama Walter A. Willis 107
Guided Missives The Readers 109

Front Cover by James Stark

Back Cover by Arthur Thomson

All Black and White Illustrations by Arthur Thomson

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Look here . . .

This issue of *Nebula* is published just four years after the appearance of the very first number—dated Autumn, 1952—and, this being the case, I feel that the time has come to take stock of our position now, in relation to what it was four years ago.

At the end of 1952 and in the months following, science-fiction in Great Britain was enjoying a most spectacular boom, with s-f books and magazines selling in their tens of thousands and new titles appearing almost daily. *Nebula*, to the casual observer, was but another of these titles, but in actual fact its appearance had been the subject of careful planning for some considerable time before the “boom.”

Nevertheless, among the many quickly-planned and poor quality publications which appeared at this time, *Nebula* stood out as a potential “great” and in the first year of its existence its circulation rose by nearly 300%.

Soon after this the sales of s-f in Great Britain started to decline and within the space of a few months all but a handful of the regular s-f publications had ceased to appear through lack of sales.

In spite of an initial falling off in sales, experienced by all other science-fiction magazines at this time, *Nebula* quickly regained the little ground lost and went on to build up its readership among those who enjoy the more serious and adult type of science-fiction, during a period which threatened to exterminate s-f as a literary form in Great Britain altogether.

In addition to this it was our honour during 1954 to be chosen as the top s-f magazine to be published in Great Britain by thousands of regular s-f readers—an endorsement of our policy of regularly publishing stories by all the top s-f authors as well as first-grade material from our many new discoveries.

Now, in spite of a regrettable interference in our regular publishing schedule due to circumstances beyond our control, we stand on the threshold of an era of even greater promise than before. Through the efforts of our new wholesale distributors the magazine is now available throughout the length and breadth of Great Britain and Ireland, with many selling points never before covered by us and there is every indication that our many overseas readers in Australia and New Zealand will very soon be joined by a host of new friends in the U.S.A.

Yes, we are pleased with our progress in four years, but are determined to continue to maintain and improve the standard set in the seventeen issues before the current one. Look out for *Nebula* No. 19—out in two months—which will see the beginning of a new photo-feature, still very much on the secret list, as well as the return of our Hollywood Film Review and, of course, first class science-fiction stories by the world's top authors.

Peter Hamilton

Outside Position

*The lady liked cold and had a very strong will.
Did this make her a potential menace?*

Illustrated by Arthur Thomson

In the cities, the snow met with brusque treatment. The blasts of warm air leapt from their secret hiding places along the streets—even from the curbs themselves—and melted it almost before one flake could settle on another. And the self-sluicing drains washed the evidence away.

As compensation, man indulgently let nature have the countryside for a playground. She had romped there wildly this February. The fields, lanes, ponds, and hedges had disappeared under a desert of snow. A smooth hump here and there marked a haystack—or a house. The drifts in places were over thirty feet deep.

But the level threads of the monorails were at no point less than fifty feet above the ground, and the monotrains sped disdainfully along them to and from London. One of these long steel caterpillars, a London-bound express, was just entering the serpentine Merefield Valley. The monorail wound round bend after bend, and the train swept after it, its line of single wheels spinning busily, its gyroscopes minimizing the sway.

Nevertheless, for safety it had slowed to fifty miles an hour, and that gave an outside chance to the man who was racing it in a jet-sledge across the snow. He came like a comet down the valley side, trailing a long plume of blown snow. So was the train.

But the sledge got there first. The driver cut the jet and sent the sledge into a magnificent broadside skid, slowing it by the buffer of snow its runners piled up increasingly before them.

Suddenly the pile fell like an avalanche into the little station yard. The driver leaped from the sledge after it and struggled knee-deep to the station door. The station-master looked out disapprovingly.

"Really, Sir Lawrence, it's taken me days to dig out that yard, foot by foot."

"Sorry, Stan," said Sir Lawrence Bailey, breathing hard. "Stop the London train, will you? Hurry—she's nearly here."

"There's no hurry at all, Sir Lawrence. I put the distant signal against her when I heard you coming this way. That jet of yours sounds for miles, and it's the only one in the district. There isn't another train for three hours. So I guessed you wanted this one stopped."

"You're positively uncanny, Holmes," said Bailey, stepping into the lift.

"You have to use your head in my job, Sir Lawrence—same as you do in yours."

The station-master pulled the door and imprisoned them both in the lift. As the little cell rose between the girders to where the station proper stood on stilts, Bailey reflected that the perennial drawback of living in the country was that everybody knew too much about everybody else's business.

"I'm going to town, Stan," he said, aloud. "I don't know for how long. I may be back tonight. If I am, I'll take the sledge back. If not, my handyman will pick it up in the morning."

"Right, Sir."

They walked out on to the platform. The station-master called in at the signal-box and cleared the distant signal but left the station one at red. Presently the monotrain came humming along the line, dawdling deliberately, it seemed, as though it wasn't even going to try to hurry now. The motorman gave them a sour look as he drifted by in his glass cabin. He had been well on time before this unexpected check. It would be hard to make up the loss now.

Bailey climbed aboard, and the train started with an irritable jerk that made him stumble in the corridor. It was the only way the disgruntled motorman could hit back.

The train was pretty full. Bailey peered into compartment after compartment, and saw no gap he could squeeze into comfortably: he was a big man.

Then he came to the blonde. She was queening it in a compartment empty save for herself. She sat regally with her back to the engine reading *The Times*.

Through the centuries feminine hair-styles and dress-styles had come, gone and returned again in endlessly recurring cycles. The blonde was well abreast of current fashion. Her shimmering black dress was ankle-length, but pressed itself to her narrow waist and generous hips as though it were elastic. The sleeves were voluminous and there were lace ruffles at her wrists. She wore gloves. Her sable coat lay neatly

folded on the opposite seat.

Bailey could see enough of her hair to note it was in the sleek, long-bob, page-boy style, which again was the latest thing—*pro tem*. But, typically, *The Times* hadn't changed its format in generations, and the large sheets hid her face and the rest of her down to the waist.

Bailey slid open the door of the compartment, entered—and shivered. It was like a refrigerator in there. The window was half open and, as the train was picking up speed again now, a chill blast from across the snowfields was driving in.

"Pretty cold in here," he remarked conversationally.

"If you don't like it, you'd better go somewhere else," said the blonde softly but also coldly. She had a slight lisp and a lifting drawl.

Bailey stared at the type-crowded *Times*, which still screened her.

"I'll bet you say that to all the boys. No wonder you've a compartment to yourself."

She lowered the screen, laid it on her lap. The first noticeable fact was that she was wearing sunglasses. The second, that her bust matched her hips. But her face was rather narrow. It was also pale, and on it her mouth looked like a fresh wound.

"By your accent, Harrow and Cambridge?"

Bailey nodded. "Good shooting."

"In short, an English gentleman. I've always been told your class has a Spartan upbringing, breaking the ice for the morning bath—that sort of thing. You're still young—thirty? Thirty-five? And you complain about a draught, like an old lady."

Bailey grinned. "We endure the necessary. But the unnecessary . . . D'you mind if I close the window?"

"Yes. I do." The lisp was pronounced.

Bailey shrugged, and settled himself in the diagonally opposite corner. The icy air streamed in, slid along the wall to nip at him. He tried to be Spartan about it. The blonde resumed her *Times*, holding it firm against the swirling air flows.

Pretty soon, Bailey began to tire of being a Spartan. He looked thoughtfully at the Pykon knob on the window.

Pykon was a unique substance, yet plentiful enough in this world, and even more plentiful on Venus, whence it originated. Under the Venusian clouds lay whole swamps of it, like white mud, kept moist by the humid heat. But once dried out and compressed into solid form, it took on a most remarkable property: it responded to psychokinetic influence like a magic charm.

The PK effect—firstly noted by Dr Rhine—was now, of course, an

accepted fact. That was inevitable from the moment the first specimen of hardened Pykon was brought to Earth. For all that, Pykon was limited in its application. For one thing (the reason wasn't yet properly understood) it could be made to move, by mind control alone, along only one line of force. That was the perpendicular dropped through its centre of gravity: the line of gravity itself.

By concentrated will, you could move Pykon directly up or directly down. But never sideways or obliquely.

There was a further limit. The effect weakened rapidly in ratio to distance above ground level. Above a height of some two hundred feet it faded out altogether. The physicists talked cryptically of the widening gaps between the lines of Earth's magnetic field, as if that had something to do with it. Perhaps it had. Nobody knew.

At first there was a lot of excited talk about a revolution in industry, especially as the PK lifting of a ton of Pykon called for no more will power than the raising of an ounce: size and weight seemed immaterial. But in the upshot it didn't come to much. The trouble was that physical sight of the Pykon was necessary during each operation. You had to watch the stuff or it hardly moved at all.

That was time-wasting. After a few dismal experiments, industry swung back to automation, which could be trusted to look after itself and move anything anywhere—not just up or down.

"It'll make a nice yo-yo," scorned one magnate, which very nearly became its epitaph, and may have done if it weren't for the parking problem.

There were a few Pykon passenger lifts, in low buildings. But they were little more than a novelty, and were seldom reliable because the wills of passengers and would-be passengers too often clashed.

So, apart from its solution of the parking problem, Pykon was used mainly for the little things of life; like sliding windows up or down without troubling to get up from your chair.

Lying back in his seat, eyes half closed but nevertheless focussed on the white Pykon knob, Bailey—imperceptibly, he hoped—began to edge the compartment window up.

He succeeded in closing it quietly. The air in the compartment at last became still. A heady perfume tickled Bailey's nostrils. He recognised it; *Syrtis*—so called because the juice of certain plants gathered in the *Syrtis Major* area on Mars was an important constituent of it. But he knew there was another important constituent, too, and felt heartened.

Suddenly, the blonde slapped the paper down on her lap, frowned

at him and then at the window. As if yanked down by an impatient but invisible hand, the window shot down with a thump, wide open.

The renewal of the polar blast made Bailey gasp. Then he set his jaw and willed the window shut again. It slid halfway up and stopped. The blonde had become very tense and was throwing in some mighty counter-willing.

Then, gradually, the window began to move again—upwards.

The blonde hissed with exasperation, then snatched off her dark glasses, presumably because they were impeding her view of the knob. The clearer one saw Pykon, the more sure the PK effect.

Bailey transferred his attention for a moment to her eyes. They were warm brown and heavily lashed and looked beautiful. He was distracted altogether, and the window slammed full open again with what sounded like a triumphant bang.

She smiled at him, and her teeth were white and perfect.

He frowned. "Don't you think you're being rather childish and wilful?"

"Wilful—or strong-willed?"

"Wilful," grunted Bailey, and seized the white knob and heaved the window shut.

"That's cheating!" cried the blonde, indignantly. "Mere brute strength. And you call yourself a gentleman!"

"In point of fact, that was what *you* called me."

"Then I was wrong." The blonde reached for the Pykon knob.

Purposefully, Bailey reached for it too. The blonde hesitated, then snatched her gloved hand back as his big, strong fingers were about to close over it.

"Where I come from," the blonde said, acidly, "I've seen men horsewhipped for such behaviour to a woman."

"Indeed? One of the southern states of America, I presume?"
Kentucky. Where all real men are gentlemen."

"That explains the attractive accent," nodded Bailey. "Have you been in this country long?"

"Too long, I'm beginning to think. About an hour, in fact."

"Of course, this is the boat-train. You disembarked at Southampton?"

"That's so."

Bailey glanced up at the empty luggage rack. "No luggage?"

She raised her eyebrows. "What's that?"

"Baggage, you would call it."

"You don't imagine I carry trunks on my back, do you? They're

in the baggage car. Why should it concern you, anyhow? Just who are you?"

"My name, dear lady, is Bob Crachit. I come from a long line of poor but honest clerks . . ."

By the time the train slid into New Victoria, he was "Bob" to her and he was calling her Louisa, and they were laughing. She had quite a sense of humour, after all. She had an attractive walk, too, with short, mincing steps and a provocative sway of the hips. He watched her as she oscillated down the corridor ahead of him.

On the platform, he said: "I'll get you a porter, Louisa."

"Don't trouble yourself, Bob. My baggage is being picked up later."

"I'll get you a taxi, then."

"Thanks, no. I have a car waiting. It's been nice knowing you, Bob. Goodbye now."

"Goodbye, Louisa. I hope you enjoy your stay here."

"Thanks again." She swayed away into the crowd. Bailey followed slowly, keeping his distance and never entirely losing sight of her. She was greeted by a small, white-faced man waiting by a car, who at once drove her off. Bailey crooked a finger, and another waiting car started across the street to him.

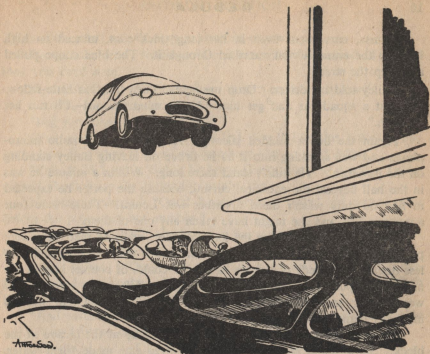
"Follow that blue coupe," directed Bailey, and the driver nodded. They spun out of the station yard into the busy streets of London, where Pykon had come into its own.

Even back in the mid-years of the century, car parking in the big cities had been a major headache. Floods of new cars were being poured on to the roads which couldn't expand to accommodate them. Ground space in New York and central London was worth a fortune per square yard. The only way to cover its cost was to build on it—as high as possible. Little of it could be spared for car parks. The narrow streets were hemmed in by massive buildings which couldn't be moved.

Parking along one side of a street made that street even narrower, and eventually street parking was forbidden altogether. The result: streets choked with cars, half of which were only there because they were cruising around with the slender hope of finding a vacant place in a car park. Towards the end of the century London, New York, and other world cities were little more than enormous traffic jams.

Then one morning a wealthy eccentric, by name Jeffrey Tubbs, waved a wand and set them free.

His car was in a funeral procession in Oxford Street. He stopped



it altogether outside a big store and jumped out. Before anyone had time to hoot a protest, Tubbs frowned at his own car, which at once rose straight up in the air to a height of twenty feet—and stayed there.

The broad white band encircling it, which his friends had thought was a characteristically Tubbsian freak decoration, was Pykon.

Tubbs vanished into the store to buy a new pair of suspenders.

Mid-air parking had been born. Within a week it was general, for Pykon was cheap and abundant.

The streets along which Bailey's car discreetly followed the blue coupe would have looked like scenes from a mad dream to a pre-Tubbs Londoner. As if hanging from invisible threads, whole lines of motionless cars were poised fifteen or twenty feet above the curbs, displaying their axles and shafts as one drove beneath them.

Oil drips on one's clothes from the fluid had become a new hazard of the streets. But penalties for such leaks were severe. Also, only a single line of air-parked vehicles was permitted on either side of the street. Nobody wished the streets roofed over by solid phalanxes of cars, shutting out the daylight.

As the blue coupe stopped outside the entrance to a tall block of flats, the winter dusk was falling. So was the snow, though it was allowed no rest on the ground.

Louisa, curvaceous even in her long thick coat, minced on high heels to the entrance and vanished through it. The blue coupe pulled away up the street.

Bailey told his driver: "Drop me here. Then tail that little fellow. Call out a squad car and get him. Never mind the girl—I'll run her to earth."

Again the driver nodded silently. He picked up a radio microphone and was speaking into it as he drove off leaving Bailey standing on the pavement. He didn't stand there long. Within a minute he was in the hall beyond the entrance, cursing because the porter he expected to find on duty wasn't there. Neither was Louisa. There were four automatic lifts and she might have taken any one of them.

He stared blankly down the long corridor, realizing that there were perhaps another twenty above it, all with rows of side branches and endless doors. Hundreds of private flats. He could, of course, inspect the name slip upon each and every door. But he felt pretty sure that he would never see one inscribed "Louisa Alcott," because that was no more her name than his was Bob Crachit.

He went out into the street again and gazed up at the facade of the block. Snow flakes spun down into his eyes and made them water. Many of the windows were lit now, for it was almost dark. As he looked, another window was suddenly illuminated. It was about fifty feet up, one of the bigger ones with a wide balcony. He wondered if that was her flat. The timing was about right—she would have just arrived there now.

But it might as easily be someone who'd been indoors for hours and only just noticed it was getting dark.

Then both french windows leading on to the balcony were pushed wide open—from this angle he couldn't see by whom—and left that way. He smiled. He could imagine only one person doing that on an evening as bitter as this. All the same, better to make sure.

He had an idea. An unlawful one, but it appealed to him. Someone had left a car air-parked a short way from the entrance. He willed it down to street level, climbed in, and drove twenty yards until he was directly below the window which interested him. Then he willed the car to rise slowly for fifty feet—and he remained in it at the wheel.

He stopped it when he could peep just over the flat ledge of the balcony into the lighted room.

It was the right window, all right. Louisa came straight out on to the balcony almost before he realized it really was her. Oddly, she was still wearing sunglasses. But she removed them as she called:

"Why, Bob, what an odd way to drop in on me!"

He smiled, feeling foolish. "Good heavens, it's Louisa! I had no idea you lived here."

She smiled, too. "Probably not—until you followed me."

"Louisa, I was only parking my car——"

"But you forgot to get out first?"

"Yes—aren't I stupid? I've parked myself like this before. You know how it is when you've got something else on your mind."

"I'm afraid I don't, Bob. I always think what I'm doing. You're parked about twice the regulation height, too."

He glanced down. "Good Lord, yes! I better get down again before the police get my number."

"Is it your number?" she lisped in her slow drawl. "I thought that car belonged to a tenant here."

Bailey sighed. "Okay, then, I followed you and borrowed this car. I fell pretty hard, Louisa. It was you I had on my mind. I just had to find out where you lived. I wanted to see you again."

"And serenade me—in the snow? I'm flattered—and thrilled to bits. You'd better come in and have a drink."

"Thanks, I will. I'll just take this car back——"

"No, you won't" she said, sharply, and her gloved hands tightened on the balustrade. He stared at her, then at the Pykon band on the car. He felt her will opposing his strongly, holding the car there in mid-air,

"You see?" she said quietly. "Now Romeo, let me see you perform the balcony scene properly. You can make this balcony in one leap from the running board—why, it's not six feet!"

"Six feet that way—but fifty feet *that* way," he said, mournfully, pointing down.

Her lip curled. "So, once more the gallant English gentleman who isn't so very gallant."

"All right," said Bailey, resignedly. "For the honour of the old school." He opened the door, balanced on the narrow running board, leaped, and caught the balcony. His hands slipped on the thin layer of snow and he almost fell. She made no move to help him. A look passed between them. Then he heaved himself over the balustrade without a word.

Down in the street there was a witness—a woman who perhaps had seen too many strange things. Her eyes remained expressionless as she turned away and resumed walking—up and down, slowly.

The apartment was ice-cold, and could have been cosy. The carpet was warm and thick, there were deep armchairs, and a cocktail

cabinet. There was also a writing bureau which Bailey surveyed from the corners of his eyes.

"Whisky?" lisped Louisa.

Bailey started. "Er, no, thanks, Louisa. I don't feel like a drink, after all."

"Cigar, then?" She held out a carved ivory box.

"That's an idea. Thanks." He took the box.

"You know," she said, "I'm surprised that you follow girls. You don't look the wolf type. Are you?"

He regarded her oddly. "I'm a terrible wolf—the worst in the pack," he said, solemnly, and lifted the lid of the cigar box.

It was as though a black cloud leaped up into his face. Ammonial fumes burned in his nostrils. He choked, dropped the box to the carpet, then sank slowly on top of it. Vaguely, he was aware of the carpet's thick pile pressing against his cheek, yet he felt, too, that he was falling through it, through the floor into a black ocean that lay beneath it. And he was drowning in the darkness . . .

He came round gradually to a condition of discomfort. His arms were trussed tightly behind him, and rope bound him painfully at the knees and ankles. He lay in the depths of one of the armchairs like a parcel waiting to be picked up.

The Ammoniacal smell was gone but another hung heavy in the room: *Syrtis*. The windows were shut and the thick curtains drawn.

Louisa sat in the opposite chair. His open wallet lay on her lap. She glanced up from the contents which she was examining.

"Would you like that whisky now, Sir Lawrence? I guess you refused it before in case it was drugged. It wasn't. The trick cigar box is more reliable."

He stared cloudily at her. When he was out on a job—even a rush one like this—he carried nothing to connect him with Intelligence. How, then, had she learned his name? Had she been fooling him from the very first?

She smiled as if she had read his thought.

"It seemed to me in the train that your face was familiar—at least, that we'd met before. But it wasn't till I got back here that I remembered where. It was long ago and far away. Over three and a half thousand million miles away, in fact. When you brought your company of spies to our planet."

"Spies be damned," he said, wearily. "It was a purely scientific expedition, as we informed you at the time, to measure stellar distances

by the parallax method."

"Why couldn't you do that from here on Earth?"

"We can and do. But the longest base-line we can get—the diameter of Earth's orbit—is only a hundred and eighty-six million miles long. The subtended angle is far too small for accurate measurements of stars over seven hundred light-years away. But Pluto's orbit gives a base-line forty times as long as Earth's. And that's really something. So—we went to Pluto."

"You have the figures nice and pat, Sir Lawrence. I didn't know you were an astronomer."

"I'm not."

"That's right. You're not—and never were. You're second in command of the Intelligence Service, or Espionage Group as it's also called. And what was the Espionage Group doing on Pluto if it wasn't spying?"

"I was only an Intelligence Officer in those days. I accompanied the scientific party as a matter of routine—you Plutonians were never very co-operative, you know. In fact, damned hostile most of the time."

"With reason, Sir Lawrence. We had the misfortune to be born on the outermost planet, out in the dark and the cold. Where the sun is no bigger than the other stars. A smaller planet than yours, poor in minerals and food, where we have to fight without rest just to maintain survival balanced on a knife-edge. While you spoilt children of the solar system hug this big, rich planet to your selfish selves and deny us even limited immigration. You shut us right out. But we want a place in the sun, too."

"Now, where have I heard that phrase before?" murmured Bailey.

"You're afraid of us."

"You're so right there," said Bailey. "We're afraid of locusts, too, and for the same reason. You're as hungry, energetic, and ruthless as they. You understand compromise to just the same degree. Give you an inch and you'll take a parsec. Your place in the sun would have no corner for us."

"True enough, my dear Old Harrovian. We've chosen our place in the sun. It's Earth. And we'll push you back into the seas from which you came. All of you."

Bailey struggled to sit upright, and failed. "Confound you, and your fancy rhetoric, and your silly idea of playing this like a cliff-hanger serial on T.V. Unties me, Louisa, and let's act sensibly."

"I'm being perfectly sensible. My will is stronger than yours but my muscles are not. That little game we played with the train window

held its lesson for me."

"You're wasting time," said Bailey, impatiently. "You're finished, Louisa. You're waiting for your driver friend—and your co-conspirator—to return, aren't you? Well, forget him. I've had him picked up. In fact, the whole of your gang is in custody now. You might just as well come along with me."

There was a short silence. "Bluff," she said.

"It is?" said Bailey, grimly. "I'll disillusion you." He went on to tell her that Intelligence had discovered months ago that a group of Plutonians was active in Britain, preparing the island as a beach-head for invasion by the Plutonian space-fleet. And that they were planting H-bombs in every key city, space-port and sea-port.

It was known that the whole stack were to be fired simultaneously by radio remote control in the near future. And then the Plutonian fleet, already assembling behind the giant bulk of Jupiter, would swoop. "Like a wolf-pack," added Bailey, deliberately.

As the saboteurs moved from town to town, so Intelligence followed them, quietly dismantling the bombs, and just as silently gathering up the stragglers. Southampton was the last nerve-centre on the list. There Intelligence hoped to rope in the remaining members of the pre-assault party.

But when the net had closed, it was found that two key members were missing. One—a male—was believed to be in London. The other—a female—had just left Southampton for London, presumably on the boat-train. Both of them were unaware as yet of the fate of their fellows.

Bailey's men at Southampton had radioed him the news at his country house, which happened to be only three miles from the Southampton-London monorail. Bailey told them: "Leave it to me—I'll intercept the train. I'll let the female lead me to the other fellow—and their London hideout, too, I hope. I reckon that'll be the G.H.Q. and there should be some interesting documents tucked away there. We've got to be sure we're stamping out every ramification of the plan."

His underling replied: "As you say, Sir Lawrence. But the train is pretty crowded. How will you pick her out? She must be well disguised—of course, she'd have to be. But we've no idea what she looks like."

"I'll spot her, all right, never fear. Now, look, if I'm going to find that London H.Q. I shan't want an obvious reception committee waiting at New Victoria. She's pretty smart and she might notice it and lead us on a wild-goose chase. So just have one man waiting, with a car, in radio contact with *our* H.Q."

"Right, Sir."

"I've got to rush now if I'm going to catch that train . . ."

And Sir Lawrence Bailey rushed—in his jet-sledge.

"Louisa"—whose real name was all but unpronounceable by a non-Plutonian tongue—sat immobile listening to Bailey verbally shredding her dreams. Her narrow face was hard and expressionless.

In the street below, another hard-faced female walked up and down faster to keep her circulation going. Two policemen came pacing along. The taller of them said good-humouredly: "Hello, Suzy. You oughtn't to hang about the streets on a night like this, you know—you'll catch pneumonia. Better go home."

"You trying to tell me to move on?" Her voice was harsh and husky.

"That's it, Suzy—for your own good."

"Coppers! You're so busy chiving the likes of us, who aren't criminals, you let cat-burglars play hopscotch on your beat."

"What's that?" said the shorter, elder policeman sharply.

Suzy said: "I saw a fellow—big chap, he was—take that car up there." She pointed, and the policemen stared at the dim shape fifty feet in the air. "Not his car, either, 'cos I've seen the real owner hundreds of times. This big fellow climbed in that window up there and hasn't come out yet. Not this way, anyhow. I'll bet he's still filling his pockets."

The taller policeman said: "Why didn't you call us?"

"Coppers!" Suzy jeered.

The other policeman said: "Fifth floor, third front flat on the left from the centre stairway. Let's go."

"All right," said "Louisa." "You've won the first round. But it's also the last round so far as you personally are concerned."

She opened a drawer of the bureau and extracted a thick-barrelled pistol.

"This, too squirts gas at one, Sir Lawrence. Home-made Plutonian gas. But this kind is *lethal*."

"Don't be foolish, Louisa. My Department knows where I am."

"Only roughly. They know you're somewhere in the block—that's

all. When they find you dead on the stairway from natural causes—for this gas produces a quite ordinary sort of coronary thrombosis—there will be nothing to connect you with this flat. Or with me. Anyhow, I'll be gone."

"They'll catch up with you. They'll spot you as easily as I did."

"That's an interesting point. Just how did you spot me, Sir Lawrence?"

"It stuck out a mile. You're a creature from the cold and the dark. It's too warm and light for you here, even in winter. So you wear sunglasses and keep the windows wide open—in midwinter. It makes one wonder how uncomfortable your race would be here in summer."

"We'd get acclimatized. Go on."

"Then there were the gloves—never removed. The lisp—because the teeth are false and the insides of the cheeks are padded. The accent—it was smart of you to imply it was Kentucky, for it sounds very like that. But I've been to Pluto—I know that Plutonian lilt. Anyhow, the Kentucky story fell down because it was obvious you had no luggage—sorry 'baggage.' The eyes shook me for a moment, I admit. Then I cottoned on: brown-irised contact lenses. Beautifully made—most realistic."

"Anything else?"

"One other point—rather an indelicate one, I fear. The *Syrtis* scent. Martian plant juice—and lots of musk. It takes lots of musk to drown out the peculiarly sharp Plutonian body odour, which to an Earthman is reminiscent of the wolves' run at the Zoo. Frankly, Louisa—I hate to say it—you smell."

She raised the pistol and pointed it straight down at his face.

She said in a low voice: "I shan't offend you any more."

She hooked a gloved finger round the trigger and began to press. Two other fingers on that hand stood out stiffly at odd angles.

There came a polite knocking on the door.

"Come in," called Bailey. "Louisa" moved like lighting. She tossed the pistol into the settee and caught up the scarf which lay there beside her coat. In the same flowing movement she whipped the scarf between Bailey's lips, rolled him over, and gagged him efficiently.

Someone turned the door handle and tried to push the door open. But it was held by a single vertical bolt, sunk into its socket in the floor. The knob of the bolt was just in line with Bailey's eyes now. It looked like a small white china ball. But Bailey guessed it was Pykon—else the bolt would have been of the common horizontal kind.

The knocking came again, less politely. "Open up there, now.

"We're the police."

Bailey willed the bolt to rise. Slowly it began to do so. But it was stiff and squeaked in the socket. The sound brought "Louisa's" attention to it. She began to counter-will at once. The bolt stopped, then jiggled gently up and down, registering the fortunes of the invisible tug of war.

Bailey was half suffocated by the gag and the blood seemed to be trying to burst out of the veins in his head. He became dizzy and his attention wandered a little. He kept Pykon in his mind but he began to think of the base uses to which it had been put. This bolt, for instance, to save the inmate from having to walk those few yards to the door. The absurd Pykon beer-mug with which soaks performed in the bar, pretending it saved them from getting "beer-swiller's elbow" . . .

The bolt dropped back into place.

The knocking became a hammering. "Open up there!"

Somehow Bailey mustered his attention again. "Louisa" fought every inch of the way. It was like trying to raise the bolt against a strong spiral spring. But he pressed it up relentlessly. The bottom end rose clear of the floor. The door slammed open and two policemen stumbled into the room.

"Louisa" darted and retrieved the gun from the settee. The taller policeman lurched into her and seized her in an armlock. He tore the pistol from her hand. The glove came away with it; also, apparently, two fingers within the glove.

The three fingers which remained more resembled claws, on a thin little hand which was backed with a fuzz of grey fur. It was like the paw of a beast.

The young policeman stared at it in shocked surprise, but held on.

The other policeman came across to Bailey, getting out his jack-knife, and cut the ropes and untied the gag.

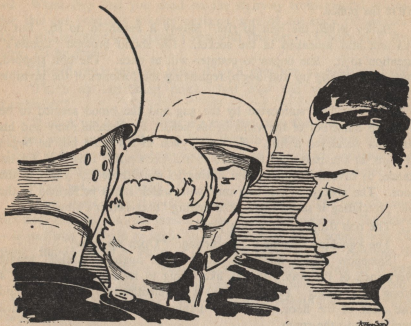
Bailey took the scarf and mopped his face. "I'm Lawrence Bailey, two i/c Intelligence."

"I know, Sir," said the elder policeman, respectfully. "I've seen you before."

"Good. This—er—woman is a Plutonian saboteur. I'm taking her to my H.Q. Keep an eye on her for a bit. I'll get a Squad car round."

Bailey picked up the 'phone and dialled a number. The elder policeman shut the door and bolted it. The other policeman still held "Louisa" firmly, but she didn't struggle.

Bailey told his Department to send a car, and hung up. He met



the brown eyes of "Louisa." Now they seemed stony and unreal.

"You overruled me." Her voice was shaking. There was a fleck of foam on her heavily carmined lips.

He nodded.

"Your will was the stronger all the time. You could have shut that train window. You could have taken that car down. Why didn't you?"

He shrugged.

Her lips curled almost into a snarl and more foam appeared at the corners. The lisp was more a hiss as she spat out: "Because you're a *gentleman*? Because it's in the code that you should never humiliate a woman? Great heavens, d'you think it's a compliment to class me with those weak, watery creatures who are the females of your species?"

She tried to wrench herself free. She almost succeeded, and the other policeman had to come to the aid of his young companion. In the struggle her hair had become awry.

The elder policeman frowned. "I think she's wearing a wig, Sir." He raised a hand to remove it.

"No, leave it," said Bailey. "Let go of her. One of you stand by the window, the other by the door. She can't get away."

The policemen did as they were ordered.

"Louisa" stood in the centre of the room, panting. Bailey tried not to look at her claw hand, and in avoiding it he found himself looking at her feet, which peeped below the long black dress. And made himself look away again. All along he'd known her swaying walk was a ghastly mockery, because of the difficulty of balancing in those shoes. He'd known, too, of the thick padding behind the striking curves.

"Go on," she jeered, snatching off her other glove and revealing that claw hand. "Tell them my feet are like it, too. Tell them I'm an animal—and I smell. Go *on*—don't keep acting the perfect gentleman. You can't humiliate me. I'm a Plutonian and not in the least ashamed of it."

She tore off her wig and flung it down. Her skull was covered with short grey fur, and her ears were small and pointed—and furry. She clawed at her face, and the mortician's wax peeled away, and her nose was squat and wide-nostrilled. She wrenched out the dental plate and the cheek pads, and her face became narrower still, with high cheek-bones.

Sickeningly, she seemed to scratch out her eyes, and the contact lenses rolled briefly on the carpet.

The young policeman at the door coughed and began to study his shining toecaps. The one at the window turned and stared down between the curtains as though he were watching for the Squad car.

"Louisa," crouched and snarling, glared round at them each in turn. Her eyes were red and small and through them flared all the hate and fury inherited from her wolfish ancestors. Her teeth were canine, small and sharp and glistening with saliva.

Bailey felt sorry for her: the she-wolf at bay, cornered, alone, helpless.

"So none of you will look at me! Not even that boy. You're *all* fine gentlemen, eh?"

Her voice was indistinct now, a sibilant whine, thick with hate.

Bailey thought, but did not say: "In all modesty, yes. And that's the difference between your race and ours." He wondered whether the Plutonians would ever realize that they hadn't a chance of mastering Earth before they had learnt to master themselves.

"Poor devils!" he thought. "It was all in the luck of the draw. The outside position is always the worst."

And he looked at "Louisa" with a pity he was too well-bred to show.

*They failed because the scheme was already,
demonstrably, a complete success*



By the time T was ten years old, his machine was already on the fringes of that galaxy. T was not his name—the laboratory never considered christening him—but it was the symbol on the hull of his machine and it will suffice. And again, it was not his machine; rather, he belonged to it. He could not claim the honourable role of pilot, nor even the humbler one of passenger; he was a chattel whose seconds of utility lay two hundred years ahead.

He lay like a maggot in the heart of an apple at the centre of the machine, as it fled through space and time. He never moved; the impulse to move did not present itself to him, nor would he have been able to obey if it had. For one thing, T had been created legless—his single limb was an arm. For another, the machine hemmed him in on all sides. It nourished him by means of pipes which fed into his body a thin stream of vitamins and proteins. It circulated his blood by a tiny motor that throbbed in the starboard bulkhead like a heart. It removed his waste products by a steady syphoning process. It produced his supply of oxygen. It regulated T so that he neither grew nor wasted. It saw that he would be alive in two hundred years.

T had one reciprocal duty. His ears were filled perpetually with an even droning note and before his lidless eyes there was a screen on which a dull red band travelled forever down a fixed green line. The drone represented (although not to T) a direction through space, while the red band indicated (although not to T) a direction in time. Occasionally,

perhaps only once a decade, the drone changed pitch or the band faltered from its green line. These variations registered in T's consciousness as acute discomforts, and accordingly he would adjust one of the two small wheels by his hand, until conditions returned to normal and the even tenor of monotony was resumed.

Although T was aware of his own life, loneliness was one of the innumerable concepts that his creators arranged he should not sense. He lay passive, in an artificial contentment. His time was divided not by night or day, or waking or sleeping, or by feeding periods, but by silence or speaking. Part of the machine spoke to him at intervals, short monologues on duty and reward, instructions as to the working of a simple apparatus that would be required two centuries ahead. The speaker presented T with a carefully distorted picture of his environs. It made no reference to the inter-galactic night outside, nor to the fast backward seepage of time. The idea of motion was not a factor to trouble an entombed thing like T with. But it did refer to the Koax, and in reverent terms, speaking also—but in words filled with loathing—of that inevitable enemy of the Koax, Man. The machine informed T that he would be responsible for the complete destruction of Man.

T was utterly alone, but the machine which carried him had company on its flight. Eleven other identical machines—each occupied by beings similar to T—bore through the continuum. This continuum was empty and lightless and stood in the same relationship to the universe as a fold on a silk dress stands to the dress; when the sides of the fold touch, a funnel is formed by the surface of the material inside the surface of the dress. Or you may liken it to the negativity of the square root of minus two, which has a positive value. It was a vacuum inside a vacuum. The machines were undetectable, piercing the dark like light itself and sinking through the hovering millenia like stones.

The twelve machines were built for an emergency by a non-human race so ancient that they had abandoned the construction of other machines aeons ago. They had progressed beyond the need of material assistance—beyond the need for corporal bodies—beyond the need at last of planets with which to associate their tenuous egos. They had come finally, in their splendid maturity, to call themselves only by the name of their galaxy, Koax. In that safe island of several million stars they moved and had their being, and brooded over the coming end of the universe. But while they brooded, another race, in a galaxy far beyond the meaning of distance, grew to seniority. The new race, unlike the Koax, was extravagant and warlike; it tumbled out among the stars like an explosion, and its name was Man. There came a time when this

race, spreading from one infinitesimal body, had multiplied, and filled its own galaxy. For a while it paused, as if to catch its breath—the jump between stars is nothing to the gulf between the great star cities—and then the time/space equations were formulated. Man strode to the nearest galaxy armed with the greatest of all weapons, Stasis. The temporal mass/energy relationship that regulates the functioning of the universe, they found, might be upset in certain of the more sparsely starred galaxies by impeding their orbital revolution, causing virtually, a fixation of the temporal factor—Stasis—whereby everything affected ceased to continue along the universal timeflow and ceases thereupon to exist. But Man had no need to use this devastating weapon, for as on its bi-product, the Stasis drive, he swept from one galaxy to another, he found no rival, nor any ally. He seemed destined to be sole occupant of the universe. The innumerable planets revealed only that life was an accident. And then the Koax were reached.

The Koax were aware of Man before he knew of their existence, and their immaterial substance cringed to think that soon it would be torn through by the thundering drives of the Supreme Fleet. They acted fast. Materialising onto a black dwarf, a group of their finest minds prepared to combat the invader with every power possible. They had some useful abilities, of which being able to alter and decide the courses of suns was not the least. And so nova after nova flared into the middle of the Supreme Fleet. But Man came invincibly on, driving into the Koax like a cataclysm. From a small frightened tribe a few hundred strong roaming a hostile earth, he had swelled into an unquenchable multitude, ruling the stars. But as the Koax wiped out more and more ships, it was decided that their home must be eliminated by Stasis, and ponderous preparations were begun. The forces of Man gathered themselves for a massive final blow.

Unfortunately, a Fleet Library Ship was captured intact by the Koax, and from it something of the long, tangled history of Man was discovered. There was even a plan of the Solar System as it had been when Man first knew it. The Koax heard for the first time of Sol and its attendants. Sol at this time, far across the universe, was a faintly radiating smudge with a diameter twice the size of the planetary system that had long ago girdled it. One by one, as it had expanded into old age, the planets had been swallowed into its bulk; now even Pluto was gone to feed the dying fires. The Koax finally developed a plan that would rid them entirely of their foes. Since they were unable to cope in the present with the inexhaustible resources of Man, they evolved in their devious fashion a method of dealing with him in the far past, when

he wasn't even there. They built a dozen machines that would slip through time and space and annihilate Earth before Man appeared upon it; the missiles would strike, it was determined, during the Silurian age and reduce the planet to its component atoms. So T was born.

"We will have them," one of the greatest Koax announced in triumph when the matter was thrashed out. "Unless these ancient Earth records lie, and there is no reason why they should do, Sol originally supported nine planets, before its degenerate stage set in. Working inwards, in the logical order, these were—I have the names here, thanks to Man's sentimentality—Pluto, Neptune, Uranus, Saturn, Jupiter, Mars, Earth, Venus and Mercury. Earth, you see, is the seventh planet in, or the third that was drawn into Sol in its decline. That is our target, gentlemen, a speck remote in time and space. See that your calculations are accurate—that seventh planet *must* be destroyed."

There was no error. The seventh planet was destroyed. Man never had any chance of detecting and blasting T and his eleven dark companions, for he had never discovered the mingled continuum in which they travelled. Their faint possibility of interception varied inversely with the distance they covered, for as they neared Man's first galaxy, time was rolled back to when he had first spiralled tentatively up to the Milky Way. The machines bore in and back. It was growing early. The Koax by now was a young race without the secret of deep space travel, dwindling away across the other side of the universe. Man himself had only a few old-type fluid ships patrolling half a hundred systems. T still lay in his fixed position, waiting, waiting. His two centuries of existence—the long wait—were almost ended. Somewhere in his cold brain was a knowledge that the climax lay close now. Not all of his few companions were as fortunate, for the machines, perfect when they set out, developed flaws over the long journey (the two hundred years represented a distance in space/time of some five hundred million light years). The Koax were natural mathematical philosophers, but they had long ago given up being mechanics—otherwise they would have devised relay systems to manage the job that T had to do.

The nutrition feed in one machine slowly developed an increasing rate of supply, and the being died not so much from overeating as from growing pains—which were very painful indeed as he grew against a steel bulkhead and finally sealed off the air vents with his own bulging flesh. In another machine, a valve blew, shorting the temporal drive; it broke through into real space and buried itself in an M-type variable sun. In a third, the guide system came adrift and the missile hurtled on at increasing acceleration until it burnt itself out and fried its occu-

pant. In a fourth, the occupant went quietly and unpredictably mad, and pulled a little lever that was not then due to be pulled for another hundred years. His machine erupted into fiery, radioactive particles and destroyed two other machines as well.

When the Solar System was only a few light years away, the remaining machines switched off their main drive and appeared in normal space/time. Only three of them had completed the journey, T and two others. They found themselves in a galaxy now devoid of life. Only the great stars shone on their new planets, fresh, comparatively speaking, from the womb of creation. Man had long before sunk back into the primaeval mud, and the suns and planets were nameless again. Over earth, the mists of the early Silurian age hovered, and in the shallows of its waters molluscs and trilobites were the only expression of life. Meanwhile, T concentrated on the seventh planet. He had performed the few simple movements necessary to switch his machine back into the normal universe; now all that was left for him to do was to watch a small pressure dial. When the machine entered the atmospheric fringes of the seventh planet, the tiny hand on the pressure dial would begin to climb. When it reached a clearly indicated line on the dial, T would turn a small wheel (this would release the dampers—but T needed to know the How not the Why). Then two more gauges would begin to register. When they both read the same, T had to pull down the little lever. The speaker had explained all that to him regularly. What it did not explain was what happened after the lever was down, but T knew very well that then Man would be destroyed, and that that would be good.

The seventh planet swung into position ahead of the blunt bows of T's machine, and grew in apparent magnitude. It was a young world, with a future that was about to be wiped forever off the slate of probability. As T entered its atmosphere, the hand began to climb the pressure dial. For the first time in his existence, something like excitement stirred in the fluid of T's brain. He neither saw nor cared for the panorama spreading below him, for the machine had not been constructed with ports. The dim instrument dials were all his eyes had ever rested on. He behaved exactly as the Koax had intended. When the hand reached top, he turned the damper wheel, and his other two gauges started to creep. By now he was plunging down through the stratosphere of the seventh planet. The load was planned to explode before impact, for as the Koax had no details about the planet's composition they had made certain that it went off before the machine struck and T was killed. The safety factor had been well devised. T pulled his last little lever twenty miles up. In the holocaust that immediately followed,

he went out in a sullen joy.

T was highly successful. The seventh planet was utterly obliterated. The other two machines did less brilliantly. One missed the Solar System entirely and went on into the depths of space, a speck with a patiently dying burden. The other was much nearer target. It swung in close to T and hit the sixth planet. Unfortunately it detonated too high, and that planet, instead of being obliterated, was pounded into chunks of rock that took up erratic orbits between the orbits of the massive fifth planet and the eighth, which was a small body encircled by two tiny moons. The ninth planet, of course, was quite unharmed; it rolled serenely on, accompanied by its pale satellite and carrying its load of elementary life forms.

The Koax achieved what they had set out to do. They had calculated for the seventh planet and hit it, annihilating it utterly. But that success, of course was already recorded on the only chart they had to go by, the chart of the modern Terrans. If they had read it aright, they would have seen . . . So, while the sixth was accidentally shattered, the seventh disappeared—Pluto, Neptune, Uranus, Saturn, Jupiter, the Asteroid planet, T's planet, Mars, Earth, Venus, Mercury—the seventh disappeared without trace.

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SHADOW OVER THE EARTH

Philip Wilding

In 1986 space observers are awaiting Halley's comet. It does not appear, but instead radio telescopes track an unknown object rapidly approaching the earth. It appears to be 360 miles in diameter, and orbits between earth and sun with most alarming consequences.

A gripping story, which will be eagerly read by all readers of Wilding's earlier book. 9/6

=====HENNEL LOCKE=====

Distributed by Harrap

Hope Deferred

*The children were to be abandoned on Mars—
Earth was too busy to care what happened to them*

Illustrated by Arthur Thomson

Franchetti was mentally composing resounding periods for use in his story while he waited for the farewell ceremony to begin. He had to confine his composing to his mind—he had not been allowed to bring even onionskin paper with him, and anything he put on his stenorecorder would certainly be wiped by the Security men before the take-off, but he needed some outlet for his indignation, and polishing and re-polishing his phrases was as good a one as any. It helped to keep his mind off the waiting rockets behind him—rockets whose skyward-pointing noses had meant a pointer to the fulfilment of a dream back on Earth. But the dream was dying. Half of it had been dead for five years.

Involuntarily he shivered. It was cold out here, and the nose-clip of his oxygen mask fitted too tightly. It was starting to wear itself a raw bed in the bridge of his prominent nose. Trust Douglas's staff to descend to even such petty annoyances as that! He wasn't welcome, and he knew he wasn't welcome—that had been made clear enough by the frigidly distant behaviour of the senator's entourage throughout the long journey from Earth, and the constant shadowing by a Security officer since his arrival had rubbed it in.

But, by God, it was worth it! It was worth all this discomfort and irritation simply to have a few personally satisfying memories. Senator Douglas's face, for example, mirroring his growing desperation as he found that despite his pretensions there were still people to whom his word was not law. He had set up the obstacles to Franchetti's trip with the ease of long familiarity, and Townsend, who owned Continental Press

as well as being in politics had as easily knocked them down again. Was there no room on the ship? Townsend persuaded a passenger to withdraw unexpectedly. Was the admission of a non-government newsman to Mars Base an infringement of Security? Townsend went for a week-end's fishing with the President, and came back with a statement to the effect that the public had a right to know—a statement with which the senator, however much he hated the idea privately, did not yet dare to oppose in public. Was the cost of Franchetti's weight in terms of food and fuel too great—a waste of public money. (Franchetti had seen that Douglas was slipping when he trotted out that one—he had used it so often that even he was beginning to get bored with it). Townsend blandly supplied not merely the cost in cash but also an offer of enough rocket fuel and food to make Franchetti self-supporting.

And Franchetti was on Mars, and Franchetti was more certain than ever before how essential it had been for him to make the trip.

He shivered again, and tried to bury himself further in his light but warm nylon fur coat. He envied the Children.

They had set up a sort of dais with a small rostrum on it, and Franchetti had a chair at the extreme end of the row, with his omnipresent Security escort silently standing behind him. The staff of Mars Base sat in silence, their faces set and resigned, on the rest of the seats, except for two which were vacant immediately behind the rostrum. Facing the dais like an audience in a theatre were the Children, talking quietly among themselves. Despite the chill of the winter's day, they were all dressed alike in shorts and boots, and of course they did not need oxygen marks.

There was a stir at the airlock of the Administration Building a hundred yards away, and it opened to let out four heavily-muffled figures. Franchetti recognised Senator Douglas at once by the big transparent globe over his head—no ordinary oxygen mask would do for him—and he could see in his mind's eye the expression of satisfaction which must be on his face.

So he couldn't even spare us that, Franchetti thought sourly. He even has to come and gloat over the last few moments of 'all. Wasn't it enough that your gamble—six months away from Earth to supervise personally the culmination of your campaign of destruction against the fickle memory of the public has come off? No, of course; your master stroke must be underlined by every means in your power.

The two husky young men dancing obsequious attendance on him were members of his personal Security staff—that word had been used so often in the past sixty years that in was now almost without meaning

—and the fourth figure, he realised from the familiar melancholy set of its shoulders, could only be Director Rupprecht. *Ex-director*, now.

The children rose as the senator and the director climbed on to the dais and took their places, and Franchetti, deliberately not copying their example, had a chance to look them over in the mass. He had, of course, seen individuals around the base every day since his arrival, but this was the first time he had seen all of them together. Probably it would be the last time any human being in the Earthly sense of the word would have such a chance—for the Children were not of Earth. They were of Mars.

Until one understood what a miracle of biological adaptation they represented, they looked misshapen. Their legs and arms were spindly and round and seemed undernourished, but they were strong enough for the weaker gravity of Mars. Their stomachs were narrow and small, but their chests were enormous—deep, wide, containing lungs with twice as much convoluted air-absorbing surface as Franchetti's. The number of sweat-pores in their skins had been reduced to a tenth, and the big, arched bridges of their noses covered thousands of close-set hairs which served the double purpose of filtering dust from the air they breathed in and drying out the air they exhaled to save wasting precious moisture on the thirsty, thin atmosphere of Mars. Their heads were small and the noses gave them a beaked, bird-like appearance—a fact which Douglass had made much of in his propaganda, saying, "We are populating Mars with morons!" But Franchetti knew what the senator's own thick head would not accept—that the ordinary human brain was too large for truly efficient functioning, because of the distance nerve impulses had to travel, a fact suspected fifty or a hundred years ago by the early cyberneticists. In fact, the I.Q. of any one of those Children was liable to top the director's, and he was an intelligent man.

The children shuffled back into their seats, relaxing in a way Franchetti envied, and he turned to find Director Rupprecht already on the rostrum and looking out over the assembly. Douglas had slumped down in his chair with a smirk on his face, and Franchetti felt a surge of mixed triumph and disgust.

"My children," said Rupprecht slowly. His voice sounded full of pent-up emotion, as if he was on the verge of crying. "The time has come for us to leave Mars to you, the only true Martians!"

His voice, which his unaided lungs could not have made to carry far in the rarified air, was picked up by microphones and broadcast from several widely separated points. It gave Franchetti a curious impression that a machine was talking. He reminded himself to memorise

that for use in his story when they left.

Rupprecht went on to review the history of Mars Base, speaking hastily and sometimes unclearly. A note of something akin to hysteria edged his words when he pointed out that the hopes it represented had at least been fulfilled. He managed to keep himself from looking at Douglas and sneering when he said that, noted Franchetti keenly. Good man! I couldn't have resisted the temptation.

The Children were seventeen years old now—only three years younger than Mars Base itself—and since babyhood they had been conditioned, adapted, trained for one sole purpose. To allow men to walk without artificial aids on the soil of Mars. That, at least, they had done.

Of course, the adaptation was not perfect. The long, slow process of conditioning—here Franchetti glanced up sharply, thinking that Rupprecht was going to break down altogether, but he recovered and went on, forcing his voice to remain steady—would have to be repeated if the first generation was to continue the promise they had themselves shown.

That won't be too difficult, thought Franchetti happily. He had himself, only the day before visited the condition laboratories and seen the eager faces of the Children who had for the past five years, ever since it became probable that Mars Base would be closed, been trained to just that one end—to handle the same equipment which had produced themselves.

They, at least, said Rupprecht, were true Martians. To the Children the thin atmosphere and dry sand of this world were as natural as the oxygen-rich air and wide oceans of Earth to their ancestors. In fact, so complete was the change that they could not live under Earthly conditions; so much oxygen would kill them.

Franchetti knew all that. His mind wandered, and his thoughts brought a grim smile to his face. He was thinking of the senator—who was at present examining the imitation sapphire-mink fur of his gloves with an expression of disinterested boredom. He remembered the way he had stood at the airlock at the end of their long voyage, looked out at the squat, dun-coloured buildings of Mars Base, and sniggered. "That's a hell of a lot to show for fifteen billion dollars!" he said, and the comment had provoked sycophantic smiles from his underlings.

He was fond of that phrase—"fifteen billion dollars." He ought to be. If his campaign went right, it would get him what he had never made any secret of coveting—the presidency.

Later, he had asked Rupprecht, "Well, where's the fifteen billion dollars worth of stuff you have to show me?"

Then he had asked Taylor, the agronomist whose handiwork showed

in the fields of peas and beans and succulent-fleshed cacti surrounding the base, which would feed the Children when the supply-line from Earth was closed today. Then he had asked the same question of Katchen, the biologist, and Katchen had mutely indicated the two Children standing near him and asked a counter-question: "How much would you call a fair price for a whole planet?"

That was another thing Franchetti would treasure—he and his Security escort had shadowed Douglas constantly—the way in which the senator had stopped, speechless, until one of his cohorts answered for him. But it was at least twenty-four hours later before he mentioned fifteen billion dollars again.

By that time, of course, he had regained his self-possession. Now he was basking in the knowledge of the way his feat in closing Mars Base, that "bottomless sink of public funds for no good reason," would mark the climax of the long career which had been highlighted by his epoch-making impeachment of the Secretary for War, his many Security probes, his re-establishment of segregation in all the Armed Forces—on the grounds that Security was endangered—it was a long list, Franchetti thought sourly, and the Presidential elections would begin this summer.

Well, there was one man here, at least who did not bow to James Trevithick Douglas, and there was one man who would be able to show that his campaign against the pioneers had failed.

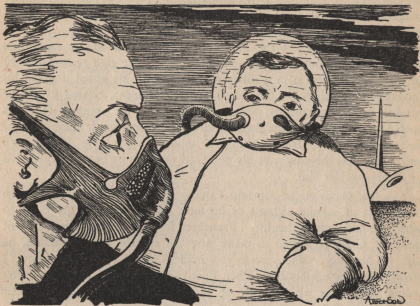
For it *had* failed. And there were the Children to prove it. Whether another spaceship crossed the gulf from Earth to Mars or not, the Children would not care, for they were at home here; the new planet was theirs, and whatever madness held Earth in its grip, Mars was safe.

He grew aware that Rupprecht had finished speaking and stepped down from the rostrum. With a defiant glance at the coldly disapproving Security man behind him, Franchetti clapped loudly and long, and the Children followed his example.

Looking out across that small sea of waving hands, he was conscious of something odd about them, distinct from their strangely-shaped bodies and heads. They were healthy, of course—the bleached-bone cleanness of Mars had no diseases for them to catch. But it was with a shock that he realised what it was.

They were happy.

He had not seen a large group of people all happy together for years—and he had never noticed it. The creeping, clutching hand which had closed around the heart of the people of Earth had been subtle, and one did not see when gradually men forgot how to laugh together, began to listen to the gossip of their neighbours, learned how to call



the police when a drunk mouthed vituperation against a member of the government . . . What kind of a world was it, anyway, when the finger of terror was 35,000,000 miles long?

The Security man at the door in the middle of the night; the man missing one morning from his desk in the office and a new one taking over without a word of explanation; more and more roads closed one by one to the public as the classified areas spread—Franchetti knew about the labour camps in one or two of these areas—

It had happened gradually thought Franchetti soberly, but if it were ever to be counteracted the reaction would be swift, violent and bloody.

And yet here on Mars the Children had hope, and were happy.

They did not know they were pawns in a political game of chess. They believed what they had been told. They believed in freedom; had life, and liberty, and nothing now to stop them pursuing happiness.

The group on the dais was breaking up now. The members of the staff were making their way to the waiting spaceships, as if trying to avoid the Children. Franchetti, copying their example and trying to make his oxygen mask fit more comfortably without breaking the seal

around his face, read into their haste a desire to get away from this place which had meant so much to them with as little fuss as possible. He did not blame them at all.

He walked over to the Mars-based ship which was to carry him back to Earth—both he and the senator's party were glad he had thought of arranging to return in a different vessel—with his guard dogging his footsteps diligently. On the way he passed Douglas, talking to one of his henchman, and the sly, self-satisfied smile on the senator's face was such a contrast to the open gladness, of the Children that it made him feel sick to look at it. He's gloating, he thought wryly. He doesn't even yet realise that the pawns in his political chess game have queened—all of them—against him.

A few paces on he ran into Director Rupprecht, standing with an expression of infinite sadness as he took his last look at the place to which he had devoted his life. Franchetti felt the need for some kind of gesture. Glancing round to make sure the senator was in earshot, he said, "That was a fine speech you made Director,! As you know, I shall be writing up this event when I get back to Earth. I wonder if you would supply me with a copy of your speech and let me have your personal ——"

Director Rupprecht suddenly seemed to return to reality. The mild grey eyes behind his sand-goggles turned and met Franchetti's. The little reporter smiled tentatively but the smile froze as he saw Rupprecht's horror-stricken gaze go over his shoulder to a point behind him. Douglas was staring fixedly at them both, listening.

Rupprecht turned and walked hurriedly away to climb the embarkation ladder, and Franchetti made as if to spit in the dust. Rupprecht was afraid. The fear was everywhere now — even here, since Douglas's probe into Mars Base; the situation here was as bad as it was on Earth.

His mind burned with a white-hot fury as he answered the alarm bell warning them for take-off. The fury lasted while he submitted to the Security officer's scrutiny of his belongings and the wiping of his stenorecorder tapes; it followed him into his acceleration couch, and when the brief unconsciousness of high g's ended it blazed still. The first chance he got, as soon as the ship was in orbit, he picked up his stenorecorder and began to compose his story. Strapped in a chair in his tiny, bare cabin, he waited for the power to warm the mechanism up.

"I was present today," he began, his voice shaking with the rage which drove his words out of his mouth tumbling one over another, "at the saddest event it has yet been my fortune to witness—the closing of Mars Base at the instigation of Senator Douglas, who was himself

present to gloat over this outstanding sacrifice to the furtherance of his political career—a career which has been marked more by a devotion to his personal notoriety than by any proof of actual interest in the public welfare.

"The senator apparently believed it would be an indication of his solicitude for the taxpayers' money if he made certain that his directives were carried out under his own smirking gaze. In his object of putting a stop to expenditure he has succeeded, but in his real object—that of destroying the hope and promise of a new world for the furtherance of his own eminence—he has most signally failed!"

He realised that his voice would carry if he shouted like that, and continued in a whisper. There were no actual Security men aboard this ship, but after the aura of fear he had found at Mars Base, he was ready to suspect that the taint of informers had spread even thus far.

"In spite of all that Senator Douglass could do; in spite of depriving the base of money and food and necessary medical supplies; in spite of his wonderful diligence in the name of Security on a planet where the nearest spies are never less than thirty-five million miles away"—Franchetti wished the printed page could reproduce the heavy irony he loaded into that statement—"the men of Mars Base under the inspired and devoted leadership of Director Rupprecht, proved in the hour of their final defeat that they had succeeded in the aim to which they have given their lives. They have left behind people—remember that: *people* as human as you or I—who can walk the soil of the Red Planet"—he would have to edit *that* phrase out!—"without artificial aids. With the reaching of that goal, the senator's agitation is empty, for the planet becomes self-supporting in any case. They have gained another world, not merely for themselves, nor yet for us, but for all mankind."

The door of the cabin slid back, and he glanced up. It was Rupprecht himself—Franchetti had known that the ex-director had the cabin next to him, and presumably he had overheard the reporter's first indiscreetly loud words and wanted to know more. He motioned the visitor to find a seat and continued, "So it looks, doesn't it, as if the senator's solicitude was somewhat misplaced? Who can call it waste when such a noble aspiration has been fulfilled? Thanks to his insistence that all flights between Mars and Earth are to end, we will never have a return for our expense. When the new Martians build their industries and their cities, they will do it for themselves alone. Who knows what benefits that interplanetary trade might not one day have brought to us?"

He leaned forwards as if he was speaking directly to an audience,

instead of to a little machine and a tired old man. "It is not too late even yet! If you had could have seen what I saw—the happiness and gratitude on the face of the Children—and contrasted it with the fear and terror which is all about us on Earth today, you would know what I know. When we go back—as we can go back if you the people, will say the word—we will find friends and allies waiting to greet us. Senator Douglass believes even yet that he has won. I say to you in all sincerity that he has lost."

Franchetti sneaked a glance at Rupperecht to see how he was taking it, and snapped off the recorder in sudden panic. For Rupperecht was shaking his head.

"What is it?" he demanded, his heart sinking. "What's wrong?"

Dry-eyed, the director stared at the little reporter. "He hasn't lost," he said in a voice from which all the grief had been drained away. "He's won."

"But——"

"God, we've been so afraid!" Rupperecht burst out suddenly. "We've been so terrified!"

"I know you have. But—damn it, man" Franchetti was struggling for words.

"Of course. You thought we were afraid of Douglass and his Security men." Rupperecht essayed a laugh; it was not successful. "We were afraid of the Children. Afraid they might find out—they're so intelligent they might have guessed. I've never hated myself so much for doing anything as for being a party to this—will I ever be able to stand up straight again?"

Stupefied, Franchetti caught the other's shoulder and shook it. "What do you *mean*?" he demanded savagely.

The other did not notice. He stared at the featureless bulkhead for a long time. When he eventually did speak, he seemed to be talking more to himself than to Franchetti.

"I didn't *want* them to hate us. But they will, as soon as they find out. The things they might have done to us——" He covered his eyes for a moment, and then turned fiercely on Franchetti.

"Have you ever imagined yourself thrown down on Mars without an oxygen mask?"

The reporter shook his head dumbly.

"I saw a man lose his mask once. He choked, and his face turned blue, and he screamed, but you couldn't hear him because the air was too thin to carry the sound. You could see the moisture condensing round his mouth, as if Mars was *sucking* him to death. Then he fell

down and began to bleed from his nose. He took a long time to die, but when we picked up his body you couldn't see any mark that he had been there. The blood had just soaked away—gone. The planet's like a sponge."

"What has this got to do with the Children?"

"Oh, they might have done that to me if they'd found out. They're hard, and they can be cruel—we made them that way. Douglass knows—he has good advisors—and he simply doesn't care. Franchetti, I called them the only true Martians, didn't I?"

"That's right," agreed the reporter suddenly. "I remember wondering why you didn't say the *first* Martians."

"Because there aren't going to be any more of them." Rupprecht made the statement in a level, hopeless tone, and then added in a charged, hating voice, "God, how they're going to hate us when they find out!"

"God damn it, man!" Franchetti burst out. "I saw with my own eyes how your staff handed over the same conditioning buildings which produced them for use on the next generation. Don't they know how to repeat the process?"

"Of course they know. But it won't do them any good. Franchetti, you know about the Children—you know how they were volunteered by their parents when they were less than a year old; how they were slowly adapted and made to do with less and less oxygen, how they were operated on, their metabolism slowed, their chests increased till they could take out every last fraction of a per cent of the little oxygen in Martian air. Less than a year old, Franchetti—less than a year *since they were born.*"

A cold hand folded round Franchetti's heart, and he saw in memory a face bearing a self-satisfied smirk. He said, dragging out the words, "A child doesn't begin when it's born does it? You enabled the first generation to live with minimum air, to stand the cold of winter—but how about their children?"

"Yes, *their* children. They'll be starved of oxygen in the womb. They'll be born—if they're born at all—as eyeless idiots or as imbeciles."

"But—oxygen tents? For expectant mothers?" Franchetti was grasping wildly at anything that might save his hopes.

"Would kill the mothers," said Rupprecht hopelessly. "We told you that. No, Franchetti. We hadn't thought out an answer ourselves, and if we couldn't, they won't."

For a moment the reporter sat in stony silence. Then his hand went out and set the eraser playing over the tape he had cut with such

high hopes. Sometimes he wondered if the human species deserved to survive at all.

For a long time the whirl of the machine was the only sound in the cabin. Then Rupprecht stirred and repeated, white-lipped. "How they're going to hate us! *How* they're going to hate us!"

"No," Franchetti corrected him. "How we're going to hate ourselves."

The ship rushed on, away from hope.

JOHN BRUNNER

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More Than Hormone

*Two was quite decidedly Amanda's idea
of company—Marcus made it a crowd*

Illustrated by Arthur Thomson

Amanda looked out of the bathroom window and saw Peter's copter landing on the drive. She whisked a comb through her dark hair and slipped into a robe.

One month, twenty eight days, six hundred and seventy two hours of holiday to go, she thought, as she rushed down the stairs. It was almost too good to be true. She had been trying to persuade Peter to demand his rights for the past two years, but always there had been something too important, some piece of research that was nearing a crucial point when vacation time came around. But this morning he had called from the laboratory to tell her that he had been given one month's leave—just like that.

Dear old preoccupied, crumpled Peter, the wonder boy endocrinologist of the Goldfarb Bio Lab. Sometimes she wondered how he had found time to court her and talk her into marrying him. Peter was not a fast talker, but there was something appealingly helpless about the big dope, despite his formidable I.Q.

He was standing just inside the front door as she entered the hall, the afternoon sun silhouetting his lean figure.

"Hallo, darling," said Amanda. "What a wonderful surprise . . ." She noticed the expression on his lean face. "I say . . . you're sure you didn't get the sack, or something?"

"Don't be silly, Mandy," he said grinning. He stepped forward and took her in his arms. "Mmm, you smell good!"

"This is going to be a wonderful holiday," she said, into his tweed

covered shoulder. "Just the two of us, alone together for a whole month. I've made all sorts of plans already."

A shadow fell across the doorway. Amanda disengaged herself and looked up at the newcomer. He was an impressively built six-footer, dressed in an immaculate spun plastic casual suit. The suit was a deep red, matching his hair perfectly. A pair of deep blue eyes gazed at her steadily out of a handsome, smiling face.

Peter cleared his throat, fingering the lapel of his jacket.

"Oh! I didn't mention it on the phone . . . This is Marcus . . ." He waffled for a minute, then blurted out: "He's going to stay with us for a few days. Marcus—this is my wife Amanda."

Amanda checked her sagging face muscles with an effort and walked forward smiling.

"How do you do, Mrs Crane," said the stranger, in an excessively deep vibrant voice. "It's so kind of you to have me. Dr Goldfarb felt that this would be the ideal home for . . ."

"Ah well, let's go into the lounge," interrupted Peter, rudely.

"You're from the laboratory?" enquired Amanda. He looked more like a video star than a scientist.

"Yes," said Marcus, walking beside her.

"Do you work in Peter's section?" said Amanda, tensing slightly.

"Well, not exactly. I was . . ."

"What about rustling up a cup of tea, darling?" Peter's voice was several tones higher than normal.

"Yes, I'll do that," said Amanda, eyeing him keenly.

"You boys go on in and have a chat. I'm sure you must have heaps of egg-headed things to talk about."

"Hurry back," called the vibrant voice, behind her.

Amanda moved swiftly about the kitchen, the speed indicating her annoyance. Sometimes Peter was impossible. No reasonably thoughtful husband would bring home a complete stranger with absolutely no warning on the first night of a holiday. And this stranger was without doubt something of a wolf . . . not at all the sort of person she would have expected Peter to be friendly with.

She banged a kettle onto the hot plate decisively and walked back to the door.

"Darling!" she shouted, pushing it slightly open. "Come and give me a hand with this beastly can opener, will you?"

Peter entered furtively. "Yes, dear?"

"Well?" Amanda was standing with her arms folded, looking at him. Her brown eyes demanded an answer.

"You called didn't you?" muttered Peter. "Where's the can opener?"

"Don't play dumb, Peterkin," said Amanda, with a searing smile. "Come on . . . out with it. Who is he?"

"Who?" said Peter innocently. "Oh you mean Marcus . . . Just a fellow from the lab." He developed a sudden interest in his left toe cap. "Nice chap, eh?"

"No," said Amanda, definitely. "He's not just a fellow from the lab—and he's fresh. You're trying to put something over on me, Peter Crane, and I won't have it."

"All right," said Peter, miserably. "You'll have to know sooner or later, anyway. Marcus is an . . . android."

"Oh, no!" Amanda's eyes moved to the ceiling for a moment in supplication, then returned to transfix her erring spouse. "You mean to stand there and tell me that that great hunk of man in the lounge is something you cooked up in your test tubes? That's carrying synthetics too far!"

"He isn't exactly synthetic," said Peter. "He was mainly constructed from human protoplasms and bones that we had in the deep freeze."

Amanda turned a shade paler underneath her golden tan.

"You mean you . . . Get that human junk heap out of here, this minute," she said, with the softness of controlled hysteria.

"Ssssh!" hissed Peter, glancing at the door anxiously. "You really musn't say things like that, Marcus is sensitive."

"*He's sensitive!*" Amanda drummed her fingers on the table top. "Really, Peter! If you don't want his dear little feelings hurt, why did you bring him outside the lab? Incidentally, what happened to the Mackenzie Law?" Don't I remember you storming in here a few months ago and moaning that it would put bio-engineering back fifty years? How did you get permission to bring an android outside the lab without a police escort?"

"That's just the point," Peter headed in a more promising conversational direction. "Marcus is the best thing we have done so far. Without a complete examination, it's practically impossible to tell that he's not a normal human being."

The kettle began to hiss noisily. Amanda lifted it off the cooker and turned back to Peter.

"*But he is still an android,*" she said. "And that means that you are breaking the law. What will Goldfarb say when he finds out that you have run off with his masterpiece?"

"It was his idea," said Peter smiling. "You see, the Mackenzie Law made things rather difficult for us; it states that no android shall be allowed outside the laboratory where it is created until it is able to pass a series of rigidly supervised Sociogenic Orientation tests. That's all very well, we can pump all kinds of knowledge into an android by using hypo tapes, but so far not one has been able to pass the tests. We've been forced to recognise that social orientation is only assimilable through environment; that no amount of theoretical knowledge can replace the empirical data gained by actually living in normal human society."

Amanda poured the water into the teapot. It made such a beautifully sane noise. Although she had not majored in Social Psyche, she was beginning to see where Peter's conversation was leading. And she did not like the direction.

"You mean that you and I have been detailed as mummy and daddy to that monstrosity?" she asked.

"Well, it's the only way, darling," said Peter. "You've seen what a wonderful specimen he is, but we'll never get him through the tests without practical experience of living. It will only take about a month . . . and Dr Goldfarb will be tremendously grateful."

Amanda wondered how she could have imagined that they were really going to have a holiday. She placed some cups on a tray.

"I don't know how you could," she said.

"Give him a chance, Mandy," pleaded Peter. "Let him stay for a few days, at least. Then, if you still feel the same way, I'll take him back and tell Goldfarb I can't go through with it." He glanced at his watch. "Good lord! It's time for his injection. Excuse me, darling."

"Injection?" said Amanda. "Why . . . is there something wrong with him?"

"Oh, no, said Peter, moving to the door. "But I wasn't strictly correct when I said that he is a perfect reproduction of a human being. There were certain of the glandular functions which we found it impossible to reproduce. But that is easily managed by giving him a balanced endocrine injection every six hours. He's due for one now."

Amanda raised one eyebrow.

"Every six hours—day and night?"

"Of course, dear," said Peter. "I must go . . . it doesn't take a minute."

Amanda entered the lounge, carrying the tray. Peter and Marcus were sitting opposite each other in the room's two easy chairs, talking.



The android jumped to his feet, smiling.

"Here, Mrs Crane—let me help you with that, please," He took the tray from her hands and placed it on the table. Peter watched with a startled expression on his face, as Marcus pushed back the chair and pulled the sofa towards the table.

"Let's you and I sit here and get to know one another better, shall we?" said the android. Amanda obeyed with a stunned docility as he took her arm and steered her towards the sofa. "Now then," he said.

"Can I help you? What it is, one lump, or two?"

Amanda watched the godlike profile, fascinated, as Marcus proceeded to pour out the tea. He passed out the cups and taking his own between a deft forefinger and thumb, leaned confidentially towards her.

"How long have you and Pete been married?" he asked.

"Two . . . two years," said Amanda, suppressing a nervous giggle.

"He's pretty highly thought of down at the lab," said Marcus. "Had quite a hand in my . . ."

Peter made a choking sound and almost upset his tea.

"Look, Marcus, it's all right in front of Amanda. She had to be

told the truth about you," he said. "But for heaven's sake be careful what you say in front of other people or we shall all land in jail."

"Don't worry about a thing, Pete, old boy," said Marcus, breezily. "I like it here. And *Mandy* and I are going to get along just fine—aren't we?" He nudged Amanda affectionately.

Amanda moved pointedly towards the other end of the sofa. She was not relishing the thought of a whole month of this sort of thing.

"I'm sure you are," said Peter, in his purblind manner. "But do be careful, won't you? Remember, the consequences would be even worse for you. We would probably be ordered to dis—" He started as the doorbell began to ring persistently. "Who on earth is that?" he said, looking at Amanda.

"I've no idea, darling," she said, rising. "But I'll be very pleased to go and find out."

"Try and get rid of them will you?" said Peter.

She looked at him coldly.

"What shall I do—tell them we've got plague, or something? I didn't ask for this situation, remember. And I don't intend to stay locked up in this house for a whole month with you and that . . . test tube casanova." She swept out of the lounge.

"Hello, darling!" Betsy Fisk gushed through the front door and began to admire herself in the hall mirror. Betsy was an old school friend of Amanda's. She was tall, blonde and pneumatic—and at the moment she was in-between husbands.

"Hello, Bet," said Amanda, with a guarded smile. "This is a surprise."

"Where is everybody?" said Betsy, turning from the mirror with an expression of satisfaction on her face.

"If you mean Peter, he's in the lounge," said Amanda. It was no use telling Betsy to go away. The only thing to do was sit by calmly whilst she vamped Peter into red-faced confusion, as always.

Peter rose with a horrified expression as the two women entered the room. Betsy descended on him with a shower of endearments and expensive perfume. Marcus stood watching the ceremony, a smile of interest on his handsome features. Betsy turned and noticed him.

"Oh! I had no idea that you already had a visitor," she said with a predatory gleam in her eye. "I'm sorry for barging in like this." Amanda breathed out noisily.

"Oh, er . . . that's all right, Bet," said Peter. He introduced

Marcus. The two moved together like the business halves of a plutonium bomb.

"You must be one of those clever men who work at the laboratory with Peter," said Betsy. "I can never get anything out of him about his work, but you look more communicative. I'm just dying to hear about all the wonderful things you do there."

The big android allowed himself to be guided, smiling towards the sofa. Betsy snuggled close to him and they were soon engaged in an earnest conversation, oblivious to the other two occupants of the room.

"Why didn't you keep her outside?" whispered Peter, urgently.

Amanda shrugged. She was rather pleased Betsy had appeared if she was going to monopolise Marcus' attention like this.

"Look at them!" said Peter, indignantly. Betsy and Marcus were gazing into each others eyes in a very pointed manner.

"They'll be all right," said Amanda, moving towards the table. "Come on, you can give me a hand with these tea things." She placed the tray in Peter's hands and commenced to load it.

"But he's never been outside the lab before," protested Peter.

"He's doing all right," said Amanda, grinning. "And Bet can take care of herself, so why worry?" They walked out to the kitchen.

"You haven't had dinner yet, have you?" said Betsy, when Amanda and Peter re-entered the lounge a few minutes later.

"No," said Amanda, ignoring Peter, who was shaking his head in a frantic signal.

"Good!" said Betsy. "I've got the most wonderful idea. Why don't we all go along to the Dead Snail and have a little party?" She turned to the android. "You'd like that—wouldn't you, Marc?"

Amanda could see from the way he nodded that Marcus was a gone goose. She hesitated.

"Well . . . I don't know. Peter has just started his holiday. We were thinking of having a quiet night . . ."

"In that case, perhaps you two love birds would be pleased if I took Marcus off your hands for a few hours," purred Betsy, smoothing off an already immaculate dress.

Peter coughed.

"Oh, no! I think it's a very good idea. Don't you Mandy?"

Amanda grinned broadly. She knew how much Peter hated the stuffy, night club atmosphere.

"It would be an ideal start for our holiday," continued Peter. "Will you phone for a reservation, Mandy? Marcus and I will nip upstairs and clean up."

Marcus tore himself from the magnetic Betsy with obvious reluctance and followed Peter out of the room.

"You wicked girl," said Betsy, when the two women were alone together. "I believe you've been hiding that charming man from me."

"Not at all," said Amanda, suppressing her amusement. "I'm pleased you came along . . . I was beginning to feel outnumbered."

Amanda had never quite seen the point in paying ten shillings for a cigarette. The first few times it had seemed rather daring and smart, but even then, the smoke had made her eyes water and done unkind things to her digestion. Mostly she allowed the white tube, with its forbidden contents, to burn away in her hand without placing it to her lips.

After many years of argument about carcinogen content, a benevolent government had finally decided that it could take no further chances with the health of the nation, and passed a law declaring tobacco a noxious drug. The government had been defeated in the next elections, possibly as a result of its noble action, but somehow the law had never been repealed. Opponents of the present regime hinted darkly at the reasons for this.

The Dead Snail was a fairly representative specimen of the Smoke Easies which had sprung up in most towns as a result of the ban on legal smoking. The Smoke Easies were patronised by sensation seekers and those citizens who reserved the right to kill themselves in their own slow and pleasant way. The interior of the Dead Snail was a dimly lit room, with about fifty tables grouped round a small dance floor. The music was dispensed by a disinterested looking trio, who played electronic instruments.

Amanda toyed with her lobster salad. She found it impossible to enjoy food in the smoky atmosphere. Peter had given up the struggle altogether. He sat with his eyes on Marcus and Betsy, taking anxious sips at a glass of wine. The android was puffing intensely at a cigarette, as he looked into the eyes of the blonde mantrap.

"You know, I'm not at all sure that this is a good thing," said Peter, worriedly. "Marcus had never been outside the lab until this afternoon—and here he is, right in the thick of the social whirl. It may be too much of a jolt for his mind."

"Stop worrying," said Amanda, slipping her hand into his. "You wanted him to know about people . . . real people, didn't you? How better could he do it than by mixing like this?"

"Yes, but you know as well as I do that Bet is not *just people*," protested Peter. "You know how she is about good looking men. And the atmosphere in a place like this . . . He's pretty rugged, but I don't know whether it will be good for him."

"Stop talking like a father, Peter," said Amanda. He'll be all right. Why don't you have another cigarette and really make a night of it?" She beckoned a waiter.

Betsy turned, as if she had just realised that they were still there.

"I say darlings, guess what?" she said, radiantly. This great big, beautiful man here has just confessed to me that he can't dance. Isn't it priceless? Will you excuse us, whilst I give him a few lessons?" She turned to Marcus. "Come along, honey child."

The android rose to his feet, with a singularly stupid expression on his face. He ignored Peter's warning look and followed Betsy towards the dance floor.

"See what I mean?" said Amanda. "You dry old scientists pumped all sorts of stuff into him, but you forgot the little, essential things that go into the making of a man of the world. Leave him in Bet's hands and he'll breeze through that silly old Sociogenic Orientation test."

"I hadn't bargained for this sort of complication," said Peter, shaking his head glumly. "Can't you see he's acquiring a fixation on that terrible woman?"

"That sort of thing happens to people, remember?" said Amanda. "Anyway she's not a terrible woman, at least you never thought so before."

She looked towards the dance floor. Marcus was acquitting himself rather better than could be expected under the circumstances; rather better, in fact than Peter usually did. He had been a consistently bad dancer ever since she had known him.

A bell shrilled raucously, drowning the other noises of the crowded club. A pale faced man in evening dress scuttled past. Peter moved swiftly and grabbed him by the arm.

"What's going on?" he demanded.

"A Vice Squad raid . . . the second in three months," snapped the man. "There's going to be trouble about this—— I've got friends . . ." He jerked his arm free and hurried away.

"Oh, lord!" said Peter, rising. "Come on, we've got to get Marcus out of here."

"What on earth for?" asked Amanda. "All the best people get picked up by the Vice Squad occasionally. We shan't be fined more than a couple of pounds each."

At that moment the lights of the Dead Snail went out.

"It's not the fire I'm worried about," hissed Peter in the darkness. "You know they always give people a medical check-up down at the station—they are sure to find out that Marcus is an android. Hang onto me—we've got to get across to the dance floor and find him. There must be some way of getting out of this darned fire trap."

Amanda clung to her husband's coat tails as they stumbled through the pitch black Smoke Easy.

"All right, everybody! Just stand where you are. Don't move!" shouted a stern voice, as the lights flashed on again.

Amanda and Peter looked around them, blinking. They realised that the number of people in the club had mysteriously decreased during the dark interval.

"Can you see them anywhere?" asked Peter.

"No," said Amanda. "Bet comes here pretty often, so she must be an old hand at this sort of thing. Perhaps they got away, after all."

"I hope you're right," said Peter, feelingly.

A dozen blue uniformed Vice Squad troopers filed into the room and began herding the occupants onto the dance floor.

"... and in a person of your standing as a scientist, such conduct is not only inexcusable, it is unbelievable, Dr Crane." The voice of the Moral Welfare Counsellor droned on, as he surveyed the two delinquents with sad, watery blue eyes.

Amanda looked over at Peter, who was squirming in the uncomfortable office chair. She was perfectly relaxed, rather enjoying the feeling of wickedness. After all, the crime they had committed was not serious, certainly nothing to worry about. The fines had been paid and after this interview they would be free to go.

Marcus and Betsy had not been among the crowd of revellers brought to the station. Apparently her guess had been correct, and Betsy had managed to spirit the android away before the Vice Squad closed in.

The Moral Welfare Counsellor rose to his feet and extended a pudgy hand.

"I trust we shall not be seeing either of you here again," he said. "Please remember that we look to responsible citizens like yourselves to set a better example. People of your intelligence should realise that these laws are made for the common good."

Peter shook the hand impatiently.

"If you call at the desk on your way out, they will give you back your personal belongings," said the Counsellor. "Good night,"

Peter murmured politely and the two of them walked out into the station corridor.

"The indignity of it!" he gritted, as the door closed behind them. "Come on, let's go and get our stuff."

"Don't be a pompous old so and so," said Amanda, laughing.

"Well?" said the desk sergeant eyeing them severely.

"Doctor and Mrs Amanda Crane," said Peter. "I understand you have the articles that were taken from us when we arrived."

The sergeant pulled over a sheet of paper and opened a drawer in his desk.

"One handbag . . . powder compact . . . assorted hair grips," he muttered, checking the list. "This would be the lady's I expect." He handed it over. Peter glowered.

"Now, let me see," continued the sergeant. "One watch . . . one wallet, containing twenty . . . no, sixteen pounds in notes . . . one bunch of keys . . . and five assorted pens."

"Five?" giggled Amanda.

"Do you realise that we've been in this hole over four hours?" said Peter, picking up his things. "Ridiculous!"

He looked up expectantly. The sergeant closed the drawer firmly.

"What about the rest?" asked Peter. "There should be a hypo gun and two small phials."

The sergeant looked at him darkly, then glanced back at the inventory.

"That *is* all," he said. "The other objects have been sent to the police laboratory for analysis."

"But you can't do that!" objected Peter. "I need them."

The desk sergeant rested his heavy chin on one hand, the corners of his mouth twisted downwards.

"Well, isn't that too bad?" he said, with a curious lack of feeling. "I had you tagged for a hop head from the start. What's in them phials . . . heroin . . . morphine?"

"Don't be damned ridiculous," spluttered Peter, his face pale. "I demand them back . . . at once!"

"Look Doc, we've got regulations, see?" said the sergeant, wearily. "So stop bothering me. Call in tomorrow morning and you can have them back—if the lab says it's O.K."

"Come on darling," said Amanda, tugging at Peter's sleeve. "You heard what the man said."

She led him towards the lift, ignoring his protests and pushed him inside. "Why do you have to be so awkward, darling?" she said, as the doors closed behind them. "I thought you wanted to get out of there?"

"Of course I did," snapped Peter. "But I hadn't any idea of the time until that big slob gave me my watch back. Marcus has been due for his endocrine injection over half an hour . . . and they've sent it to their stupid laboratory for analysis!"

"Is it serious, then?" asked Amanda.

"Serious!" exploded Peter. "If he doesn't get it within the next hour his glandular imbalance will become so acute that he may be permanently damaged. Any longer than that and he will pass into a comatose state, followed by death. We've got to do something, quickly! Where do you think Betsy will have taken him?"

"To her apartment, I expect," said Amanda. The doors of the lift opened and they stepped out onto the roof of the police building. "Haven't you got more of this stuff at home?"

Peter groaned.

"Yes, but don't you see? Every second counts. It would take me nearly an hour to go home and get back to Betsy's place."

Amanda surveyed his worried face sympathetically. Even though Marcus had been a pest, she felt that something ought to be done.

"Didn't you tell me that Doctor Goldfarb practically lives on the job?" she said, brightening. "The lab is only about five minutes from here."

"I couldn't go there!" said Peter, his eyes widening at the thought. "How could I explain all this to him? He'd think I'd gone mad, taking an android into a Smoke Easy like that."

"But surely, this is a matter of life and death?" said Amanda.

Peter nodded.

"In that case," said Amanda, firmly. "I'll go to the lab and see Goldfarb. After what he has wished onto me, the least he can do is to give me a bit of cooperation."

"Well . . . I don't know . . ." hesitated Peter. "I suppose you could. It would give me a chance to get to Marcus sooner and make sure that he is resting; he would stand a better chance, if he took it easy."

"Right!" said Amanda. "Get me a cab—and don't argue."

Peter ran along the roof, waving frantically at a copter cab that had just appeared over the sky line.

"Don't worry," said Amanda, as she climbed aboard, a few moments later.

She waved cheerily to Peter as the copter hovered off into the cold light of dawn.

Amanda rang the bell of Betsy's flat energetically.

"Oh, it's you," said her friend, opening the door. She was clad in a filmy negligee, the effect of which was entirely wasted on Amanda. Her mouth was set in a thin line.

"Yes," said Amanda, entering. "Where are they?"

"If you mean your husband and that big dumb 'ox you wished off onto me . . . they're in the lounge," said Betsy. She flounced off in the direction of the bedroom.

"Have you got it?" Peter moved to meet her.

Marcus was lying prone on a couch in the background.

"How is he?" asked Amanda.

"I think he'll be all right if he gets the injection right away. He seems to be sleeping normally, so far." Peter took the already charged hypo gun from her outstretched hand.

"What's the matter with her?" said Amanda, nodding in the direction of the bedroom.

Peter discharged the contents of the hypo into one of Marcus' arteries.

"Betsy?" he said, looking up. "Apparently they stopped off for a couple of drinks on the way home. Must have been too much for him; he passed out soon after they got back here. Betsy is rather disappointed with Marcus."

Amanda made a small sound of sympathy for her friend.

"I've had enough of this," said Peter wearily, placing the hypo gun on a nearby table. "As soon as he comes round, we'll take him back to the laboratory and tell Goldfrab to get someone else to do his dirty work. I've been thinking about it while I've been sitting here waiting. Marcus is much too nerve wracking to have around the place for any length of time. He's O.K. in the lab, but outside . . . Look at the scrapes he's got us into already. We've got to face it; androids will always be a menace in normal human society."

Amanda smiled smugly.

"You men! You don't really understand these things, do you?" she said. "Perhaps you'll learn sometime—Doctor Goldfarb saw what I was getting at after a few minutes. We had quite a chat about the training of Marcus." She pointed to the big, handsome android. "Don't you realise where you made your mistake? Look at him? He's far too grown up to be a good subject for social orientation."

"A normal human child is more or less socially organised long before he reaches maturity, and yet you *scientists* take a *physically mature* artificial human and try to make a stable character out of him. It's just not possible, because he already has drives which will over-rule any conditioning you try to give him. This Betsy business, for instance."

Peter looked at his wife as if she had just sprouted a second head.

"And so?" he said.

"Simple!" said Amanda. She sat down in a chair and smoothed her unruly dark locks. "Goldfarb got to work right away and produced a new formula. The endocrine balance will be slightly changed in future injections."

The large body on the couch stirred. Amanda walked to Peter's side and they stood, looking down at the android.

Marcus' eyes flickered, then opened wide. The lines of his face seemed suddenly softer.

"Hello, mum!" he said, looking at Amanda brightly. "I'm hungry . . . what's for breakfast?"

"See what I mean?" said Amanda, smiling up at Peter. "Where are we going to take our son for his holiday?"

DAN MORGAN

U n i v e r s a l . . .

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Armistice

*Assured of their own supremacy, the Thunians
were ready to sign their own death-warrant*

That the Thunian main base should be riding now as a satellite, a scant and arrogant couple of hundred miles from Earth's surface, was the last proof of Thunian invincibility. Even its orbit, Pyle recognised dully, was a trajectory or contempt. For three weeks now it had swept monotonously over Earth's last outpost in the Himalyas—and Earth had been powerless to harm it.

But such proofs were no longer necessary, hadn't been for months now. *Months?* Pyle's lips quirked wearily. It should have been obvious in the beginning—two years ago when the first Thunian ship had appeared in the skies over the world capital of Paris. Would it, he found himself wondering, have been obvious to the Thunians if they, back on their own world, had suddenly found themselves in a like position? How would they have reacted?

He glanced at the Thunian escort who sat by him in the narrow compartment of the robot scout. The Thunian did not return his glance. He seemed not even to notice the Earthman. He sat there, perfectly relaxed, unconcerned, master of the situation. Of this and any situation that could conceivably arise.

Pyle turned away, feeling again a mounting of that impotent anger that the mere sight of a Thunian aroused in an Earthman. He had never been this close to one of them before. In the conditions of total war under which the two races had met for the first and only time, a human seldom had that chance—or mischance. Was it only the knowledge of their ruthlessness, Pyle asked himself, that stirred his anger now? Or something much smaller . . . simply their infuriating air of confidence? Because of Man's own arrogance, his blind refusal to admit than another race could have the edge on him?

Pyle thrust such speculations from him as the Thunian scout went in on an approach beam. It was a visible beam—a miles-long shaft of pearly light. Pyle wondered how they maintained it in the vacuum of

space. He remembered enough physics from his early days, before he had specialised in the more flesh-and-blood science of sociology, to be able to ask the question—but not enough to begin answering it.

The huge sombre bulk of the Thunian base loomed above them, silent and seemingly blind, giving no hint of the intelligence and power packed inside it. A slight shudder ran through the scout as it homed against the base's side.

Simultaneously, padded clamps slid out from Pyle's seat and grasped him with a gentle firmness. He knew why when the stars spun in a half-circle. By the time he realised that part of the wall of the base had rotated, the scout was already at rest in the softly-lit interior.

The clamps slid back, releasing him. Lights died on the control panel. The Thunian rose from his seat and beckoned Pyle to accompany him.

Their progress down featureless corridors seemed typical of everything pertaining to this other-world race. The passing by of an Earthman roused no interest in the few other Thunians they encountered. There was no jubilation at the spectacle of one ragged Earthman come to sue for peace. No display of martial panoply. Not even any of the cold and elaborate formality of a victor receiving the vanquished. And certainly no melodramatics like their blindfolding him. That would have seemed startlingly un-Thunian.

No, thought Pyle, as they passed down quiet corridors to the heart of the base, he might have been a boy being escorted to the headmaster's study on his first day at school.

They halted outside a plain door. For a moment they waited, then the door slid back. Pyle, uttering a silent prayer for strength, went in.

The interior was starkly simple. Bare walls, a softly resilient floor that needed no rugs. The only features of the room were a bulky tri-di scanner, blank now, and a desk. And behind it a Thunian who looked up at Pyle's entry.

The Thunian smiled faintly. "Mr Pyle? Sit down, won't you?" He spoke in surprisingly perfect English. Or perhaps it wasn't so surprising that a high-ranking Thunian, in the thick of a bitter campaign, should have learned the enemy's language so thoroughly. It was only another witness to their almost frightening efficiency.

Pyle did as he was invited, and once again the image of himself as a schoolboy came back into his mind. Hadn't it been exactly like this?

He fought against the uncomfortable closeness of the parallel. "Colonel Pyle," he corrected.

"Well—ex-colonel, shall we say?" the Thunian countered easily. "The war is over now, isn't it? Or do you want to go on fighting?"

Forced into a weak position, Pyle came to the point. "I am here to agree on terms for peace. I am so empowered by the Supreme War Council of Earth."

How grand it sounded! he thought. *And how pathetic the reality was!* The "Supreme War Council" had met in a cave, huddled round a fire to keep out the bitter Himalayan cold.

He reached into a fold of his tattered greatcoat and drew out a scrap of paper. He passed it over. The Thunian gave one glance at it, without opening it, and placed it to one side of his desk.

Pyle strove for dignity. "You are similarly empowered?" he asked stiffly.

"I am in charge of the expedition," the Thunian answered. "I am therefore empowered to take what steps I think fit. It may be difficult for one of your heterogeneous culture to appreciate, but there are none of the differences between members of our race that make a man's initiative accountable to, or limitable by, a majority."

Why, thought Pyle, does the word initiative sound strange on Thunian lips? Planned ruthlessness, a robot-like efficiency, yes—but somehow not initiative. He had warned himself a hundred times not to judge them by Earth standards; now he had to be wary of falling into the opposite error, of not recognising that their qualities were essentially human ones. The only difference was that those qualities were set out in another kind of pattern.

"Very well," Pyle said. "Then let me present the terms of our people. In return for our abandoning all further resistance, we ask to be allowed to set up a sovereign state in the sub-continent of India."

He was conscious, as he uttered the carefully-prepared words, of how hollow they sounded—even though he had been the one who had framed them. The rest had been too surprised by the Thunians' agreement to think of haggling about terms. Just to have the necessity of going on fighting removed, to be able to breathe air free of the reek of destruction for as many days as the Thunians would allow them, that had been as much as any of them had dared for. Until, that is the Thunians had bafflingly agreed to parley.

And here he was—parleying . . . and painfully aware of his limitations. He had been chosen because he had maintained that the Thunians must have *their* reasons for agreeing to a truce, that therefore it was for Earth to put forward the highest possible terms.

The Thunian spent an all but imperceptible time in considering

them. Then he shook his head. "That is out of the question. We need Earth—all of it. Two intelligent species cannot occupy the same world."

Pyle had been prepared for rejection—but not for it to have been quite so out-of-hand. He backed away down the first of his diplomatic retreats. "We will keep strictly incommunicado. And we will agree to your taking all security precautions."

"Security?" The Thunian smiled slightly. "Against what?"

Anger stirred again in Pyle at the other's calm assumption of superiority. Suddenly, bitterly, he regretted the request for an armistice. They should have fought it out to the last, not wavered now.

If the Thunians had been intelligent beetles it would have been instinctive. But that the Thunians were so man-like had prompted the last wild hope that they would listen to an appeal. And they had. He wished now they hadn't.

Earthman and Thunian faced each other across the desk in silence. If the Thunians *had* been beetles they couldn't have been more alien. Their humanoid characteristics only stressed the differences between the two races. Apart from a slight bluish tint in the skin, hairless skulls, and an easily-overlooked extra finger on each hand, the physical identity was almost complete. Yet—

—The Thunian sat there, completely impassive, his black-pupilled eyes calm on the Earthman. Pyle felt like a child beside him. His words deserted him, the prepared lines of argument tangled in his mind. He was relieved when the Thunian broke the silence.

He broke it, surprisingly, with a low-pitched chuckle. "You are a strange people. You love your planet so much. So much that you would see it laid waste under your feet."

"We had no choice," Pyle said angrily. "And I came here to discuss terms, not to fight the war over again. I am not interested in our motives being examined."

The Thunian smiled patiently. "You will have to abide my interest. Your resistance was noble—but pitiful. Am I to be denied my pity? You are acting against your own interests if you do so."

"We don't want your pity," Pyle told him sharply. "Talk of pity sounds hollow when it comes from an enemy who took no prisoners."

The Thunian shook his head sadly. "We took a few—for intelligence purposes. Your statement is largely true, though. But why should that be wrong? Prisoners belong to a stage of development that sees war as a kind of game, complete with rules. The same applied on our

own world millennia ago, before we grew out of it. But war is a cruel necessity. We did not invade you because we wanted to. We would not even have used force, but you compelled us to. And once war is on, there is no room for prisoners. Each individual is part of one whole, locked in combat with another whole. The individual cannot make his own armistice."

Pyle recognised the logic of that, but stirred at its coldness.

"But now," the Thunian went on, "your side has admitted defeat. If only your world had admitted that in the first place there need have been no war."

Pyle stared at the Thunian blankly. He had expected surprises, but not this—to hear Earth being virtually blamed for all that had happened!

"What other course was there?" he protested.

The Thunian shrugged. "If only your leaders had asked that question when our request was first presented . . . instead of exploding emotionally and slaughtering our envoys."

"That was wrong," Pyle conceded. "But it was an ultimatum, not a request. How else could we have been expected to react when another race demands that we hand over our planet to them?"

The Thunians gave him a look of quietly amused vexation, like a mother who had caught her child in some small wrong-doing.

"There you go again, with your narrow planetary patriotism!

Can't you see how irrational it is? A world is only the cradle of a race, nothing more. When we Thunians discovered that our sun was going nova we accepted the fact. One's native world has associations, of course, but they are of little consequence and easily put aside. By us, that is. But how did your people react?

"You were already thrusting out among the stars. Yet, when your own little world is threatened, a kind of frenzy seizes you. Every ship, every man, flocks back to Earth's defence. If you had kept your senses and your ships you could have salvaged your remaining numbers, long before you reached your present straits and started again elsewhere. You could have done so in the beginning, without a shot being fired. We would have given you time.

"But no—you have to pit yourselves in an insane struggle against a superior enemy. Until—" The Thunian had been looking slightly downward as he spoke. Now he raised his eyes.

"Exactly how many of you are there left?"

Pyle hesitated. He had known that the question must come some time. He had been ready to bluff outrageously. If they had checked up

he would have said that there had been an overnight epidemic. But now he felt that bluffing was futile.

"Five hundred and fifty," he murmured.

"Five hundred and fifty!"

For the first time the Thunian betrayed something like emotion. "What a waste! What a shocking waste!" For a moment he seemed almost angry, then he sobered. "Don't you realise that we could have fought it all out on paper? We could have *proved* to you that resistance was absolutely futile. You could have left Earth and settled on other worlds."

Pyle fought against the unreality of the argument, of an enemy who could discuss fighting wars on paper as calmly as if they were games of chess. "Then why didn't you choose those other worlds?" he parried.

"Because our system is much more developed than yours. We need a system. This system is the closest approximation to our own. That you should be dispossessed was a less evil than that our culture should be cut back."

The Thunian fell silent for a moment, then said speculatively, "Of course, my offer to you now of what we would have originally granted would be futile, I suppose? Even your peace terms stipulated your retaining a part of your precious Earth."

Pyle felt suddenly as if he were standing on his head. He had thought that in asking for one small tract of Earth he had been audacious. Now he was being offered a whole new world! An ironic vision came into his mind of himself going back to the handful of his people like a hero.

"We would agree to that in place of our original terms," he said, striving to keep his voice steady. A sudden thought did that for him. "But . . . we have no space-worthy ships. And no fuel."

"That is easily overcome. Our engineers will help put your ships in order, and we will supply the necessary fuel."

"But why?" he asked. "Why should you go to the trouble for the last five hundred of your enemy?"

"It is little trouble. Put it down, if you like, to a respect for the fact that you have at last, however belatedly, come to your senses."

"Only that?"

"And—well, that pity which seems to annoy you."

Pyle's look of disbelief registered on the Thunian.

"You think we have no pity? No emotions? On the contrary. We have control of them, that is all. Just as we have control of all our bodily processes. A moment."

He reached in a compartment of his desk and pulled out a sharp instrument. Smiling at Pyle, the Thunian pulled back the sleeve of his tunic and plunged the point of the instrument into his own arm flesh to a depth of well over an inch. *And kept smiling.*

While Pyle watched, fascinated, the Thunian withdrew the blade and laid it aside. He showed Pyle the wound. Only a small bead of purplish blood broke the surface. It immediately clotted. The Thunian drew his sleeve down.

"The wound will be healed in a few minutes," he said.

"But pain is necessary," Pyle objected. "As a warning surely."

"Indeed. If that wound had not been self-inflicted so that I was prepared in advance, I would have felt the pain of the stab—but only for an instant before my mind instinctively took over. In the same way my mind could let down the screen, as it were, whenever needed for the purpose of diagnosis.

It is the same with emotion. Anger, fear, hatred, we know what the words mean. But they are little more than words to us, because they are under our control. Just as our subconscious is—or what you would call our subconscious. Ours, in fact, is no longer *subconscious* at all. Our gain is double, for that portion of our minds is switched from a negative to a positive function. That is how, for instance, while I have been talking with you, two other parts of my mind have been closely engaged with two other entirely separate matters."

The Thunian spoke without vain glory. He was merely stating what were obviously facts, underlining in the Earthman's mind the futility of ever having resisted such super-beings.

"Which explains," went on the Thunian, "why I feel sorry for your race. You are at the mercy of your emotions, your subconscious, your own bodies. It is pitiful—all the more so because you will never be able to overcome them. You lack the necessary physical mechanism. We have found that out by dissection of your dead."

Hearing the enunciation of his own people's inferiority, Pyle felt overwhelmed. Spoken so baldly, it summed up the hopelessness of all mankind's agonised and neurotic history—his obsessions, his wars, his torture and self-torture. And then——

He was borne up by a sudden irrational elation, so that the conscious part of his mind struggled to fathom it. Was it only, he asked himself, a pride in Man's heroic struggle against such an age-long succubus? No, that was only part of it. The rest was . . . a realisation that the Thunian was acting magnanimously *because he thought he could afford to be*. Because Man, cursed by pain and irrationality, had never been a real

threat to a perfect race like the Thunians, could never be.

With the elation came hope. Even the thought that that only bore out what the Thunian had just said—that Man was at the mercy of his emotions—could not contain it.

He was suddenly aware that the Thunian was speaking.

"I said that——" The Thunian broke off with a vexed smile. "You were dreaming of Earth again?"

"I'm sorry. Yes." He had been, he realised. But not the Earth of today, shattered and in the hands of the Thunians. But tomorrow—a few centuries from now. And he offered up silent thanks for being irrational. Irrational enough to be able to dream that five hundred humans, starting on a new world, could build up enough strength to wrest Earth back again.

The Thunian nodded. "I was suggesting that the best world for you might be the single planet of the star which I believe you call Procyon. The gravity is fifty per cent above Earth's the atmosphere thin but breathable. Land proportions——"

"That sounds suitable," the Earthman said, cutting across the other's catalogue. "But I'm no expert. We have one back at base. You can discuss the details with him. I agree to your broad terms. Shall we draw up the treaty?"

"Treaty?" The Thunian smiled. "That hardly seems necessary."

"Very well," Pyle said airily. "We certainly don't need one." The sound of his own voice startled him. He was speaking like a magnanimous conqueror, instead of a tattered representative of a defeated rabble! And then he realised——

What had the Thunian said? *'Prisoners belong to a stage of development that sees war as a kind of game . . . the same applied on our own world millennia ago.'*

Millennia . . . that was it——

How much of an edge had the Thunians really had? A more efficient use of power, certainly, more massive armament, the overwhelming advantage of being prepared. And what besides? A means of maintaining visible beams in space? A mere conjuring trick. A few other tricks, and what else? He wasn't a technological expert; it didn't take one to see that they weren't all that far ahead of Man.

Irrationality had its advantages. It could refuse to recognise the impossible, for one thing. The subconscious might be a dark waste-pit, but from its compost the seed of inspiration flowered. And suffering drove men to soar beyond it. A race that had no need to, whose control was built-in, would never have Man's fever to rise.

For the Thunians, with all their perfection, had taken millennia to get a small edge on Earth. While it was a scant two centuries since Man had abandoned the view of war as somehow romantic. Even now, faced with interplanetary war, he had still regarded it right to take prisoners—until it had been evident that the enemy not only took none, but expected no such quarter themselves.

Yes, in two hundred years man had reached a stage only slightly behind that which had taken the Thunians thousands to attain. Suddenly Pyle's sense of inferiority dropped away. And with it went the irrational feeling of resentment against the confident Thunians. Now *he* was beginning to feel sorry for *them*!

For, by their own standards the enemy had acted creditably. More creditably, by those standards, than Earthmen. They had acted as they had only under the pressure of necessity. They had been prepared to avoid war. And they were ready now to give Man a final helping hand.

For a moment Pyle was seized by a pang of conscience. But he *had* offered a treaty, hadn't he? So could it be laid at his door, whatever happened in some future century? Or even at Man's as a whole? How could you blame a race with such imperfect control over itself?

For plainly the Thunians did not recognise the full implications of irrationality. They would not learn, until it was too late, that one of the strongest of man's irrational emotions was a resentment of being done a favour, as he was being done a favour now. Oh, for a time he might be grateful—for a generation or so. But afterwards, in that dark subconscious that the Thunians only pitied Man for possessing, what a resentment would grow! What a spring to his every endeavour! He had started before in wildernesses, armed only with his brains, his emotions, his fierce irrationality. And in a century or two—

The Thunian broke in on his thoughts. "The scout that takes you back will pick up your planetary expert."

It was plainly an end of the meeting. Pyle rose and gathered his ragged greatcoat about him.

The Thunian inclined his head slightly. "Goodbye, then."

"Goodbye," Pyle said. "Thank you." He was relieved that the Thunian, expert in his defeated enemy's language, had not added that other customary farewell, the wishing of luck. That would have made him feel like a Judas. But then, luck was an irrationality that was surely the antithesis of Thunian reason.

Instead it was he who turned at the door and said, "Good luck," to the Thunian.

And he meant it. Whether or not it existed in their universe, he had a feeling that the new landlords of Earth would need it one day—every little bit of it.

ARTHUR SELLINGS

Reluctant Farmer

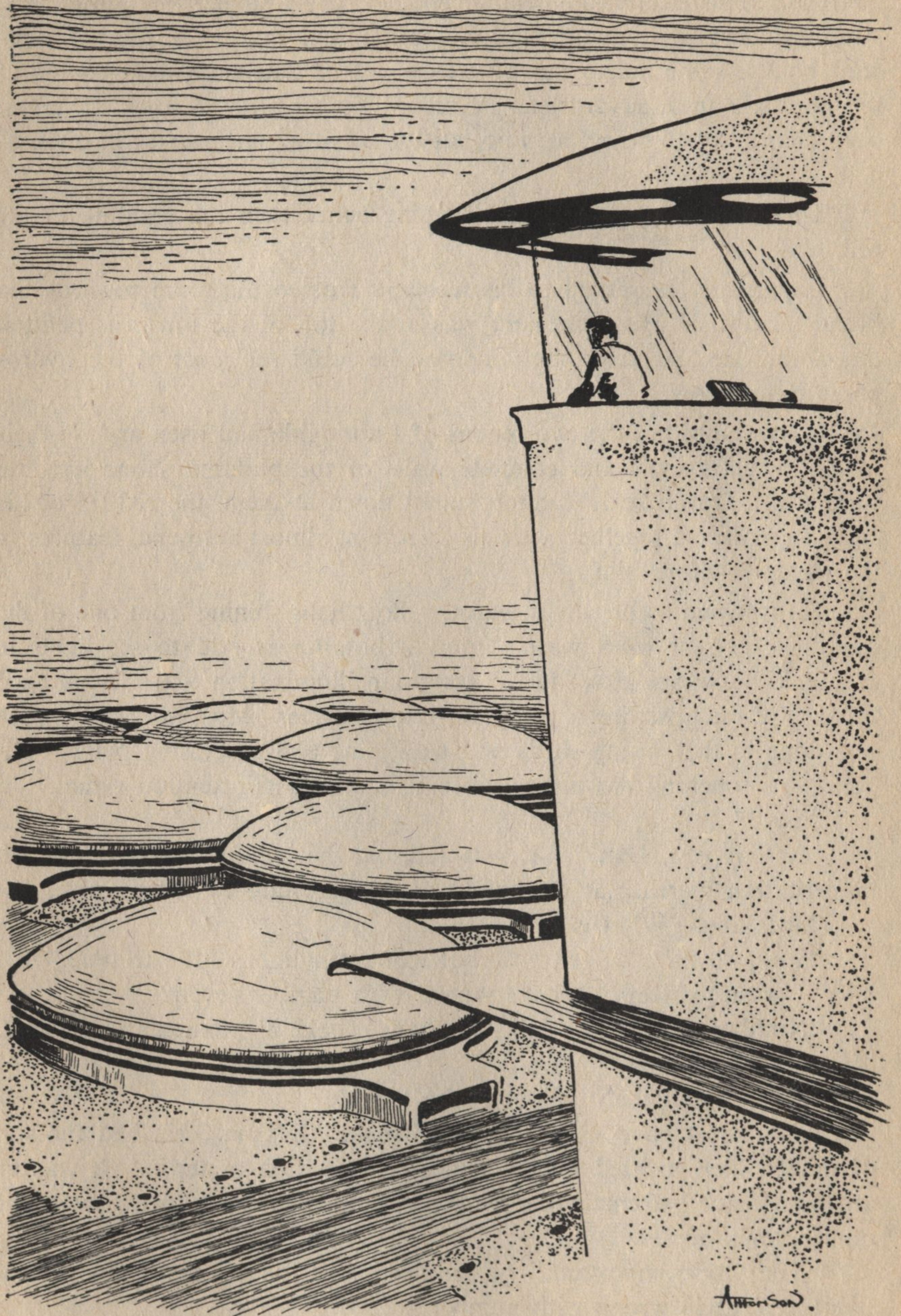
*Kenton was prepared to do almost anything
to return to the planet of his dreams*

Illustrated by Arthur Thomson

It was going to be another restless night. Kenton could tell it from the way he had begun to twitch, the muscle high on one cheek, his legs, the nervous movement of his hands. Irritably he threw down his book and lit a cigarette, sucking the smoke deep into his lungs and letting it trickle from his nostrils.

It wasn't new, this feeling. He had had it before and he knew exactly what to expect. Going to bed would be a waste of time; he would lie in the darkness and try for sleep only to find his mind more active than ever. He would lie for hours while his thoughts bubbled like the released gas in a bottle of mineral water. Then he would rise and smoke and maybe drink a little. He would take a shower and pace his rooms until, physically exhausted, he would fall into a parody of sleep only to wake depressed and emotionally unstable.

Knowing what caused the unrest didn't cure it. If anything it only made it worse. Like it or not, he was stuck five hundred light years from Earth and, like it or not, here he had to stay until he did something about it. Doing something about it, however, wasn't as easy as it sounded.



Atkinson

Irritably he drew at the cigarette and scowled around his living quarters. They were comfortable enough, even he had to admit that, but they were poor compensation for the real thing. A row of well-read books, some magazines now long out of date and almost alien in the products they advertised. A record player with a stack of tapes, deep chairs, soft lighting, a radio, all the usual appurtenances of civilisation.

To Kenton they represented nothing better than the padding of his cell.

Impatiently he jerked to his feet and crossed the room towards the broad windows. His apartment was at the top of the tower as befitted the Controller and, from the windows, he could see most of the hydroponic farm below.

It was night but the two moons of Lubridgida had risen and, in their light, the glass roofs and concrete walls of the building shone like the waters of a frozen sea. Kenton stared down at them, the red tip of his cigarette reflected together with his own thin, almost aesthetic, features in the window before him.

He frowned as he saw a warm, yellow light shining from one of the buildings. Night work wasn't unusual but it was odd to see lights in the tank buildings after dark. Irregular illumination was discouraged because of the upsetting of the plant-growth cycle. Most after-dark work was done in the sorting sheds and packaging and processing plants. His hand was touching the phone when it hummed its attention signal.

"Yes?"

"Is that you, Dan?" It was Jelkson, the botanist, and Kelton felt his irritation increase at the sound of the carefully educated voice.

"Speaking. What is it?"

"Sorry to have woken you, but we've run into a little trouble."

"I wasn't asleep. What's wrong with number seven?"

"Number seven?" Jelkson's voice held a momentary surprise. "How did you know?"

"Never mind that. What is the trouble?"

"You must have seen the lights," mused Jelkson. He had the sort of mind which insisted on the logical explanation of trivia. It was an attribute which had made him an expert in his field but which now grated on Kenton's nerves.

"That isn't important," he snapped into the phone. "Get to the point. What is wrong with number seven?"

"Susan spotted what she thought was rust on some of the plants.

She reported it to me earlier this evening. It isn't rust. The crop will have to be destroyed and the building sterilised."

"What!" Anger mingled with sickness so that Kenton felt his muscles jerk beneath his skin. The sickness was caused by the prospect of losing the crop, the anger at the calm assumption that his opinion was neither needed or necessary. "Who is in charge of number seven?"

"Perchon."

"Is he with you now?"

"No. I'm alone with Susan. Why?"

"I'm coming down. Remain until I arrive. In the meantime send out a call for Perchon to join us in number seven. We'll decide what is to be done after the inquiry."

"Decide?" Jelkson's voice held the subtle contempt of the expert for the amateur. "What can there be to decide? The crop is diseased and there is only one thing to do."

"Sterilise and burn," snapped Kenton impatiently. "You don't have to tell me my job, Jelkson. But that crop is almost ready for harvest and we can't afford to throw it away. Now get moving and find Perchon."

"As you wish," said Jelkson casually. "Naturally, you accept full responsibility?"

"Responsibility for what?"

"For whatever you may decide."

"You," said Kenton bitterly, "are talking like a fool. I . . ."

The click was unmistakable. Kenton slammed down the receiver and stood shaking with rage at Jelkson for having hung up on him. Savagely he dragged at his cigarette. It had gone out while he was talking and he relit it, inhaling with such force that his throat burned from the hot smoke.

He was acting like a fool and he knew it but the knowledge only made him worse. Temper was useless when dealing with a man like Jelkson.

Impatiently Kenton snatched up the phone.

Doctor Thorpe, small, wizened, mellowed with age and canny with understanding, sat engrossed over a problem in chess. He had set up a board on the operating table and the little red and white pieces seemed strangely out of place among the sterile glitter and soft green of the dispensary. He looked up as Kenton entered the room, nodded, moved

a piece on the board, looked at it, frowned, then moved it back again.

"The trouble with chess," he commented, "is that it's too logical. A man needs a mind like a computer to play the game, that is if he wants to be any good at it. Me, I'm a poker player myself."

"Then why waste time with chess?"

"I'm ambitious. First I want to beat Jelkson and then, when I'm ready, I want to tackle our blue-skinned friends. It doesn't seem right that we should be beaten by a bunch of aliens at our own game."

"The Denebians are logical," said Kenton absently. "As far as I know, Jelkson is the only one on this planet who can hold his own with them." He looked around the room. "Where is it?"

"That dope you ordered?" Thorpe shrugged. "It's ready if you want it. A couple of pills and you'll feel as if you're riding on a cloud. No nerves, tense muscles, irritation. Nothing but peace."

"You don't have to be sarcastic," snapped Kenton. "I know what I'm doing."

"Naturally. Well, what will it be this time? Opium? Morphine? Something new to numb your survival instincts and fog your brain? Name it and you've got it."

"All right, so you don't believe in sedatives," said Kenton tiredly. "But this is special. I'm as jumpy as hell and ready to fly off the handle. Jelkson's getting ready to ride me and I don't trust myself with the little swine. Give me a pill and save the lecture."

"Jelkson?" Thorpe nodded as if he understood. "Got under your skin, has he? Well, I'm not surprised. It isn't human for a man to be always right." He rose and took a phial from a cabinet. "Here. Take a couple of these and give them five minutes to take effect."

"Thank you." Kenton opened the container, swallowed a couple of pills, and handed the phial back to Thorpe.

He felt calmer already though he knew that the drug could not possibly have acted so fast. He looked around the little dispensary with its machines and instruments for curing human ills. Physical ills, that was, nothing had yet been discovered or invented to cure the basic unrest of the human race. He turned to leave the room.

"Hold it, Dan," said Thorpe quietly. "Five minutes, remember?"

"Jelkson's waiting for me."

"Let him wait. Start running about now and you will be sorry for it later." Thorpe waited until Kenton had reluctantly sat down and then produced a pipe. He filled it, lit it, then sat down and puffed with evident enjoyment. Looking at him Kenton envied his calm.

"How long have you been here, Doc?"

"Ten years, perhaps. Why?"

"Just wondering. When did you see Earth last?"

"A long time ago. Say forty years and you wouldn't be far short. I took the first ship out after I graduated and I've never been back." Thorpe took the pipe from his mouth and stared at it. "Always been too busy to think about it, I suppose. Now you, you're different. You think of nothing else.

"I'm a doctor, Dan, and I know what makes men tick. Jelkson, now, he's almost happy out here. If he had your job he would be happier still. He likes his work and what it means. You, all you want is to break your contract and run back home."

It was true but, hearing the old man say it, put it into a new light. It made it sound almost as if it were something to be ashamed of and Kenton reacted in instinctive defence.

"There's nothing wrong in a man wanting to go home," he said. "I'm not really needed here, Jelkson could do my job with his eyes shut." Kenton scowled down at his hands. "They made me Controller with a twenty year contract and I was fool enough to jump at the offer. I've served five years of my time and now I want out. What's wrong with that?"

"Nothing. It's natural for some men to want to go home just as it's natural for children to cling to their mother's apron strings." Thorpe examined his pipe again. "I said that it was natural but that doesn't mean that it's a good thing. Man is an animal and every animal has to grow up and leave home some day. The trouble is that some men don't grow up."

"More lectures." Kenton wasn't annoyed at what the doctor had said. He had thought it all out for himself a dozen times and, though he knew the answers, he couldn't help the way he felt. He had no affinity with Lubridgida. He was an Earthman, pure and simple, and it had been the biggest mistake of his life ever to leave the planet of his birth.

A mistake he looked like paying for with the rest of his life.

Jelkson was waiting for him outside the inlet of hydroponic building number seven. The small, waspish botanist was talking to his assistant when Kenton arrived. Susan Blake was a natural blond, tall, slim, utterly feminine beneath her one-piece working overall. Even with flat heels she was taller than Jelkson though not as tall as Kenton himself. The couple fell silent as he joined them and they followed him through

the outer door and into the mist-spray. Ten seconds later they left the hot-air blast and entered the building.

It was warm with a sticky humidity which did nothing to reduce Kenton's discomfort. Impatiently he unzipped the front of his coverall.

"I thought that I asked you to wait inside the building," he snapped. "I found you both outside. Why?"

"You were rather a long time," said Jelkson evenly. "Neither of us are dressed for extreme heat. Susan began to feel a little faint and I escorted her outside. Satisfied."

"Has Perchon arrived yet?"

"No. Are there any more questions?"

"A lot of them. Susan, you stay here. Jelkson, please follow me." Kenton led the way down the aisle between the tanks, halting when he was sure that they were out of earshot.

"You hung up on me, Jelkson. Why?"

"I do not have to listen to personal insults," said the botanist stiffly. "You had called me a fool and were about to say more. I decided that it would be best to terminate the conversation."

"I see." Kenton stared at the little man and was pleased to find that he remained calm. His normal dislike for the precise botanist still remained but his frustrated temper was now beneath control.

"Let's get to business," he said abruptly. "You say that this crop has to be destroyed?"

"Yes."

"I see." Kenton led the way back to where Susan was waiting. "Jelkson tells me that you first discovered something wrong in here. Will you please show me what it was you found."

"Certainly." She led the way down one of the aisles towards a group of marked plants. Kenton followed her, trying not to notice the motion of her hips. He was acutely conscious of Jelkson close behind.

"Here." Susan pointed to the underside of a thick leaf. "At first I took it for rust, but Mr. Jelkson says that it is a virus disease."

"A pity," said Kenton dryly. "I would have liked you to have run an independent test without being swayed by Jelkson's undoubtedly expert opinion." Stooping he examined the underside of the leaves. The fleshy greenness was marred by pin-point areas of blackness. He straightened and looked at the botanist. "Does Perchon know about this?"

"The infection or the results?"

"Both."

"He might have spotted the infection," said Jelkson slowly. "Central said that he went to town early this afternoon, before Susan spotted it herself. He couldn't know of my results."

"If he had spotted the infection surely he would have reported it?"

"I would have thought so," admitted Jelkson. "It is a thing any farmer would do."

Kenton nodded, his eyes thoughtful. Number seven held tobacco and the air was heavy with the scent of the thick-leaved plants, neat and of uniform height in their tanks of nutrient solution. Slowly he walked down the aisles, inspecting random plants with minute thoroughness. Most of them showed signs of the black areas but the infection seemed to be confined to the outer leaves. The tobacco was almost ready for harvest and Kenton was reluctant to throw away the work of three months.

He had another, equally good reason, for trying to save the crop.

"The plants don't seem to be too badly infected," he said. "It should be possible to salvage something from it. If we remove all the outer leaves and any others showing signs of infection we could harvest the rest."

"Impossible." Jelkson was very definite. "I told you that the disease is a virus. That means the entire building must be sterilised. This infection isn't just local, restricted to a few leaves. The plants themselves are rotten. What you are looking at is the outward symptoms of advanced degeneration."

"Do you agree?" Kenton glanced at Susan. Jelkson spoke before she could answer.

"Of course, she agrees. Any botanist would agree. If you were a botanist yourself you wouldn't even consider trying to harvest the crop."

"I am the plant manager, not a botanist," reminded Kenton. "I have more to worry about than a few spots on some leaves."

"Those few spots, as you term them, are about as harmless as the first signs of cancer," said Jelkson acidly. "Don't confuse the symptoms with the disease and don't be deluded by them. This crop must be destroyed."

"Isn't that up to me?" said Kenton mildly. "As Controller I have the final word, or have you forgotten that?" He smiled at Jelkson's furious expression, human enough to feel triumph at having cracked the other's

armour. His triumph didn't last long.

"You have no choice," said the botanist evenly. "Even though you may be the Controller yet my word is final when it comes to a decision like this. If you doubt me, we can take the matter to the Port Authority. Commander Ranson would not appreciate your attempt to flood the market with poisoned tobacco."

"Did I suggest that?"

"Yes. Normal tobacco is harmless, but these plants are no longer normal. The virus may be a radiation-induced mutation, in which case we can hardly call these plants tobacco at all. We cannot tell what toxic effects the smoke may have, but we do know better than to try. Golmen taught us that."

"Golmen?" Kenton glanced at Susan and then back at Jelkson. "What has Golmen to do with it?"

"Golmen is a planet," explained Jelkson evenly. "Twenty years ago a similar thing happened to their tobacco crop. Instead of the crop being destroyed it was harvested, cured and processed. Fifty-nine men died and over three hundred more suffered from lung disorders before it was discovered that the mutated tobacco released harmful tars. The smoke was toxic. It must not happen again."

"No," agreed Kenton. "I can see that." Inwardly he cursed himself for having pulled rank to win a cheap triumph only to have that triumph recoil and make him look a fool. "So it is your considered opinion that the crop is a total loss?"

"It is."

"Can't we salvage anything? The seeds perhaps?"

"Especially not the seeds, they could be potential dynamite in their mutated form." Jelkson looked sharply at the Controller. "Why do you ask? We have reserve stocks surely?"

Kenton didn't answer. His irritation and anger had left him and now he felt both physically and mentally worn out. Silently he zippered up his coverall and moved towards the inlet. Jelkson called after him just as he was about to pass through.

"Your decision, Controller. What is it?"

"My decision?" Kenton blinked then remembered. "An inquiry will be held first thing in the morning."

"And the crop?"

Jelkson was rubbing it in. He was taking his revenge for implied insult and Kenton knew it. The decision had been Jelkson's all the time.

"Use your discretion," snapped Kenton and passed from the building.

Outside he paused, looking up at the moon-bright sky, and felt a sudden overwhelming nostalgia.

Damn Jelkson! Damn Lubridgida! Damn everything all to hell! He wanted to go home.

Take a faster-than-light drive which converts a light year of distance into two days of travel and you have solved the problem of transportation. Take radio which still obeyed the electro-magnetic restriction of speed of light and you have a problem in communication. Take planets which, while earth-like in most respects, were utterly alien when it came to the chemical structure of their vegetation and you have the biggest problem of all.

Food.

Man could traverse the galaxy and find oxygen and water on a million worlds. He could find edible food only on one—his own. Trace elements did it. Feed an apple tree minute quantities of selenium and the tree will sicken and then recover as it assimilates the new mineral. Eat an apple from such a tree and you will die. Vegetation can adapt to poisonous elements in the soil but the fruits of such vegetation are lethal to human life.

And not one discovered planet other than Earth had just the right combination of soil elements which produced food acceptable to the human metabolism. Some had too-high quantities of selenium, others were loaded with arsenic, tungsten, copper, none of them were just right.

There was nothing strange about it and neither was it unique. Every race which ventured into space found the same problem and all had solved it in the same way. To carry food in bulk was too expensive, too wasteful of cargo space, and hopelessly impracticable in view of the rising populations and the long journeys. So they grew their own food where it was needed.

Hydroponic farms grew edible food isolated from alien environments. Chemicals for the nutrient solutions were mined, refined and purified from local sources. Fresh seeds were imported from tested stock direct from Earth in exchange for the mineral wealth essential for a top-heavy civilisation. It worked beautifully—until something went wrong.

Kenton had the uneasy conviction that something had, at last, gone wrong.

The inquiry was held in the rec-room, now cleared of all uninterested personnel. Jelkson, together with Susan, sat at one side of the table.

Perchon, red-headed, freckled, normally cheerful but now glum, sat together with King, the accountant, at the other. Doctor Thorpe, present because of his long association and because he was a neutral observer, occupied the foot, while Kenton, as befitted the Controller, sat at the head.

He wasted no time.

"Last night the entire tobacco crop in number seven was found to be infected with a virus disease and will have to be destroyed. The purpose of this inquiry is to find out how and why the crop became infected." He looked at Perchon. "We may as well begin with you. What have you to say for yourself?"

"Me?" Perchon blinked. "I had nothing to do with it."

"You were in charge of number seven," said Kenton coldly. "To be in charge of anything means to take responsibility for what happens to it."

"Now, wait a minute," protested Perchon. "Remember all this is new to me. I only came in a little while ago. Just what is supposed to have happened?"

"Susan made a spot check late yesterday afternoon," said Jelkson. "She discovered traces and I checked. Unfortunately there can be no doubt as to what is wrong."

"Did you inspect the crop before going into town?" Kenton leaned a little forward as he asked the question.

"That depends on what you mean by 'inspect,'" said Perchon. "I checked the temperature and the solution. I took a walk around for general impression but the crop looked healthy enough to me. If I had spotted something I would have reported it."

"You left the plant about three," said Kenton. "Susan checked about seven. It doesn't seem likely to me that the disease would have manifested itself during those four hours."

"Why not?" said Jelkson. "If the disease is a mutated virus, as I think possible, then anything can happen. Four hours, in our accelerated growth-cycle, would be ample time for the external symptoms to become apparent. Don't forget that Susan was deliberately looking for trouble. Personally I consider that we were lucky in having caught it so early."

"Lucky?" Kenton felt the muscle twitch high on his cheek. He looked at Perchon. "You are in charge of number seven. How is it that the crop became infected?"

"That isn't a fair question," snapped Jelkson, then fell silent at Kenton's gesture.

"I was talking to Perchon, not you. Well? What are your excuses?"

"Do I need any?" Perchon's voice reflected his anger. "If you knew anything about botany you'd know that things like this can happen all the time. Perhaps the seeds were irradiated during transit, or perhaps they weren't taken from original stock, how do I know what caused it?"

"He's right, Kenton," said Jelkson.

"Is he?" Kenton lit a cigarette and glowered at the botanist. "Those seeds were government sealed earth stock," he gritted. "The building was, and is supposed to be, sterile. Now the crop has become infected and must be destroyed and yet you have the temerity to tell me how 'lucky' we are. Luck has nothing to do with it. The infection of the crop was due to sheer, incompetent negligence."

"You realise what you are saying?" Jelkson glanced at the flushed face of Perchon then back at Kenton. "You are accusing Perchon of criminal negligence and sabotage. He is guilty of neither. I think that you should offer your apologies and, if you are a gentleman, you would think so yourself."

He was right. For a moment Kenton hesitated then, because Jelkson had made the suggestion, he ignored it.

"Apologies can wait," he said grimly. The fact remains that the crop is infected and it didn't happen all by itself. Someone or something caused it. I'm afraid that I just can't shrug off what happened as an act of God. Maybe you can but I can't."

"Perhaps that is because you do not believe in God," said Jelkson quietly. "Frankly, I fail to see why you are so disturbed. We have lost crops before and probably will again. All we have to do is to sterilise and replant."

"Simple," agreed Kenton. "What with?"

"Fresh seed, of course." Jelkson stared at the Controller. "We have fresh seed, I suppose?"

"Then you suppose wrong," said King. He was a big, fat, jovial man and, as the accountant, he kept his fingers firmly on the pulse of finance. He looked at Kenton. "Seems that we'll have to spill the beans, Dan. Want me to tell it?"

Kenton nodded. He settled back in his chair, the cigarette burning between his fingers, and watched the faces of those around the table. He was annoyed with himself to find that one face in particular was very hard to ignore.

Susan, as he had long ago decided, was very beautiful.

"None of you know this," King said, "but we had a little trouble a while ago. Someone, we don't know who, was careless and boxed up a few spores with the processed seed. I don't have to tell you what happened."

He didn't. Lubridgida had a fecund vegetable life of its own consisting mainly of spore-bearing plants. The survival factor of the spores was so high that they would germinate on contact with any vegetable matter.

"Dan found out about it when he had the chance to do a trade for some alien seeds for the test vats. The swap was for tobacco. He called me to witness the deal and I was with him when the storeroom was opened. The trader, naturally, wanted to check. When we opened the box we found out what had happened."

"Spores in the seed boxes?" Jelkson raised his eyebrows. "How did they get there?"

"That's what we'd like to know," said King grimly. "Incidentally, only the tobacco was ruined. Nothing else was touched. In view of that the recent crop failure needs investigation. We were relying on it to replenish our seed stock."

"Incredible!" Jelkson shook his head as though he found it impossible to believe. "Coincidence, of course, but incredible just the same."

"Coincidence?" King shrugged. "What makes you say that, Jelkson?"

"Well, isn't it?"

"I'm not sure. You tell me."

"Tobacco isn't an easy crop to grow," explained Jelkson. "By that I mean that it isn't easy to breed true, not when subjected to alien radiation. I don't know why that is, but experience has taught us never to rely on it as a staple. It doesn't seem incredible to me that the seeds of say, a second or third generation crop should display odd tendencies. Number seven is a perfect example of what I mean. One day a perfectly normal appearing crop, the next rotten with disease."

"There were spores in the boxes, Jelkson, not disease," reminded King. "Can you explain how they could have got there?"

"Could it have been by accident?" Susan didn't blush as she made the suggestion, but the tone of her voice gave the impression that she did. If anything it made her even more attractive and Kenton wished that she wasn't so introverted. Career women were the very devil, especially when they were shy and doubly so when they chose a man

like Jelkson to be their guiding star.

"Naturally," admitted the accountant. "But for any such accident to have taken place would mean that someone was criminally careless."

"Not necessarily." Thorpe spoke for the first time through a screen of tobacco smoke. "Accidents happen all the time. If I understand what you are hinting then it wasn't an accident at all." He removed the pipe from his mouth, examined the bowl and poked at it with a seemingly fireproof finger. "Did you make any investigations?"

"We did what we could," said King. "The results were negative. Either it was a pure accident, in which case the spores must have contaminated the seeds before packaging, or someone in the packaging sheds introduced them. In either case the spores must have been introduced, whether by accident or design, sometime during harvesting and the sealing of the boxes."

"I disagree," said Jelkson. "There is another method which you haven't mentioned. The seed boxes are only fibre board overlaid with thin metal. Assuming that someone wanted to introduce spores into the seeds he could have done so with a slender instrument."

"Such as a hypodermic needle?" Thorpe looked intently at the botanist. "Is that what you mean?"

"A hypodermic needle would be ideal," said Jelkson evenly.

"Yes," said Thorpe dryly, "I suppose it would." He glanced at King. "Did any of the boxes show signs of puncturing?"

"No." King glanced at Jelkson. "Have you changed your mind about it being a coincidence?"

"Of course not. I was merely theorising. I say that the introduction of the spores was the result of an accident. It's incredible to think that it could be otherwise."

"We're getting nowhere," said Perchon abruptly. "Talking about the lost seeds won't replace them." He looked at Kenton. "I understand now, Dan, why you blew your top. Forget any apologies you may think you owe me. This thing is more serious than I thought."

"Serious?" Jelkson shrugged. "Surely that depends on the point of view. Admitting that the loss of any crop is serious, yet it could have been worse. Our staples are unharmed and, even if we do lose our tobacco, it can't really harm us."

"No?" King pursed his lips as he looked at the botanist. "For a man with so much brains, Jelkson, you seem awfully dumb. Don't you realise that tobacco is the most profitable crop we can grow? With those profits we subsidise our other produce. Lose those profits and up go

the price of our staples. Let them rise too high and the competition will step in and, maybe, the government. Aside from anything else we are paid on a profit-sharing percentage and, unless you've forgotten about it, lost profits hurt us where it hurts most—in the pocket. Unless we can replace our tobacco it will pay us to work as common labourers. That is unless the government step in and make us work for our keep as they can do under the emergency laws."

"What would happen then?" asked Susan. She was fairly new to the hydroponic farms and was still full of idealism. King doubted whether she had ever once thought of the financial juggling which went on behind the scenes.

"The emergency laws were passed to safeguard our people against exploitation," explained the accountant. "If the price of food rises too high the government have powers to step in and operate the plant under martial law. They will conscript us and concentrate on producing basic yeast. Home Office will send out a new staff and we will face an inquiry."

"But nothing can happen to us, can it? I mean they can't hurt us, can they?"

"Deliberate sabotage of any crop, seed, building, plant, machinery or anything which could lead to hindrance or damage to farming is punishable by first degree execution," said King. "I won't tell you what first degree execution is but it isn't pleasant. In fact, it's the most unpleasant death the experts could dream up. For minor things like incompetence, bad management and criminal negligence the penalties range from life imprisonment to a heavy fine." King shrugged. "You should read the small print on your contract, it's all written down there."

"But that only applies to us, doesn't it? Not the general staff."

"Paid servants can be fired or, if the Controller sees fit, reported to the government authority for the above penalties." King grinned at her shocked expression. "That's right, Susan, in a way Kenton has the power of life and death. Now you know why you should be nice to him."

The joke, Kenton thought, was in bad taste. He was responsible for the entire farm but, because he was responsible, his position carried the heaviest penalties. He rapped on the table to attract attention.

"I think it time we discovered something more important," he said curtly. "I still want to discover how the crop became contaminated in the first place. Jelkson, have you anything to say?"

"A little. The disease is extremely virulent. The progression of decay is fantastic, the crop now is totally infected and is in actual process

of disintegration. In view of the rapid degeneration of the crop I hesitate to perform further tests for fear of spreading the contamination."

"Is the disease recognisable?"

"No. However that means nothing. It must be a virus, probably a mutated strain, and the progress of the infection bears out my previous decision. Utter destruction and sterilisation is the only answer."

"Agreed." Kenton glanced at Perchon. "And you?"

"I can't help you," said the young man miserably. "I took all precautions and simply cannot account for the infection. Unless, of course, the disease was inherent in the plants themselves."

"Could that be so, Jelkson?"

"In this case I doubt it. Inherent disease is always possible, of course, but the shocking speed of actual decomposition is against it. At first I thought that it was inherent but it is hard to believe that the crop could have grown so well without previous signs of infection." Jelkson held up his hand to halt Kenton's instinctive reply.

"Before you blame Perchon let me make one thing clear. He was not the only one to enter number seven. He has worked in other buildings, the crops of which show no signs of harm. I believe him when he says that he has taken all precautions."

"So do I," said Kenton abruptly, and Perchon smiled with sudden relief. "But that doesn't help us. You say that the disease is not inherent?"

"I do."

"Then it must have been introduced?"

"Yes."

"That settles it. The seeds were one thing, the crop another. Add them both together and there is only one answer." Kenton drew a deep breath. "Someone deliberately sabotaged our crop."

His voice carried the hate of all men for anyone who would strike at the very roots of their existence.

Phorisci, the Denebian, smiled as an aide announced his visitor. Tall, thin, humanoid and, aside from his cat-eyes and blue-tinted skin, almost man-like, he bowed as he offered Jelkson a chair.

He had been eating, the plate on his desk half-filled with succulent vegetables and synthetic meat, but Jelkson knew that one mouthful of the appetising food would double him in a fit of retching and more would kill him as surely as prussic acid.

"I am intruding," apologised Jelkson. "I apologise. If you would prefer me to call some other time . . .?"

"Think nothing of it." Phorisci spoke Terran with scarcely a trace of accent. "If it does not offend your sight to see me partake of nourishment I would be happy for you to remain. I will soon finish and then be able to entertain you."

Jelkson nodded. He knew enough of the habits of the Denebians to know that he was being particularly favoured. Food, to them, was merely fuel. They ate to stay alive and not for pleasure. Unlike the Terrestrials they had never evolved a complex ceremonial about the necessity of eating and, while not forbidden, it was considered impolite for anyone to watch another partaking of his food.

Phorisci ate swiftly, almost mechanically, lifting his food to his mouth and chewing it as if it were a duty. Jelkson waited until the plate had been emptied.

"May I smoke in your presence?"

"Certainly." Phorisci leaned back and watched with interest as Jelkson lit a cigarette. The Denebians did not smoke and, of all the intelligent races as yet contacted, Earthmen were the only ones addicted to the illogical, utterly unreasonable habit of paying money for the privilege of inhaling harmful substances.

"Thank you." Normally Jelkson smoked very little. He smoked now for no other reason than that the air in the Denebian farm was heavy with the taint of alien chemicals. Tobacco smoke effectively numbed his olfactory passages.

"I trust that your visit is of a social nature?" Phorisci's eyes strayed to a side table on which a chess board and men were set out ready for play. "I have a new gambit which I think will interest you. It is something one of our technicians developed and, though I say it without boasting, it is beautiful in its complex logic."

"That is interesting," said Jelkson sincerely. "Have you worked out the counter-moves?"

"That is its weakness," admitted Phorisci. "As I pointed out to the technician it suffers from a certain degree of inflexibility. It allows of only three variations, more than that and it is worse than useless. I shall be happy to show it to you."

"Later," said Jelkson. Chess, to the Denebians, was a ruling passion. Coldly logical in their emotions, they relished the game as being the ultimate in a test of skill. Jelkson, himself a good player, had spent

many friendly hours with the Denebian Farm Director over the chess board.

"Later?" Phorisci straightened a little in his chair. "Then your visit is not wholly social?"

"Unfortunately, no." Jelkson drew at his cigarette, inhaled, and let the smoke trickle through his nostrils. The irritating taint in the air vanished beneath the more powerful fragrance of the tobacco smoke.

"Kenton, our Controller, asked me to call on you," Jelkson said. "He would have come himself but other business has become pressing. He knows of our friendship and hopes that you will not consider it impolite for me to convey his request."

"He was correct," smiled Phorisci. "I do not consider it impolite. Where is Kenton now?"

"At the space field. He had business with our government representative."

"Commander Ransom, your Port Authority." Phorisci nodded. "I know him, he is a good man. Well, what is this request?"

"We have recently lost our entire crop of tobacco." Jelkson gestured with his cigarette. "You know of our addiction to the plant. Kenton thought that it might be possible for you to have seeds which you would be willing to either sell or exchange. Have you?"

"Seeds of tobacco?" Phorisci smiled and shook his head. "What a strange idea! What use would we have for seeds of tobacco?"

"Experimentation, perhaps?" Jelkson stared at the Denebian. "We know each other too well for subterfuge, Director. There is no reason in the galaxy why you should not have tobacco seed or be growing tobacco plants in your tanks. It is a profitable crop and there is no harm in your trying to grow it. After all, you grow other, non-Denebian food in your buildings."

"Do we?" Phorisci seemed to tense a little in his chair. "May I ask what makes you think that?"

"Because you would be foolish not to," said Jelkson calmly. "There are only two hydroponic farms on Lubridgida, yours and ours. There are at least seven space-travelling races who call here. We ourselves grow alien foods for them and, naturally, so must you."

"Admittedly we grow alien foods," smiled Phorisci. "The Rigelians are our best customers, but tobacco?" He shook his head. "We could sell that only to your race. And how would we test it?"

Jelkson nodded. Phorisci had a point there. Both farms grew a certain amount of food for the alien races who might call at a wayward

planet and the trade, while small, was regulated by strict regulations. Sample batches of all harvests had to be fed to test animals before being packaged and offered for sale. The test animals were native to the race for which the food was intended and, inevitably, served to ensure that the food was wholesome by alien standards.

There was no possible way for any alien farmer to test his tobacco.

"So you have no seed." Jelkson shrugged and crushed out his cigarette. "Frankly, I didn't think that you had, but we had to ask."

"I'm sorry about your loss," said Phorisci. "I wish that I were able to help, but . . ." He didn't have to finish the sentence. Aside from basic chemicals and equipment there was little any one farm could do for another if it was alien.

"Never mind," said Jelkson. "We'll manage somehow."

"Naturally." Phorisci rose and moved towards the side table. "Now . . ."

He broke off as the communication box on his desk hummed to life. A blue-tinted face stared from the screen and said something in rapid Denebian. Phorisci answered him, listened for a moment, then cut the connection.

"I am afraid that I must leave you for a while," he said to Jelkson. "A routine matter, nothing of importance, but my presence is essential."

"Trouble?"

"No, nothing like that. We are ready to sterilise one of the buildings. A routine matter, as I said, but I am needed." Phorisci hesitated, his eyes on the chess board. "I hesitate to suggest it but perhaps you would like to accompany me?"

"Willingly." The botanist smiled his pleasure. "We have trouble sometimes of our own and I would be interested in seeing your methods."

Phorisci nodded and led the way to the door.

Comamnder Ransom, the Terrestrial Port Authority and the highest power on Lubridgida, was a withered, thin-faced old man who had spent the best years of his life in space. Too old for command of one of the government vessels, he had accepted the sinecure of Port Authority on Lubridgida with the determination to run the planet as if it were a ship. His failure to make the residents agree with his ideas had long since soured his already acid disposition.

He received Kenton in his office, made the customary offer of whisky and cigarettes, then leaned back and stared at the Controller.

"Before you say anything," he snapped, "let me make one thing

clear. I have no information of any ship likely to call here which is heading for Earth."

"I didn't think that you had," said Kenton. There had been a time, a couple of years ago now, when he had almost driven the Commander frantic by his asking the unanswerable. Ships, aside from the courier vessels which carried news, messages, and nothing else, obeyed no strict schedule. Company ships carried seeds and replaced personnel only. Private ships followed the path of profitable cargoes or lent themselves to outright charter. Traders operated on local routes, hopping from planet to planet and acting as interstellar carriers. Such ships were useless to anyone who had more than a hundred light years to travel.

Kenton had five hundred.

"I haven't called to ask about shipping schedules," he said. "At least not for personal reasons. We've had a little trouble at the farm and I think you should know about it."

"Trouble?" Ransom jerked upright in his chair. "Bad trouble?"

"Bad enough. Our tobacco crop has had to be destroyed. On its own that wouldn't be too important, but a week ago I discovered that all our stock seed had been ruined by spores. Now we have no plants and no seed. Have you any in the warehouse?"

"No. I send all seed received straight up to you." Ransom looked thoughtful. "All the stock seed ruined, you say?"

"Yes."

"Why didn't you tell me this before?"

"There didn't seem to be any necessity for it. Accidents happen and we could have replaced it with seed from mature plants. Now, because of the crop failure, we can't." Kenton hesitated. "I held an inquiry. The results forced me to believe that someone has deliberately sabotaged our farm."

"Sabotage!" Ransom looked sharply at the Controller. "Are you sure?"

"As sure as I can be about anything. One accident, yes. Two, no. Not just as it happened. The only seed ruined was the tobacco. The only crop infected was tobacco. What would you think?"

"Sabotage," breathed Ransom. "It doesn't seem possible. Have you any idea who did it?"

"No, we went into all that at the inquiry. "It could have been any one of the top staff."

"Do you think that one of them did it?"

"I don't know," said Kenton miserably. "It seems incredible that

anyone in such a position would even think of a thing like that. I . . . I don't like to think about it."

"That's no way to talk, Kenton," snapped Ransom. "I don't have to tell you how important the farm is to us. More now than ever. Now that . . ." He broke off and looked uncomfortable.

"Not what?" Kenton stared at the old Commander. "The farm is important, period. How can it be more important than before?"

"I shouldn't tell you this, Kenton," said Ransom slowly. "The fewer who know about it the better. Blake was in a couple of weeks ago. You know him?"

"I think so. Works for Farben Minerals, doesn't he?"

"That's right. He came in a couple of week ago with news of a big strike of copper he'd made back in the mountains. I sent him off on the next ship to carry the news to Base. If we can keep this quiet we can increase our population before the Denebians have a chance to catch up. Once we reach the minimum population superiority we can go to the Arbitration Council and claim Lubridgida as a Terrestrial planet. Now you know why the farm is more important now than ever."

"How big an increase do you expect?" Kenton looked thoughtful. "Maybe I should start increasing the size of the farm."

"And warn the Denebians what we are up to?" Ransom shook his head. "You know how these things work, Kenton. Once they get wind of a big population increase they are going to start thinking. In a race neither of us would win. As yet Lubridgida is an open planet, no one up to now has wanted the trouble of developing it. Let the Denebians know of the copper and we'd have a cold war on our hands. The planet would be flooded with immigrants and no one would be any better off."

Kenton nodded. There had been population races before as each power tried to build up their own people in order to claim a new world. Normally, there were so many planets that no one bothered about ownership. It was only when the world proved rich in essential minerals that rivalry stepped in.

"I suppose that I'll receive enough warning so as to take care of the increase?"

"Yes. I can't permit you to extend your buildings yet, but there's nothing to prevent you stepping up production of sugar for the basic yeast plant. Also, the immigrants will bring some stores with them." Ransom smiled as he thought of the intricate planning necessary to bring off the coup. To succeed close timing would be essential. The immi-

grants must arrive just prior to the case being taken to the Council and they must show enough development to satisfy the Arbitrators that the Terrestrial claim was just. He lost his smile as he thought of something.

"This sabotage at the farm," he said. "Is it possible that it was caused by the Denebians?"

"I don't know." Kenton frowned as he thought about it. "I hadn't considered it because there was no reason for them to do such a thing. But if they had news of the copper?" He stared at Ransom. "Could they have?"

"It fits in," said the Commander. "First they sabotage the tobacco crop and then, perhaps later, they ruin our sugar." He nodded, his military-trained mind already accepting as a fact that the two races were at war. "You need guards, Kenton. Above all nothing must happen to the farm. Unless you can keep in production we'll have to postpone our claim for this planet. I'll send to Base for a company of militia."

"No." Kenton smiled at the expression on the Commander's thin features. "If you do that you will give the game away. No guards, Ransom, we can take care of the farm ourselves." He hesitated. "There's one other thing. If they wanted to sabotage our production, then why pick on tobacco? The loss of that crop can't really hurt us. We can do without smoking if we have to. It doesn't make sense."

"The Denebians are alien," reminded Ransom curtly. "How do we know just how they think? To them tobacco could appear as an essential to the human race. After all, almost everyone smokes and, to a non-smoking race, it could appear as if we depended on tobacco more than food." He shrugged. "To the Devil with the reason, they did it and that's good enough."

"I won't argue," said Kenton. "Now about that crop. I'll be needing a fresh supply of seed and I can't afford to wait for it to come from Home Office. What ships are due in?"

"Cormack might arrive tomorrow, he's on the Holwen-Rachi-Lubridgida circuit. The Seven Star ship should come in sometime this week and the Immishti Transportation Co. are about due. Why?"

"I'll have to go begging," explained Kenton. "I'll catch the first ship out and do some planet-hopping until I locate some seed. When I do I'll charter a ship and come straight back. It'll be expensive but it will save maybe six years wait for fresh seed from Earth. You agree?"

"Can't someone else go?" Ransom looked dubious. "I don't like the idea of your leaving the farm at this time."

"I'm the obvious one to go," argued Kenton. "I can authorise the

expenditure, providing you countersign it, and no one else can really be spared."

Ransom hesitated. As Port Authority he was legally Kenton's superior and his permission was needed before the Controller could leave his post. Unless he had that permission Kenton would be classed as a grade one criminal guilty of sabotage by neglect.

"I'll be back within a few weeks," urged Kenton, quite aware of what was passing through the other's mind. "It's either that or we do without tobacco for the next few years. With the population increase you expect that isn't going to be good. You know how important it is to keep up the morale of new immigrants, without tobacco they're going to feel pretty low."

"Maybe that's what the Denebians did it for?" mused Ransom. He nodded. "All right, Kenton, you have my permission to leave. I'll hold the next ship due in and save you a berth. Good enough?"

Kenton smiled.

Doctor Thorpe stood at the entrance to his dispensary and looked thoughtfully at the buildings before him. The farms were built on rectangular lines, the tank buildings separated by concrete paths, the whole structure clean and white with anti-spore chemicals sprayed on both paths and the concrete walls of the buildings. A man walked slowly past the little doctor, a tank on his back and a nozzle in his gloved hands. Carefully he sprayed every inch of the path before him.

"Respraying?" Thorpe stepped back as the mist of dissolved chemicals approached his feet. "I didn't think it was due so soon."

"Jelkson's orders." The man straightened and eased his back. "The whole farm has to be gone over."

"Don't let me stop you." Thorpe sucked at his pipe as the man moved on. He smiled as Susan came towards him. "Susan! It's good to see you. I wondered if you were going to join me for coffee."

"Sorry I'm late," she said. "We've just finished sterilising number seven. I thought that I'd never get away."

"A long job, isn't it." Thorpe led the way into the dispensary and, loading a perculator, switched on the heating element. "Coffee won't take long. Sit down and rest a while, you look tired."

"I feel tired." Gratefully Susan slumped into a chair. "You know, Doc, sometimes I love this work and sometimes I hate it. I think that this must be one of those times." She sighed, automatically patting a

long strand of blonde hair back into place, and her lips pursed a little as if she were a spoiled young child getting ready to cry.

"You don't really mean that." Thorpe turned as the perculator began to boil and busied himself with cups, milk and sugar. "You're just tired from overwork. Here," he handed her a steaming cup. "Drink this and you'll feel better."

"Thank you." Susan reached out for the cup, smiling, then lost her smile as she saw his expression. "What's the matter?"

"Your hands." Thorpe set down the cup and took one of her long, slender hands between his own. The delicate skin was spotted with angry flecks of red. "Are they both like this?"

"Yes." Disinterestedly she held them both up for inspection.

"Do they hurt?"

"They itch a little," she confessed. "I noticed it a little while ago." She stared at her hands and shrugged. "It's probably a rash of some kind from the chemicals. Jim is always telling me to wear gloves, but I keep forgetting."

"Jim?"

"Mr. Jelkson." Susan really did blush this time. Thorpe smiled.

"You were right the first time, Jim it is. I had forgotten that Jelkson had a first name." He passed Susan her coffee and stared thoughtfully at her as he stirred his own. "You like Jelkson, don't you?" he asked abruptly.

"Yes." Susan stared defiantly at the old doctor. "I know that he isn't very popular with the others but I think that he is a fine man. They just don't understand him, that's all."

"And you do, of course." Thorpe finished his coffee and reached for his pipe. "Nothing wrong in that, Susan. Jelkson is a fine man but he is too introverted. Marriage could do a lot for him."

"I never said anything about that."

"When an introverted man like Jelkson meets an attractive girl who takes an interest in him, then there is only one thing he can think about," said Thorpe. "Has he asked you yet?"

"No."

"He will," promised Thorpe. "And you?"

"I don't know," she said slowly. "I like Jim a lot but . . ."

"Not enough to marry him?"

"I don't know," she said again. "You've got no right to ask me."

"Put it down to an old man's curiosity," smiled Thorpe. "After all you're a big girl now and it's natural for you to think of marriage. Your

only trouble is deciding whom to choose. How about Perchon?"

"Not Perchon!" Susan shivered a little. "I don't like him at all."

"He is rather a hell-bender," admitted Thorpe. "Most of his money goes on the girls in town and the rest in trying to win back what he's spent at the casino. King is a married man so you can't waste time on him. Kenton? How about Dan?"

"He never notices me," said Susan. "For him I don't exist."

"No?" Thorpe shrugged. He knew better. He had seen the way the Controller stared at the young botanist when she walked past him and he knew human nature too well to be fooled. Susan, though she denied it, must have known too. No woman could be close to a man for long without having a pretty shrewd idea of how he felt about her.

"Finished your probing, Doc?" Susan's smile took any sting from the words. "I do believe that you won't rest until I'm well and truly married. If you don't promise to avoid the subject then I won't have coffee with you again."

"I promise," said Thorpe quickly. His banter had served its purpose and now he got down to the real business. "Before you go, Susan," he said casually, "just let me have a look at those hands of yours. A rash like that can develop into something quite painful."

"It's nothing," she protested. "Probably an allergy symptom. It'll clear up soon enough."

"Maybe." Thorpe squinted at the tiny flecks then went to fetch an instrument. He passed it over her hands, grunted, then reached for a jar of salve. "Rub this well in, wash in hot water after an hour and use more of this salve. Repeat the washing each hour until all itching vanishes. Got that?"

"I think so." Susan made a face at the sight of the thick ointment but obediently rubbed it into her hands. What is it, Doc?"

"Nothing serious, but it could be bothersome." Thorpe glanced at his instrument and then back at the girl. "Tell me, Susan, did you handle the plants with your bare hands during the sterilisation?"

"No. I didn't touch them at all. The labour squad cleared the tanks and took them to the incinerator."

"I see. When you examined them, did you touch them with bare hands then?"

"The first time I examined them?" Susan frowned, pausing in her task of applying the salve. "Yes. Yes, I think I did. Why?"

"No reason." Thorpe rose and picked up his instrument. "Do you happen to know where Jelkson is now?"

"He went over to see the Denebians," said Susan. "Kenton asked him to go. He thought there might be a possibility that they had some seed and, as Jelkson is so friendly with them, he suggested that he ask for some."

"And Kenton?"

"He went into town to see Ransom." Susan finished anointing her hands. "There! Satisfied?"

"So far, yes. Now wear gloves and don't forget to wash in hot water every hour. Water as hot as you can bear and use plenty of salve afterwards. Call in tonight and I'll have another look at them."

"Yes, doctor," she said primly. "Anything else, doctor?"

"Yes," he said sternly. "I've got things to do now, so you can wash the cups and clean out the perculator for me." He headed towards the door, halting on the threshold to look back at her. "And Susan, better make up your mind pretty fast, I'm still a bachelor, remember."

He smiled wryly at the sound of her laughter.

Jelkson was curious as he followed Phorisci from the Director's office into the heart of the Denebian hydroponic farm. While no great attempt was made at secrecy yet no open co-operation existed between the two farms. Visitors to either were usually entertained in the administration buildings, though there had, occasionally, been exchange visits of inspection. To invite a visitor to watch the sterilisation of a building was something which just didn't normally happen.

Jelkson was intrigued and, his mind being as it was, he sought for a logical explanation.

Friendship he immediately discounted. There could be no real friendship, not as men understood the term, between alien races. Respect, yes. Friendship, no. The very difference of the thought processes of the races were against it. Customs, mores, differing points of valuation, all presented an insuperable barrier to the warm intimacy which friendship implied. So Jelkson, even as he smiled and chatted with his guide and host, was busy trying to solve the problem.

Phorisci could well have left him in the office to wait his return. He had done so on other occasions and Jelkson had expected to be asked to wait. Instead he had been invited on a tour of inspection, for that was what it amounted to. The obvious reason for such an invitation was to make sure that the office remained vacant.

Jelkson considered it, mulling over every facet of the problem, then

reluctantly dismissed it. He could see no reason why a visitor, any visitor, should not know of his presence.

"The building to be sterilised is just over there," said Phorisci. "We had a regrettable accident, an alien crop, Rigelian lanke-weed, promised well and then developed virulent tumours. Our chemists say that wrong feeding was the cause but I dare not take any chances. Destruction and sterilisation is the only answer in such a case. Do you agree?"

"Certainly." Jelkson looked with interest through the glass of the building. "I see that you have not yet cleared the tanks."

"Not yet. First we sterilise and then, when the crop is dead, we clean out the building. You use different methods, perhaps?"

"Slightly different," admitted Jelkson. "We remove and incinerate the crop before sterilisation." He glanced at Phorisci. "Aren't you afraid of the virus, if it is a virus, contaminating the next crop? I would think that the obvious thing to do would be to remove the infected growth first."

"No. We sterilise it first. That prevents any danger of spreading the infection by confining it to this one building. If we were to remove the crop it would mean sterilisation of all matter which came into contact with it."

"Of course, that is our biggest problem." Jelkson saw no reason to be at all secretive about so important a subject. Phorisci smiled and shook his head.

"Our methods differ, my friend. We use direct radiation for sterilisation purposes. It has the advantage of destroying both crop and infection."

"Direct radiation?" Jelkson looked thoughtful. "But isn't that extremely dangerous?"

"Not very. There is some danger, naturally, but it is minor and the method is perfectly safe providing precautions are taken." Phorisci called to a blue-skinned worker and took something from him.

"See? This is the cartridge we use." He held out a small object a little like an old-time hand grenade. "Here is the fuse. Here is the safety device, remove it and the cartridge is primed. Here is the detonator. It can be set for any period up to five minutes, ample time for the operator to get out of range. Inside the casing there is a small quantity of unstable elements which, when detonated, disintegrate at a controlled rate of fission."

"Neat." Jelkson took the thing and examined it. "A miniature

atomic bomb. I take it that the fission is controlled to below the violent level?"

"Naturally, we do not wish to destroy our buildings." Phorisci took the object and handed it back to the worker. "Its sole purpose is to release a flood of gamma and other radiation utterly fatal to all animal and vegetable life. There are some secondary effects but they are minor. The building should be allowed to 'cool' for a few hours after use before entering, and for a period of several days before replanting."

"To allow the artificial radioactivity to die away." Jelkson nodded. "The greatest danger would be in handling the exposed vegetation but a great deal would depend on the radiation-tolerance of the race concerned. I believe that we have a higher tolerance than yourselves so, in fact, there would be less danger for us than for you." He glanced to where the worker had disappeared into the building. "How great is the lethal range?"

"About fifty yards. The walls and roof of the building tend to shield the outside and, after the exposure, the secondary effects are quite local." Phorisci looked up as the worker gestured from the door of the building. "We had better withdraw now. He is signalling that he is about to pull the release."

Jelkson allowed himself to be led to a safe distance. He was interested in the Denebians sterilisation procedure and, when he compared it to his own, slow and tedious removal of crops and flame-searing of buildings, he could see immediate advantages.

"Now," said Phorisci quietly, and, instinctively, Jelkson shielded his eyes.

"No need for that," said the Director calmly. "Little of the energy is wasted in the visible spectrum." He glanced at a chronometer attached to his left wrist. "There! It is over."

"So soon?" Jelkson felt a vague sense of disappointment. He had expected something more spectacular. Phorisci must have guessed what he was thinking for, as he led the way through the buildings, he chuckled.

"The old methods were more of a show, I admit, but think of the work! To flame-burn every square millimeter and then not to be sure that sterilisation was complete. No, the new methods are far more reliable. In a few months there won't be a farm using anything other than the method you have just seen."

"This system is new then?" Jelkson halted by a building and casually glanced at the ranked plants just visible through the glass of

the roof. "How new?"

"The factory sent me sample bombs a few weeks ago. We have used them perhaps twice." Phorisci took Jelkson by the arm and continued his walk. "Normally I would hesitate to use them but the test reports were so reassuring that I felt I had no option. Labour, as you know, is always short and, with these cartridges, it will be possible to sterilise at every harvesting. It will be a comfort to know that no stray virus or mould will be able to attack the new planting."

"A great comfort," said Jelkson dryly. He remained silent during the rest of the conducted tour.

It was night and the two moons of Lubridgida hung like a pair of matched pearls in the cloudless sky. Kenton stared up at them, the smoke from his cigarette softening the thin lines of his features as they were reflected in the window before which he stood. Abruptly he turned and stared at the two men in his office.

"I still can't believe it," he said. "Jelkson, are you certain?"

"I saw it," said the botanist. "I don't think that Phorisci knew what he was doing. He gave me a conducted tour on the excuse that he wanted to show me how they sterilise their buildings. That was just an excuse. What he really wanted to prove was that they were not growing tobacco."

"Are they?" King, fat, rumpled, his normally jovial features hard now and taut, stared at the little botanist. Jelkson shrugged.

"I didn't see any."

"Does that prove anything?" Kenton sounded bitter. "I told you what Ransom said. It is perfectly possible that the Denebians learned of the strike and are playing their own game." Savagely he slammed the first of one hand into the palm of the other. "Damn them! If I could only be sure!"

"How sure it 'sure'?" snapped King. "Jelkson has told us that he now believes the tobacco crop was ruined by exposure to radiation. The Denebians used direct radiation bombs to sterilise their buildings. They could have smuggled one into number seven. If they had then the results would match what we found. Right, Jelkson?"

"Yes." Jelkson sighed. "I'm afraid that is the only conclusion I can draw from the evidence at hand. The fact that they are not growing tobacco means nothing. Phorisci could know that seed is on the way to him by the next ship."

"He could have some already." snapped King. "With our crop destroyed the market is wide open. All they have to do is to step in

and supply the demand. Once they grab the market we take a back seat." He sat back and glowered at the windows.

"I disagree," said Jelkson primly. "I think that I can claim to know more about the Denebians than any other man on Lubridgida. They are coldly logical and they do not lie. When Phorisci told me that he had no seed he was telling the truth. However, he had not told me that he had no seedlings. He took me over his farm to show me that he was not lying by restrictive truth. The Denebians have no tobacco."

"But why tobacco?" Kenton looked helplessly at the botanist. "If they wanted to sabotage us with their trick bombs then why ruin the tobacco? That's what I can't understand."

"I've thought about that," admitted Jelkson. "My theory is that they don't believe us when we tell them smoking is just a habit. Almost everyone smokes and, as far as the Denebians are concerned, everyone smokes most of the time. They must think that smoking is an important part of our diet." He gestured as he saw Kenton's dubious expression. "It's just a theory."

"They're after the market," said King grimly. "To me that's obvious. What isn't so obvious is how they managed to ruin both our seeds and the crop." He scowled and rubbed at his jawl. "Dan, what are the chances of a Denebian creeping in here unobserved?"

"None."

"That's what I would have said. The bomb I can swallow, it could have been planted at night, but the seeds are something else." He looked at the Controller. "You know what I'm thinking?"

"Yes." Kenton smashed out his cigarette. "I've been trying not to think of it because I don't believe that any man could be so low. But there's no other answer. Someone has sold himself out to the Denebians." He took a deep breath. "The question is, who?"

Kenton stared at the other two men as his words faded into silence. Impatiently he fumbled in his pockets for cigarettes, lit one with hands which trembled a little, and felt the muscle high on one cheek begin to twitch in warning of mounting irritation. He sucked smoke and forced himself to be calm.

"Let's look at it this way," he said. "At the inquiry we found that someone, not a Denebian, had introduced spores into the seeds. I'll leave out the question of accident. With the news about the radiation bombs I don't think we need even consider it. So, someone is doing the damage and, from what we know, they are getting paid for it. Let's start considering suspects."

"Take me," said King. "What would I gain?"

"Nothing. Also you didn't have the opportunity. You have no contact with the Denebians that I know of. You never go into town and, by ruining the crop, you would be cutting your financial throat."

"That applies to all of us," reminded King. "Who else?"

"Jelkson." Kenton raised his hand at the botanist's gesture of indignation. "You are in contact with Phorisci. You have had ample time to cook up any scheme he might suggest. You are friendly with him and could have obtained the bomb. You had access to the seeds and to number seven." Kenton dragged at his cigarette. "All that's missing is motive. Well?"

"I didn't do it," said Jelkson simply. "I couldn't have done it."

"All right, personally I don't think that you did it either, but I could be wrong." Kenton paused. "Susan, do we consider her?"

"No!" Jelkson half rose and then relaxed. "Not Susan. I'd trust her with my life, she simply couldn't do such a thing."

"Count out the Doc too," said King. "I'll vouch for him."

"That leaves Perchon and myself." Kenton shrugged. "I know I didn't do it but that means nothing. What do you think?"

"No motive," said King. "As Controller you have everything to lose and nothing to gain. What about Perchon?"

"It could be Perchon," said Jelkson suddenly. He looked at the others. "We know that he spends most of his off-duty time in town. He could have contacted the Denebians there. He is a heavy gambler and must be in need of money. He is irresponsible and would see no great harm in destroying the tobacco. He was in charge of the infected crop."

"That's right," said King slowly. "He fits, Dan. It could be him."

"It needn't be." Kenton turned back to the window. "I don't like to crucify a man behind his back. If we only had some sort of proof to go on. Something concrete instead of mere suppositions."

He paused, waiting for the inevitable suggestion and, when it came, he was not surprised to find that it was Jelkson who proposed it.

"We could search his room," said the botanist. "We could do it now while he is away in town. We might be able to find a clue."

Kenton didn't smile but the twitching in his cheek eased a little. He sighed and, turning, let his shoulders slump in resignation.

"I don't like it," he said. "But if you both agree?"

They did.

Thorpe, Susan and Perchon were waiting in the office when the three men returned. Susan looked pale and the heavy gloves she wore

accentuated the slimness of her arms. Perchon seemed bewildered and moved restlessly about the office while Thorpe, sitting in the chair smoking his pipe, was the calmest of them all. A boxed instrument stood beside him on the floor where he had placed it. He rose as the three men entered.

"Sorry to barge in like this, Kenton, but something cropped up which I think is important."

"Is it about the crop failure?"

"Yes."

"It's all over," said Jelkson bitterly. "We know who did it." He glared at Perchon. "There's the man. There's the dirty swine who sold us out to the Denebians."

"What!" Perchon took a step towards the little botanist then, with a visible effort, controlled himself. "I think that you'd better apologise, Jelkson, and you'd better do it quick before I knock your teeth down your lying throat."

"There's no need for that sort of talk," rapped King. He took something from his pocket and threw it onto the desk. It rolled a little before settling, a small, heavy object shaped a little like an old-fashioned hand grenade. "We found this in your room, Perchon."

"My room?" Perchon stared at it. "What is it?"

"A radiation cartridge such as is used by the Denebians to sterilise their buildings. One just like it was used to ruin the tobacco crop. Maybe you'd like to explain how it came to be in your room?"

"I didn't put it there," said Perchon. "I've never seen it before."

"Naturally you'd say that," sneered Jelkson. "That's what I thought you'd say. But you can't lie your way out of this. You could have ruined the seeds. You could have set off the radiation bomb. You had this thing hidden in your room. If that isn't proof, then what is?"

"Sit down, Jelkson." Thorpe pushed the excited botanist into a chair. "Now, let's have some sensible talk about this. You say that you found this bomb in Perchon's room?"

"I didn't find it," snapped Jelkson, meticulous as ever despite his excitement. "King found it."

"In Perchon's room?"

"Yes."

"I see." Thorpe looked at Kenton. "What made you decide to search Perchon's room?"

"Jelkson came to me with the discovery that the tobacco failure had been caused by exposure to hard radiation. He saw Phorisci sterilise one of his buildings with a similar bomb to that we found in Perchon's

room. We decided to search his room merely either to eliminate or confirm him as a suspect." Kenton shrugged and lit a cigarette. "Something had to be done, Thorpe. It was obvious that we had a saboteur among us and it is our duty to find him."

"And you've picked on Perchon?"

"I've picked on no one," said Kenton deliberately. "It could have been any of us, we all had access to the seeds and to number seven. Discovering a radiation cartridge in Perchon's room seems, to me, to need explaining." Kenton sighed and stared at the red-headed man. "I'm sorry, Perchon, but you must see how it is. Until you prove yourself innocent I can only assume that you are guilty. I have no choice but to turn you over to Commander Ransom."

"For what?" Perchon glared at the Controller. "Are you telling me that I'm guilty of sabotage?"

"No. All I am saying is that I have sufficient proof to charge you with it. Commander Ransom can weigh the evidence and give his verdict. I'm sorry, Perchon, but I have no alternative."

"I didn't do it," said Perchon. He was sweating, his forehead glistening with tiny beads of moisture. "Someone must have planted that bomb in my room. I've never seen it before in my life, I wouldn't even have known what it was. You can't condemn a man to first degree execution on evidence like that."

"Commander Ransom will do the condemning," reminded Kenton wearily. "He is a just man. If you are innocent you have nothing to fear."

"That's the bunk" snapped Perchon desperately, "and you know it. Ransom will think as you do. He will insist that I clear myself, and how can I do that? If you don't believe that I'm innocent he will certainly think I am guilty." He looked at the others. "But why me? Aside from the bomb, which was planted in my room, what case is there against me?"

King told him. He told him with a curt abruptness which left no doubt as to his conviction as to the other's guilt. Perchon listened without interruption and, when the accountant had finished, he seemed to have shrunken into himself.

"It sounds good," he said bitterly. "As far as circumstantial evidence goes I haven't got a chance. I don't suppose that it's any good me saying that I didn't do it?"

"Ransom will decide that," said Kenton. He inhaled at his cigarette. "I'll record my testimony and leave him to make the decision."

"Record your testimony?" Thorpe frowned. "Why? Why can't you give it in person?"

"I'm catching the next ship out," explained Kenton. "Ransom has approved my leaving to purchase supplies of tobacco seed. I doubt if I will be here when the inquiry opens." He hesitated, looking not at Perchon but at the thin trail of smoke rising from his cigarette.

"I hate to say this," he said quietly, "but it has to be said. "If you are guilty, Perchon, and frankly I cannot see how you can be found innocent, then you have one chance to undo some of the wrong you have caused. An inquiry cannot do other than hurt our relations with the Denebians. The sentence, without doubt, will be first degree execution. I don't know how you feel about that but, personally, I cannot think of anything worse. If you would prefer to take the easy way out I am sure that the doctor will assist you."

"Suicide?" Perchon dabbed at his streaming forehead. "For what? To prove that I'm guilty?" He stared hopelessly at the hard faces surrounding him. "You really believe it, don't you. You all honestly believe that I'm guilty."

"No." Thorpe smiled and shook his head. "No, Perchon, I don't believe that you are guilty."

"No?" Kenton looked up, his face strained. "What makes you so sure?"

"Because I know who really did do the sabotage," said Thorpe evenly.

He stared at the twitching muscle high on Kenton's cheek.

"This trip of yours," Thorpe said abruptly. "Tell me about it."

"It's a routine matter," said Kenton. "We need more seed and I'm going to buy some. I've permission to leave and King will authorise money for the purchase."

"I see." Thorpe nodded as if he understood. "As the seed may be expensive and as you may have to do quite a bit of travelling you will need a rather large amount of cash. Do we have that much available?"

"If not I can draw on other Company farms for my needs." Kenton dragged impatiently at his cigarette. "May I ask what concern this is of yours?"

"None, naturally. I was just interested."

"I don't see why you should be. It is normal procedure. But never mind that, what makes you think that you have discovered the saboteur?"

"I don't think I have discovered him," said Thorpe quietly. "I know who it is and, if you will be patient, I will prove it." He reached down and lifted his box onto the desk. "Firstly, I think it must be plain that the criminal must be someone with motive, opportunity and availability

of method. We know that the crop failure was due to a radiation cartridge being detonated in number seven greenhouse. That cartridge must have been exploded before Susan went to examine the plants."

"Obviously," snapped Jelkson impatiently. "Perchon fired it before he left for town."

"Did he?" Thorpe shook his head. "I think not. As soon as I discovered that radiations were the cause of the crop failure I did some investigating. I took the trouble to call in on Phorisci, you were present then, Jelkson, but we didn't meet. I explained what I wanted to the sub-director and he arranged to meet me in Phorisci's office. We had a most interesting conversation."

"So that was why he invited me to see the sterilisation!" Jelkson nodded as if at the settling of a nagging doubt. "Why didn't he want us to meet?"

"I requested that my audience be private. I made myself mysterious enough to intrigue the sub-director and, perhaps because we have played chess together in the past, he agreed to keep my visit a secret. I wasn't there long."

"Why did you go in the first place?" asked King.

"To find out whether or not they could help me solve a problem," said Thorpe blandly. "They could and they did. I asked them about sterilisation techniques, I heard of the radiation bombs from my Denebian opposite number on a visit to town. He was quite worried at the time because of the potential danger of uncontrolled radiations. I remember our conversation and I went to find out the answer to a single question. I wanted to know the maximum time between the firing of the bomb and the begin of vegetation decay. The answer, gentlemen, is three hours."

It didn't register. Thorpe could tell it from their blank expressions. All of them, with the exception of Kenton, looked irritated at what they considered a waste of time. Kenton was just irritated. He sat and smoked, his left hand clenched as though he found it almost impossible to control his impatience.

"Perchon went to town at three in the afternoon," said Thorpe. "Susan examined the tobacco crop four hours later. At that time the plants showed signs of decay. Whoever set off the bomb it could not have been Perchon. At that time he was in town and didn't return until next morning. Incidentally, I have taken the trouble to check up on him. There are five witnesses who will swear to his presence from four in the afternoon until late in the evening. I have no doubt that other witnesses could be found to account for the rest of the time."

"They could," said Perchon emphatically. "Six of them. We played poker until dawn." He smiled with sheer relief. "Thanks, Doc. I guess that clears me."

"No it doesn't," snapped King. "The time margin is too small and, anyway, you could have used a timing device."

"He could," admitted Thorpe, "but he didn't. Perchon only returned to the farm the next morning and attended the inquiry as soon as he arrived. At that time number seven was under guard and, later, it was occupied with the sterilisation crew. Perchon had no chance to enter it unobserved and less chance to remove the exhausted bomb or any timing device used. The shell of the bomb was not discovered so someone must have removed it during the night."

"Sounds logical," admitted King. "I hadn't thought about that."

"Thank you." Thorpe smiled at the beaming Perchon and rested his hand casually on the box he had lifted onto the desk. "We can eliminate Perchon. In fact he is the only one we can eliminate so easily because he is the only one with a fool-proof alibi."

"So we're back where we started," said King worriedly. "No proof against anyone."

"It isn't quite as bad as that," said Thorpe. "We do have proof and, as I said, I know who is guilty."

"Who?" Kenton rose from his chair and strode toward the windows. He stood facing outward for a while then turned and regained his seat. "Who was it?"

"Let us run over the events of that evening," said Thorpe with deliberate attention to detail. "Susan examined the plants at seven. At that time decay had just commenced and, naturally, she handled the leaves to examine the minute traces. She then called Perchon who, after making tests, called Kenton. All three met in the building then Kenton left and the other two continued their duties. Between Susan discovering the traces and Jelkson checking her findings was a lapse of several hours. Is that correct Jelkson?"

"Yes. Susan reported to me early that evening. I was busy and couldn't get around to checking until later. It was fairly late when I called Kenton, in fact I thought that he would have been asleep."

"Thank you. Susan in fact, was alone in the building from seven until about an hour later. Jelkson joined her about eleven and took an hour to make his tests." Thorpe shrugged. "The times are not important. What is important is the danger period for secondary radiation after use of the bomb."

"Phorisci told me that it was several hours," said Jelkson.

"For Denebians, yes," agreed Thorpe. "But our radiation tolerance is lower than theirs. But I am not concerned with secondary radiations, what I am interested in is the radioactivity of the exhausted bomb itself. That radioactivity, according to the Denebians, is so high that they must wait several days before they dare approach it."

"I begin to see what you're getting at," said King. "We didn't find the shell of the bomb so someone must have removed it."

"Exactly. And that man is the saboteur." Thorpe glanced at the girl. "Susan remove your gloves." He watched as she peeled them slowly from her hands. The tiny flecks had spread until both her hands were a raw mass of ugliness. She held them before her, their swollen redness almost obscene against the smooth whiteness of her arms. Jelkson made a strangled sound in his throat and, suddenly, was beside her, his face reflecting his anxiety.

"It isn't serious," assured Thorpe. "We caught it in time." He looked at the others. "Susan, for some reason, does not like wearing gloves. She handled the plants with bare hands and is now suffering from radiation burns. She was unlucky in that she handled them so soon after exposure to the radiation bomb. But the point is this, you can't hide radioactivity. Whoever handled that exhausted bomb must have contaminated his clothing or his flesh and," he rested his hand on the box before him, "with this scintillometer we shall find him."

"Damn you, Thorpe!" Kenton surged to his feet his features a mask of hate. "Must you go through all this? You said you knew who it was. If you do know then tell us and get it over with. Who was it? Who?"

"Don't you know?" Thorpe knew that he was being cruel but he could find no pity for the man before him. Understanding, yes. Pity, no. Men do not pity those who destroy the scaffold of their life, but, staring at the tormented face before him, he felt a sudden revulsion.

"You are the man," he said tiredly. "You are the only man it could be."

For a moment Kenton thought his head would burst then, as the shock passed, he felt a dull resignation steal over him. It was over. All his plotting and planning, his cleverness and desperation, all his cunning and use of his position, all was over.

He had failed.

Numbly he sat down. He was surprised to find that he had a cigarette between his fingers and he lifted it to his mouth, inhaling and exhaling with automatic gestures, not really knowing or caring what he was doing. He even listened to Thorpe as he piled up the damning evidence.

"Who else could it be?" said Thorpe. "The criminal had to be someone with three things; motive, opportunity and availability of method. Kenton is the only one with all three. He, like every other farmer, received sample radiation bombs from the manufacturers. Instead of issuing them he retained them. When we search we shall probably find the others where he has hidden them. That takes care of the availability of method, the seeds, of course, were ruined by easily obtainable spores, but only he could have destroyed the tobacco crop in such a way that it would appear to have been caused by a virus."

"I can't believe it," said King sickly. "The Controller!"

"Being Controller gave him the opportunity," continued Thorpe. "Who would question his presence anywhere in the farm? Who would even suspect him of deliberate sabotage? His position was his surest safeguard."

Kenton became aware of the doctor looking at him. He did not return the gaze. He was thinking, not of what Thorpe was saying, but of a planet five hundred light years away, a planet of green fields and blue seas, fleecy white clouds and laughing people. Home.

"Kenton is insane, of course. Not insane as is generally understood by the term, but unbalanced by frustration and inward conflict. He doesn't want to be here. He wants to go home but, as Controller, he can't just leave without being liable for heavy penalties. So he had to think of some way in which he could get off Lubridga." Thorpe sighed. "His plan was brilliant and it almost worked. First he destroyed the seeds and then the actual crop. He knew that he wouldn't be suspected and, more important, he had a good reason to ask Ransom to give him authority to leave his post. But space travel is erratic, he couldn't just catch a ship home, he had to planet-hop on stray traders and company vessels, hopping nearer and nearer to Earth until he could make the final jump."

"What about the Denebians?" That was Jelkson, his hated features twisted like those of a monkey as his clockwork brain gnawed at the logic of the problem. Kenton smoked and stared and listened, still without real interest, but with the appearance of attention. He was more interested in something else.

"Luck," said Thorpe. "Ransom told me about that when I went into town. Sheer luck, but Kenton's plan would have worked without Blake's strike. Ransom is naturally suspicious of anything not human, given the hint and he would automatically think of the Denebians as being behind the sabotage. Planting the bomb in Perchon's room was insurance against discovery. Kenton didn't care what happened to

Perchon just so long as he could get off-planet." Thorpe sighed.

"Peculiar, isn't it. All Kenton wanted to do was to get home. But to do that he needed money for passage, an official authorisation so that he could obtain food while on his travels, and a good reason for deserting his post. Once off-planet he would have been safe. He would have been ahead of the couriers and we could never have warned the planets against him."

Too slow! Kenton hid his face behind a veil of smoke. Had he been too slow? One more day and he would have succeeded. One single day!

The fools were still talking about his great failure, mouthing nonsense about Ransom and first degree execution, of trials and punishment. He dug the fingers of his left hand into his palm, feeling the pain from the red patch of the radiation sore, the sore caused by the hot shell of the bomb when he had scooped it up while pretending to examine the plants. Only a sore, but it was enough to convict him beyond doubt. He had known of the danger and accepted it because there was nothing else he could have done.

Just as now there was nothing else he could do but . . .

Muscles exploded into action as he surged from his chair. Faces peered at him as he lunged forward, not towards them, but towards the clean, wide expanse of the windows. He jumped as he neared them, hurling himself forward with all his strength and glass shattered in a thousand crystalline shards as he dived through.

The moonlight was in his eyes as he fell.

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Gotterdammerung

In this article a popular writer on scientific subjects discusses both the immediate and more far-reaching affects and their causes of the dropping of the H-Bomb on a large centre of population

A tremendous burst of light over London—lingering as a blue-white, perfect hemisphere of fire a thousand times as bright as the sun expands into a white hot fireball; a tingling feeling of warmth on the skin and every nearby building and tree standing out bathed in glorious golden, purple, blue and violet colours. There's not a sound as, like a futuristic, pyrotechnic advertisement, the giant fireball grows and its colour changes through yellow, orange and scarlet to a cooler, dull red glow. Then, in a minute and a half, the air blast smashing windows and tearing the slates off the roofs, quickly followed by a deep, sustained roar as if the end of the world is at hand. And it is—for you've just seen a *small* hydrogen bomb exploding over London.

As you watch, the fireball rises skywards trailing a flaming stalk that, at a height of two miles, throws out a typical mushrooming cloud. The ball continues to rise, losing its colour until it is a dull grey and throwing out two more mushrooms several miles apart. A dense pall of smoke begins to rise all along the horizon

and already the flicker of flames from the burning city is reflected from the smoke.

You are one of the lucky ones for you are still alive and uninjured but not all the ten per cent of the readers of this will be so lucky. Two million people, men, women and children will be dead or dying in the holocaust that is converting Earth's greatest city into a funeral pyre. Unbelievable? It can't happen here? A third of a million civil defense volunteers don't agree with you. How powerful is a hydrogen bomb and what are the after affects going to be in a radioactive, hydrogen bombed city? What chances have YOU?

Full scale work on the hydrogen bomb began at Los Alamos back at the beginning of 1950 and two have already been tested at Eniwetok by the Americans, whilst the Russians have tested one. Research began because there is a limit to the power of an atomic bomb, fixed by the speed at which the critical mass of fissionable material can be reached. The maximum size of an atomic bomb is about ten times that known as the normal

atomic bomb, the plutonium one dropped over Nagasaki ten years ago, but there is no theoretical limit to the power of a hydrogen bomb—although it would not be much use as an offensive weapon if it was too heavy to be carried by an aircraft.

The weight of a hydrogen bomb as used by the Americans is said to be about 12 to 16 tons, near the limiting load for modern aircraft. The power of the present hydrogen bombs can be estimated reasonably accurately: the Nagasaki bomb was equivalent to 20,000 tons of T.N.T., the first hydrogen bomb experiment at Eniwetok was equivalent to about three and a half million tons of T.N.T. and the second experimental one two years later in 1954 was several times larger. It appears that the lower economic limit to a hydrogen bomb is equivalent to about a million tons, a megaton, of T.N.T. so that we can expect one hydrogen bomb to be between 50 and 500 times as powerful as an old fashioned atomic bomb. Within these sizes the radius of damage by a nuclear bomb increases as the square root of its power but the area damaged is directly proportional to its power.

Two factors do limit the maximum economic size of a hydrogen bomb; beyond a certain power there is a law of diminishing returns and the blast of a very large bomb would push straight up through the Earth's atmosphere and dissipate most of its force in space, any increase in power would only discharge more energy into space. The other factor is the amount of radioactive dust that would be scattered by winds and raise the radiation level of the air to well above that which would kill all

life on Earth. One 500 ton hydrogen bomb, containing cobalt to absorb neutrons from the thermonuclear reactions and become a gamma ray emitter lasting for years, will do this—and it is not impossible that a major power actively losing a global war would commit planetary and racial suicide by exploding its stock of bombs, interlaced with cobalt metal, in an, "If I can't win, neither shall you," grande finale. And so exit the human race.

The hydrogen bomb reaction uses one or more of the known thermonuclear fusion reactions in which small atoms combine at high temperatures to form larger atoms and release energy to further raise the temperature. There is a wide range of thermonuclear reactions in the stars, depending on the temperature and the composition of their interiors. The fusion of four hydrogen atoms to form helium occurs at the temperature reached for a fraction of a milli-second at the centre of an atomic bomb explosion, whilst helium fuses to form heavier elements such as iron and copper at still higher temperatures. But all these temperatures are too high for us to directly utilize in a hydrogen bomb; even a hydrogen atom has too short a time at the centre of an atomic bomb explosion to have a fair chance of combining with three others and we must turn to fusion reactions not found in nature.

Deuterium, from heavy water, is an isotope of hydrogen containing one extra neutron and will fuse at lower temperatures than will ordinary hydrogen. But there is a third hydrogen isotope, tritium, that contains two extra neutrons and will undergo fusion reactions far more readily than any other element.

Fortunately, or unfortunately, tritium is an extraordinarily rare element and the whole of the waters of the Earth contain only two pounds of it. It is being continually produced by cosmic rays striking the atmosphere and producing neutrons that react with nitrogen to form carbon and tritium. However, it is radioactive with a half-life of only twelve years and so is constantly disappearing. Tritium can be produced in atomic piles by the absorption of neutrons by lithium but is an expensive material, even in terms of the megabuck. Tritium needs an atomic bomb to set it off but it, in turn, can set off other fusion reactions. The hydrogen bomb is a composite affair, probably concentric cylinders containing a plutonium bomb surrounded by tritium and deuterium, this surrounded by a cylinder of pure deuterium.

Of the three major effects of nuclear bombs, two, the blast and heat flash are not novel. The third, the radiological effect, is completely new but will normally kill only 15 per cent of the victims. Nuclear bombs may be exploded underwater, when there is widespread radio-active contamination from the spray and little heat or blast damage, at ground level, when once again there is a great deal of radio-activity but more damage, and in the air. The radius of destruction with a low air burst is limited by the shielding effects of the buildings whilst a high air burst gives the greatest destruction but the least amount of radio-active contamination, most of it being carried far up into the air.

Your calculated chances of living near a high air burst, small, megaton hydrogen bomb are—within two miles of ground zero

(the point immediately under the centre of the explosion) you have only one chance in ten of escaping alive; between two and four miles away you have an equal chance of dying or living whilst between four and six miles from the centre your chances of living rise to five in six. Between six and eight miles from ground zero you have ninety nine chances out of a hundred of escaping alive. Of course, you have a much better chance as an individual if you are in a basement or shelter. These figures ignore your chances of being badly burnt or injured, although if you don't die of radiological damage within a month or two you will completely recover. If a bigger bomb is used you can well expect to treble the distances from ground zero given above; you may have only one chance in ten of living within six miles of the centre of the burst.

At the moment of the burst of a hydrogen bomb there is a wave of intense heat, called the heat flash, lasting for only a few seconds and made up of ultraviolet, visible and infrared radiations. This heat flash accounts for thirty per cent of the casualties and, in clearer weather, will set 100 square miles of London alight and be felt at a distance of thirty miles. It can be divided into two periods: one a blue-white flash lasting for a few hundredths of a second, containing most of the physiologically harmful radiation, and a longer flash that slowly dies away as the fireball expands. This longer flash is the one that causes most of the fires and is most hazardous on a summer's afternoon or evening when there is little dust or water in the air to absorb the radiation. The greater part of the ultraviolet is absorbed in a short distance, even

in clear air, but the red and infrared pass through unhindered.

Cotton materials will be ignited up to twelve miles away and fires will be started in houses by the heat rays entering through windows and open doors, whilst, nearer to the centre, secondary fires will also be started in collapsed buildings by broken gas pipes and domestic fires. Probably the updrafts of hot air will cause a fire storm to reach gale force and fan the conflagration.

A blast wave travels from the centre of the explosion at a speed of a mile a second, appearing as a pressure wave followed by a suction wave, its duration being several times that from a highly explosive bomb. There will be few casualties from the direct effect of the blast—but about half of the casualties will be due to people hit by glass or flying debris or buried in collapsed buildings within eight miles of ground zero. Up to four miles away, all buildings will be completely demolished. Between four and six miles away there will be no inhabitable buildings but there will be little underground damage; gas and water mains will be undamaged except where they cross on bridges but gas holders, pumping stations, electricity substations, telephone exchanges, overhead power cables and surface transport will be completely destroyed up to four miles from ground zero.

The radiation dangers from a hydrogen bomb are usually over estimated, one point being that if you are close enough to the centre of the explosion to get a fatal dose of gamma rays or neutrons the odds are that you will be killed by the heat flash or the blast effects. The radiation dangers consist of two types; firstly,

the initial or immediate danger from the invisible burst of gamma rays and neutrons at the time of the explosion, and, secondly, the delayed danger due to radio-active contamination of air, ground and water for several hundred miles around.

The gamma rays travel at the speed of light and can pass through several feet of concrete but they do not render materials radio-active. Accompanying the gamma rays there is a burst of neutrons lasting for a few seconds. These high speed neutrons have considerable penetrating power and they cause induced radio-activity where they are absorbed, although most of this will be in the ground and the rubble within two miles of ground zero.

The delayed radiation danger is partly due to this induced radio-activity and partly to the radiation from fission and fusion products falling to the ground, the latter being greatly increased by encasing the bomb in cobalt or uranium-238. Most of them are carried upwards and the greatest danger is downwind of the explosion and when there is rainfall immediately following it. Contaminated areas will remain radio-active and the air will contain fine dust particularly harmful if inhaled or swallowed. Dangerous quantities can even be absorbed through cuts and sores. However, due to the short half-lives of many of the isotopes the initial radio-activity quickly falls off, by a factor of ten thousand during the first twenty four hours, and it will be possible for rescue workers to enter the lesser contaminated areas more than a mile or two from ground zero within a few hours. They will have to wear rubber suits and masks to protect themselves against the

dust but only lead lined vehicles will give protection against gamma rays.

The radio-activity cannot be destroyed and must be left to die away, although dust and spray can be washed off the streets by hosing them down with a detergent solution. Tinned food exposed to gamma rays is safe (gamma rays are now being used to experimentally sterilize food) but if it is close enough to the centre to receive neutrons it will be dangerous. Unprotected food exposed to air and dust will be really "hot."

The amount of radiation is measured by radiac instruments either as individual total doses in terms of roentgens, 800 being a fatal dose, or as roentgens being received per hour. Radio-active contamination is measured in curies, one curie being equivalent to one gramme of radium. The symptoms of a large dose of radiation show up in a few hours and take the form of severe shock with vomiting, a rising fever and weakness followed by hemorrhages as blood vessels burst and culminating in severe infections which generally kill the patient. With lesser doses the onset of the symptoms are delayed for some days and, with very much smaller doses, the symptoms may not appear before the third week. In the latter case as when a more seriously injured patient survives to the sixth week, the patient usually recovers. The characteristic signs in those who survive the sickness are the falling out of hair, anaemia and temporary sterility.

Treatment of radiation sickness is, at the moment, directed towards the treatment of the symptoms—blood and plasma transfusions plus iron, vitamins and

amino acids to restore the supply of blood and to replace damaged tissue, antibiotics to protect against infections, protamine to stop hemorrhages and desoxycorticosterone acetate to counter-effect the poisons released by the breakdown of cells. But it has been shown that rats can survive larger doses of radiation if the oxygen in the air (and thus in the blood) is decreased.

Mutations are caused by the radiations, especially if a foetus is irradiated at one of a number of particular periods during its development. Mutations also occur if the mother or father is irradiated a short time before the conception of a child, although these mutations are often recessive. There is also a small difference in the ratio of the sexes of such children; if it is the mother who receives the radiation there are fewer boys born whilst if it is the father there is a tendency for fewer girls to be born. Radiation doses such as would be received by unprotected women within twelve miles of ground zero would cause such internal damage that two thirds of the embryos would be prematurely born or die soon after birth.

There appears to be little knowledge (at least not available) of the mutations, latent or otherwise, that might occur in humans, although it has been experimentally shown that seeds exposed to nuclear bombs not only develop all the known mutations but produce many brand new types. Animals, insects, bacteria and viruses in a hydrogen bombed London will also mutate but what the effects will be is a horror story that has yet to be written, if anyone will be left capable of writing it up for a non-future posterity.

JOHN NEWMAN



New Hard-Cover Science-Fiction Reviewed by

KENNETH F. SLATER

Probably everyone who is the least interested in science-fiction will by now have read the first two books I am mentioning in this column. Publication delays have precluded my reviews appearing in reasonable time, but both these are too good to dismiss without a word. The first is Alfred Bester's **TIGER! TIGER!** published by Sidgwick & Jackson at 12/6. Whilst in the American field a new novel by Alfred Bester was being announced for serial magazine publication, the British publishers produced the book version. They are to be complimented on this, and Mr. Bester is to be congratulated on writing a masterpiece equal to *The Demolished Man*. A "psi" novel based on teleportation, or "jaunte"; Space Mechanics Mate Gully Foyle conducts a one-man vengeful war against the spaceship *Vorga*, which left him stranded in its sister-ship *Nomad*. The path of Gully from the gutter to the elite of the 24th century is exciting, bloody, intriguing in many of its novel concepts and enthralling reading. If you have not yet followed his career, do so promptly.

Eric Frank Russell, like Mr.

Bester, needs no introduction; more prolific in his output, and held in esteem by s-f readers for perhaps more years now than he likes to recall, the publication of his "Jay Score" series by Dobson Books under the title **MEN, MARTIANS AND MACHINES** will perhaps enable some of the older fans to recapture a spark of that "sense of wonder"; it will certainly show the newer readers that some pretty good old wine can be found in new bottles—if you'll pardon the phrase. Space operatic stuff, it is true, but with touches of that humour which adds such charm to Russell's modern stories in many cases. The book is composed of four episodes, each a complete story of exploration of a strange world; the reader is not just "dumped" into extraterrestrial strangeness familiar to the characters (a thing common in many currently written yarns) but joins the crew in discovering the secrets of these planets—perhaps a novel treatment to many newer readers. Well worth the 9/6 it costs.

Now for some recent items. I recommend Rex Gordon's **NO MAN FRIDAY**, from Heinemann at 13/6. Holder is the only sur-

vivor of Earth's first Martian expedition—and he is stranded on Mars, the ship in which he arrived is a wreck, it is not known on Earth that it departed—its launching being highly unofficial. Holder makes out—I'll not detail how—reasonably well and survives until a later “first” expedition arrives. A large part of the book is devoted to his “Robinson Crusoe” activities; the second and smaller section of the story covers his rescue and brings in the inhabitants of Mars. Neither part of the story follows any of the usual lines of such adventures; the Martians are not what the reader expects, and by careful omission more than description Mr. Gordon manages to convey a truly “alien” creature to the reader. Somewhat philosophical in places, rather than active, the

story makes you read it at a sitting even so.

The death of grass doesn't seem to mean a great deal, until John Christopher conveys to you all the implications of just what that means in his book with that title: *THE DEATH OF GRASS* (Michael Joseph, 12/6). When you, along with the characters in the story, catch on to just how it affects life on earth, you will start to think just how you would act in the same circumstances. Mr. Christopher has drawn what I feel is a very realistic picture; with no more altruism than does usually occur, no more heroics than are natural, and some very convincing callousness on the part of his central group of survivors. This book ranks, in my estimation, with John Wyndham's *DAY OF THE TRIFFIDS* as a tip-top

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NEW YORK TIMES

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EYRE & SPOTTISWOODE

"near destruction of the world" story. Perhaps, on the face of it, you may think to compare it with J. J. Connington's *NORDEN-HOLT'S MILLION*. Don't be deceived—apart from an idea, there is no parallel; even in the idea the divergence is great.

NINYA by Henry A. Fagan (Jonathan Cape, 13/6) appeared early in 1956, it is true. But it appears to have escaped notice—well, for most of us, that is as well. But if you care for Utopian-Erewhonian style novels, let me draw it to your attention. The scene is the other side of the moon, the people are—almost—human; the science, even pseudoscience, is absent. Amusing, but not for the space-fiction enthusiast.

Also from Jonathan Cape, and also earlier this year, came *DAWN IN ANDROMEDA*, by E. C. Large. Disdaining pseudoscience, Mr. Large transports his group of a dozen characters to a virgin world by supernatural means, and then writes an intriguing science-fiction story about their adventures there. There are, please note, some elements of mysticism throughout the story, and the ending is definitely on a mystical base. Just the same, the story should be s-f, and warrants the attention of all enthusiasts who do not feel that rayguns and rocketships are "essentials". Price 15/-.

THEY SHALL HAVE STARS by James Blish (Faber & Faber, 12/6) comes before *EARTH-MAN, COME HOME*, chronologically. It covers the development of the two things which made the "Oakie" cities possible; the "spindizzie" and the "anti-agathic" drugs. Readers will recognise that these two themes formed separate short novels, published in ASF; here Mr. Blish has interwoven them into one story, linked by heroism of Senator Waggoner, in his efforts to push through his schemes to give man the stars, in the face of the opposition of security-mad witch-hunting Senator MacHinery. This, by the by, is another case where the publishers are to be complimented in getting an American book onto the market before an American publisher.

All in all, despite gloomy opinions held by many people still—and by myself in the past—I feel very happy over the state of s-f at the present. There are many good books on the market, and quite a lot more to come. But you must watch out for them. The term science-fiction is not being greatly used, and the titles are apt to be deceiving. The early flood tide having receded—it went so far back that we thought we were being left high and dry—it does seem probable we shall have a constant but not excessive flow of books; good books, well chosen. Not so much jetsam. . . .





WALTER WILLIS writes for you

"They watched anxiously as Kcid came to them across the treacherous *ttornòt*. 'He'll be here in less than a *glb*,' muttered Arck tensely."

This is a typical example of the sort of thing you find in many modern science fiction stories and which infuriates anyone with a logical mind. Why, it even annoys me. I refer of course to those alien words and names which the author uses to impart an appearance of verisimilitude to his narrative, much as Indian Army colonels pepper their memoirs with *chota pegs*, *mem sahibs* and *tiffin*. The idea, you see, is that the author was there on the spot witnessing these stirring events, and is so intimately acquainted with the locale that he can't even think what the English equivalents might be for the local terms. He'll do his best of course, but he can't be expected to descend to the level of you day trippers.

I don't mind that so much, though it is a cheap trick. What I object to is the names themselves. These are all ones that have been used in professional stories recently. Just look at them. I concede that you can't very well call your extra-terrestrials Smith and Jones, and it's legitimate enough to give them names that look strange and exotic with lots of

consonants, especially 'X' and 'K'. But I do claim that they ought to have proper names, not mere random collections of letters.

I take it that these aliens do not use the English alphabet, and that the "words" quoted are transliterations into the English alphabet of the sounds of their language—an actual sound which can be uttered in some way or other, transmitted through a physical medium and received at the other end. In that case the English letters used must be assumed to have some phonetic value. But if so, just how do you pronounce 'Kcid'? What is the phonetic significance of the extra 't' in 'ttornòt'? Just how do you get your tongue round 'glb' without the aid of a vowel? And what is the exact shade of difference between 'Arck' and the ordinary English word 'ark'?

No, these little tricks do not convince me that the author was *there*: they just make me suspect he thinks we're not all there. These phoney phonetics are examples of rank bad writing and careless thinking, and an insult to our intelligence.

As you may have noticed, I haven't been reviewing fan magazines here so much recently, for various reasons. However, they're still going strong, and subscribing

to one is the best and easiest way to get in touch with the friendly and interesting people all over the world who are united in the loosely organised and tightly knit society known as science fiction fandom.

One of the reasons I haven't been doing so much reviewing in this column is the long time-lag before its publication. By the time you read it, the issue of the fanmag I reviewed may be sold out, or worse, the editor may have given up publishing altogether. In either case, you'd feel dissatisfied and I'd feel responsible. So Ken Bulmer of London and I have thought up a project which might solve this little difficulty. We propose to set up a bureau to be called the Nirvana Guild (named after a legendary perfect fanmag), which will be a sort of combination between a Fanmag of the Month Club and a clippings bureau. Its aim will be to help people who'd like to see something of the best in science fiction fan publishing, but who haven't the time or the resources to search it out themselves. The idea is that they send us a small deposit, from which we pay for them to be sent the next fanmag that comes out which we think they might enjoy. If you'd like to try this, send a couple of experimental shillings to me (at 170 Upper Newtonards Road, Belfast, N. Ireland) or to Ken Bulmer, 204 Wellmeadow Road, Catford, London, S.E.6,

and see what you get. Both Ken and I have been around so long we're about due to be scheduled as ancient monuments, so you needn't worry about losing your money, and we get pretty well everything published in fandom, so you won't miss anything outstanding. As an example of what you might get I'll list below a few British fanmags: in addition of course there are dozens of American ones, which I've never reviewed here but which will also be available to you.

EYE, the London Circle fanmag. News, views and reviews from the centre of English sf publishing, intelligently and humorously presented.

TRIODE, the leading Northern fanzine. All types of material, most of it of the highest standard.

HYPHEN, an international fanmag devoted mainly to humour and personalities rather than sf itself, but featuring also reviews by Damon Knight.

FEZ, a lively and controversial fanmag mainly the work of young ladies. Formerly *FEMIZINE*, it had a curious history, being started ostensibly to demonstrate the competence of female fans to produce an exclusively female fanmag, by a young lady who eventually turned out to be a male hoaxer.

CONTACT, a lively and enterprising news magazine published in English by a Belgian fan.





GUIDED MISSIVES



Letters to the Editor

Dear Ed.: Mr. Donaldson with his antifeminist viewpoint did not only write while emotionally moved but has also got the facts nowhere near right. Let's take it line by line. So much nonsense—let's pass that, others will answer for me, no doubt.

Capabilities of men and women. Women in almost all countries except the Western European ones are very efficient soldiers, dustmen, tramdrivers, maids-of-all-work and farmers. Russia and Egypt are two outstanding examples of this and only recently several magazines showed photographs of girls of 13 training as soldiers for front line use. As to the jobs which are nasty and dirty, I believe it is women who do most of the dirty work in hospitals, it isn't often you see a male nurse or ward orderly (except in mental homes where often a degree of strength is necessary) and that is some of the dirtiest work I know. Would Mr. Donaldson be willing to swab up vomit and blood? Or is he dodging a job which is too dirty to be done by any but women?

As for physical stress, I consider the labours women endure under childbirth far exceed any a man may go through. What man may labour in physical pain for as long, sometimes, as three days, a comparatively common length of time for a first child?

While the male may be physically stronger, his imagination and creative and scientific abilities are no greater than those of a woman. Until this century women were prevented from using their abilities by the male myth that women were supplied to men in order to gratify the male sexual desires, to keep their homes, to bear and rear their children (often by the dozen) and generally slave as the male desired. As for decisions under stress being coloured by emotion, what might I ask was the cause of the sabre-rattling when the Suez Canal was nationalised? Rational, unemotional and scientific decisions? Men are as much at fault as women when it comes to being dominated by their emotions. (It's only this century that men consider it unmanly to weep; in the golden age of Queen Elizabeth, honourable tears were shed by many men in public.)

The reason we have no women prime ministers or bankers is because of the male's desire to be cock of the roost. Now women are fighting their way against blind prejudice into business and the law. One name immediately springs to mind when lawyers are mentioned—Miss Rose Heilbron.

As to women's place in the scheme of things, I suggest Mr. Donaldson leaves Britain and lives in Germany, he would be

perfectly happy with their philosophy of Kinder, kuche, kirche (I think that's right but as I do not have any knowledge of German I am unsure. However, it is the appropriate meaning that counts).

I feel that I have been not only scientific but unemotional in this reply. I could have laughed Mr. Donaldson off and refused to answer, but if he likes, although I have had no education beyond that of secondary school (except what I have picked up myself), I would willingly challenge him to a test of his imagination, creative and scientific abilities, if someone is willing to devise such a test. Over to you, Mr. D.

JOY CLARK,
(formerly Goodwin),
London, S.E.6.

* *Over to you it is, Mr. Donaldson. I am looking forward to your reply as well as to that of any other mere male to the broadside delivered above.*

My only personal comment on Joy's letter is that from the feminine viewpoint at least we appear to have reached a greater state of enlightenment here in Glasgow than in the rest of Western Europe — I came to work on a tram driven by a woman this morning!

Dear Ed.: You have once again produced a very fine issue and one which I found thoroughly entertaining. The stories all showed quality and thought and were varied in style and approach as you pointed out in the letter column. My own belief is that "balance" is a necessity and this approach in NEBULA, which incidentally is shown also in your policy on reprints, aligns with my own opinion.

The cover was once again a polished co-ordination of art and attractiveness and the back cover disproves any notions that Alan Hunter's work has passed its peak. The interior illustrations served their purpose without being brilliant.

I am darned if I am going to mutilate my copy by cutting out the voting form, but for the fun of it here's my story rating:—(1) Into the Empty Dark; (2) Project Pseudoman; (3) By the Name of Man; (4) Wrath of the Gods; (5) Cry Wolf; (6) Storm Warning.

Ted Tubb's short was outstanding I felt, showing that he is still at the peak of a form which resulted in his being voted Author of the Year. I don't think it too much of a good thing that the honours should be cornered by one writer, but when anyone produces a story of this calibre, a classic of the modern type of Science Fiction, with its combination of human emotions and a futuristic situation, he obviously deserves any prize bestowed.

I was a little disappointed in the use of the name Lattimer in Project Pseudoman, after having read it in By the Name of Man. Could not another name have been substituted? When on page 69 Thornton asks, "Lattimer? How did he get into this?" he echoes the readers' feelings to such a degree as to take him right out of the story. A pity, for I rate this story as one of the best Ken has written.

Wrath of the Gods was good without being brilliant and Cry Wolf presented a new approach to an old theme. Unfortunately I felt the climax too long drawn out.

And there's the letter on the case of Man v. Woman. I do believe that Miss Goodwin is having the better of the argument. Quite apart from the fact that great women like Jane Austen, Madame Curie and Amy Johnson rose above the limitations of a society dominated by men, I would certainly like to hear of Mr. Donaldson having a baby. Whereas a man cannot step into a field of life concerning women solely, a woman can step successfully into that field which we usually associate with our conventional minds with that of man.

RON BENNETT,
Harrogate,
Yorkshire.

* *Very glad to have all your comments on NEBULA No. 17, Ron. It is a pity about the Mr. Lattimer in Project Pseudoman. We should have just completed matters by linking novel and novelette together and calling the whole thing By the Name of Pseudoman!*

Dear Mr. Hamilton: When NEBULA failed to appear as scheduled for May my newsagent (a reader himself) told me that he had it on pretty reliable authority that NEBULA had ceased. Of course I was astounded. You have had Tubb Martian stories and nearly every top British author I know; however, the upshot of it all was that I believed it. Then last Wednesday I walked into my newsagent's and there was NEBULA No. 17. Was there any reason for the delay in the appearance of this issue and can we expect regular publication in

ONE GUINEA PRIZE

To the reader whose Ballot Form (below) is first opened at the NEBULA publishing office.

All you have to do, both to win this attractive prize and to help your favourite author win the 1956 Author's Award, is to number the stories in this issue in the order of your preference on the Ballot Form below and post it to NEBULA, 159, Crownpoint Rd., Glasgow, S.E., immediately.

Outside Position	
T	
Hope Deferred	
More Than Hormone	
Armistice	
Reluctant Farmer	

Name and Address

Mrs. J. Dimmer, of Glasgow, S.W., wins the One Guinea Prize offered in NEBULA No. 16. The result of the Poll on the stories in that issue was:—

1. FRONTIER ENCOUNTER
By Sydney J. Bounds 21.8%
2. DYING TO LIVE
By E. C. Tubb 20.2%
3. ALWAYS
By Robert Silverberg 15.0%
4. HOT WATER
By E. R. James 14.7%
5. BARRIER TO YESTERDAY
By Bob Shaw 14.3%
6. THE MORON
By John Seabright 14.0%

The result of the Poll on the stories in this issue will appear in NEBULA No. 20.

future? We are all looking forward to the day when NEBULA becomes monthly and I hope that the late appearance of No. 17 is not a signal that your fine magazine is to appear even less often than before.

FREDA LONGMUIR,
Sydney, Australia.

* *The delay in the appearance of NEBULA No. 17 was due to a variety of reasons including the usual production and publishing difficulties which are liable to arise at any time. However, from the current issue NEBULA is back on a regular bi-monthly schedule, and we have high hopes, backed by encouraging reports from our distributors throughout the world, of reverting to monthly publication for NEBULA before the end of 1957.*

Dear Sir: Some time ago I sent an order, accompanied by cash, in response to the advertisement of Messrs. Fantast (Medway) Ltd. published in your magazine, to your address.

As these goods have been a very long time in being sent to me I am wondering if you would be so kind as to throw some light on the matter.

JAMES ROSS,
Edinburgh, 8.

* *I regret that the NEBULA organization may be partly to blame for the delay in the arrival of your books, Mr. Ross. As you will be aware, the appearance of NEBULA No. 17 was very much delayed and consequently our entire*

organization including that part of it which handles advertisers' mail was thrown somewhat out of joint.

I would like to apologize both to Mr. Ross and Messrs. Fantast (Medway) Ltd. for any inconvenience which this unfortunate oversight on our part may have caused them.

Dear Ed.: In your editorial you go to great lengths to impress on us that you never reprint stories and yet you feed us on Heinlein's stories that all science fiction enthusiasts have read before.

The only real gripe I had with the 17th issue of your magazine was Forrest Ackerman's thoughtless review of Forbidden Planet, which I think is by far the best science fiction movie yet. What few mistakes there were barely showed—truly a magnificent picture.

JIM LINWOOD,
Netherfield,
Notts.

* *If you had read my editorial aright, Jim, you would have noticed that I promise only to reprint stories which have not so far appeared in any magazine circulating widely in Great Britain and which I feel will be enjoyed by a majority of NEBULA readers. The Heinlein material which I have printed so far comes under both of these categories, so I fail to see that you have legitimate complaint.*

