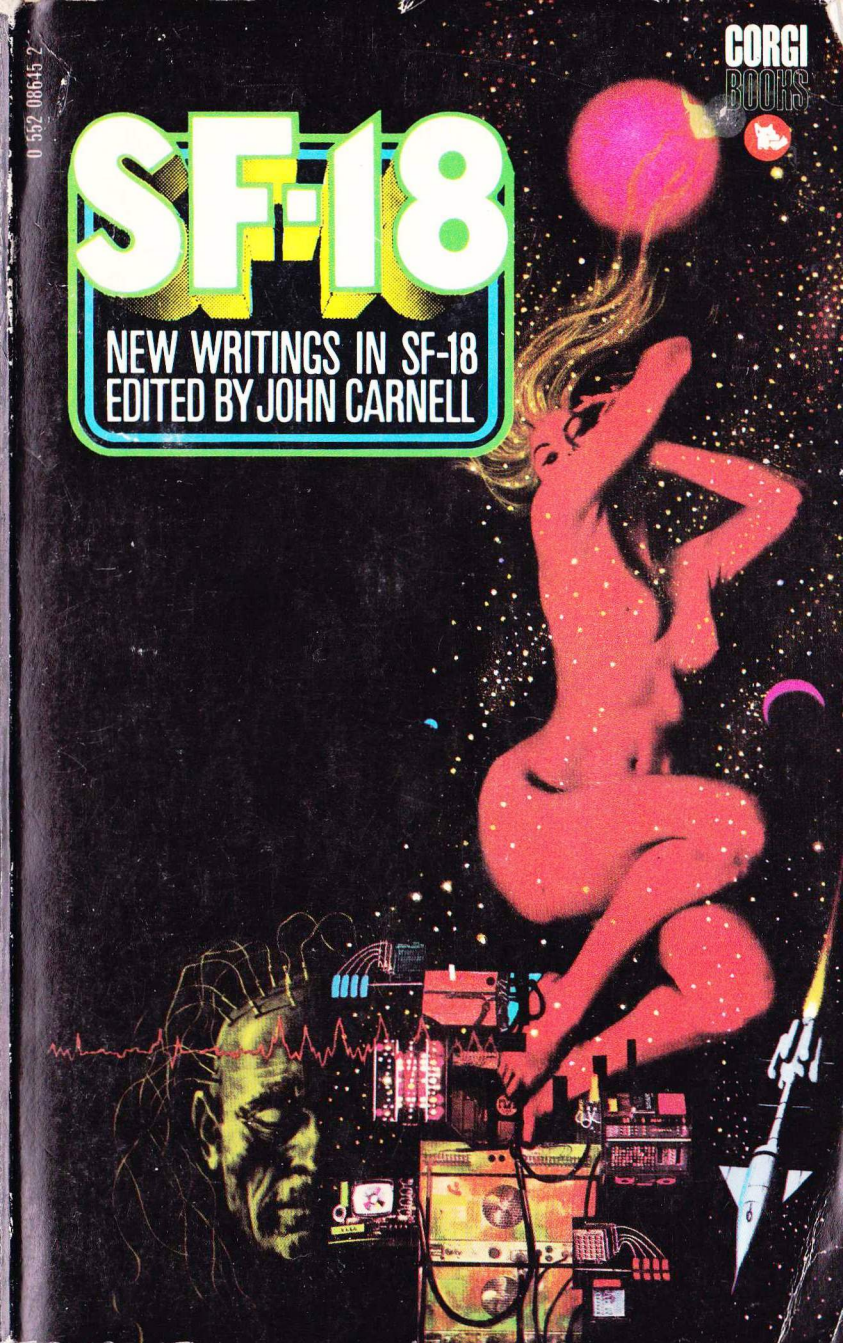
0 552 08645 2

CORGI BOOKS

SF-18

NEW WRITINGS IN SF-18
EDITED BY JOHN CARNELL



NEW WRITINGS IN SF–18

Edited by John Carnell

SOME DREAMS COME IN PACKAGES tells of a future where it is not always easy to tell the real people from the ... other people ...

In THE CYCLOPS PATROL, a new and quite ingenious form of industrial espionage is devised, while FRONTIER INCIDENT by Robert Wells is a macabre tale of a man's mind being used for alien purposes.

Three stories, one by Grahame Leman, one by Donald Malcolm, the other by Lee Harding, deal with the individual fighting to remain an individual—in a totalitarian world. And for those who have been following, in previous volumes of NEW WRITINGS IN SF, the medical history of the planet Drambon, James White's MAJOR OPERATION is the final episode of the staff of Sector General Hospital—diagnosing, treating, and curing a patient over 50,000 miles in diameter ...

Also edited by JOHN CARNELL

NEW WRITINGS IN SF–1
NEW WRITINGS IN SF–2
NEW WRITINGS IN SF–3
NEW WRITINGS IN SF–4
NEW WRITINGS IN SF–5
NEW WRITINGS IN SF–6
NEW WRITINGS IN SF–7
NEW WRITINGS IN SF–8
NEW WRITINGS IN SF–9
NEW WRITINGS IN SF–10
NEW WRITINGS IN SF–11
NEW WRITINGS IN SF–12
NEW WRITINGS IN SF–13
NEW WRITINGS IN SF–14
NEW WRITINGS IN SF–15
NEW WRITINGS IN SF–16
NEW WRITINGS IN SF–17

and published by CORGI BOOKS

John Carnell

New Writings in SF–18

TRANSWORLD PUBLISHERS LTD
A National General Company

NEW WRITINGS IN SF is a series especially edited by John Carnell for the publishers, Corgi Books. A hardcover edition is available from Dobson Books Ltd.

NEW WRITINGS IN SF–18

A CORGI BOOK 0 552 8645 2

Originally published in Great Britain by
Dobson Books Ltd.

PRINTING HISTORY

Dobson Books Edition published 1971
Corgi Edition published 1971

This book is set in Pilgrim 10/12 pt.

Corgi Books are published by Transworld Publishers, Ltd., Cavendish House, 57–59 Uxbridge Road, Ealing, London, W.5

Made and printed in Great Britain by
Richard Clay (The Chaucer Press), Ltd., Bungay, Suffolk

CONTENTS

Foreword *by John Carnell*	*page* 7
Mistress Of The Mind *by Lee Harding*	9
Frontier Incident *by Robert Wells*	33
The Big Day *by Donald Malcolm*	53
Major Operation *by James White*	69
The Cyclops Patrol *by William Spencer*	127
Some Dreams Come in Packages *by David Kyle*	147
Django Maverick: 2051 *by Grahame Leman*	171

FOREWORD

by

JOHN CARNELL

IN recent correspondence, Australian writer Lee Harding pointed out that many volumes of *New Writings In S-F* have contained stories concerning sociological trends and he felt that this was a particularly rich vein for science-fiction authors to explore, whether the locales concern today's world or are extrapolations into the future. True on both counts but the sociological story has been with us for a long time—at least a century and a half (and I will quote here, Lord Charles Moresby's *A Hundred Years Hence*, published in 1828, 'concerning the advanced world of the twentieth century'). For, naturally, we are all interested in the world of the future, especially that thin slice we are going to live in for our lifetime—and what we do about that immediate future is always rooted in what we do today.

Despite the decimation of humanity by natural disasters, war, starvation, the automobile, disease, and even old age, world population continues to expand, although there are signs that in the western hemisphere at least the rate has been dropping slightly. Like the wages–production–prices spiral, the humanity spiral gets caught in its own vortex—it uses up everything at an increasingly faster rate, creating more and more shortages, greater waste, higher pollution, and limitless social problems. For millennia, Nature herself controlled the ecological balance of this planet, a long slow period of adjustment and gestation; then, in one short century, since Man himself has taken charge, technology has continued to push back Nature's barriers and we seem to be

getting deeper and deeper into the morass of unbalanced forces.

Against this immense background we can list dozens of subdivisions within which the science-fiction writer can project his thoughts—water shortage, over-production, noise, mechanisation, computerisation, city complexes, sewage, raw materials, oil, and Nature's last great stronghold the sea. Nobody yet knows whether we have passed the point of no return in the despoliation of our planet but at least the warning signs have been long and loud.

If you look for them, one sociological trend or another will turn up in every science-fiction story. It is a form of literature which lends itself admirably to pointing out our own shortcomings and stupidity, but it also makes sensible suggestions as to how we may well circumvent some of the problems we are apt to bring upon ourselves.

June 1970 JOHN CARNELL

MISTRESS OF THE MIND

by

LEE HARDING

As the world of the flesh becomes more accessible and prosaic—taking the agonies of our presentday so-called permissive society as a criterion—so the spiritual needs of people like Arthur Talbot will become more obsessive.

MISTRESS OF THE MIND

ARTHUR TALBOT followed the old south-eastern freeway as far as the abandoned Springvale overpass before he resumed manual control. The car slowed down almost to a standstill while he made the changeover, shuddered gracelessly as he spun the wheel to the left and applied cautious pressure to the accelerator, then purred quietly down a narrow access ramp towards a residential wasteland.

He was relieved to have the dismally flood-lit concrete of the deserted freeway behind him and to be moving away in a direction where the unblinking eyes of the traffic monitors were not programmed to follow. He tried to relax and enjoy the luxurious anonymity of the suburban night, but his nervous manner would have given him away to any curious onlooker. He sat a little too stiffly at the wheel; his narrow, peevish face looked straight ahead, and his dark eyes were unnaturally bright because of some inner tension. His fingers tapped and fidgeted with the steering wheel and his foot felt stiff and awkward poised over the accelerator.

He drove slowly, determined not to attract any attention from prowling police cars, guiding his sleek little business vehicle carefully through the narrow, crumbling streets. Only the ugly illumination provided by some left-over fluorescents from another generation gave any indication of the sort of neighbourhood he was moving through and he had dimmed his headlights to such a degree that he could barely see where he was going.

But he had been this way many times before and, at the

modest pace he was travelling, finding his way presented no difficulty. He had no desire to see any more of this part of the world than he already could. This had been a depressed area for as long as he could remember; dozens of square miles of factories and shops and offices had been allowed to fall into disrepair through conscious neglect—several thousand homes and apartment blocks had been abandoned and the area itself made redundant. This was a measure of the times and a toppling birthrate.

The car inched slowly forward. The gutted shapes of factories crowded against him. Now there was only sufficient space on the narrow street for two cars to pass abreast —not that there was any likelihood of that ever happening. Only the poor and morally dispossessed people of this affluent society roamed rootless through these deserted slums and they kept well clear of encroaching vehicles—particularly those that came creeping in so late at night.

The police were supposed to patrol these areas regularly —not because crimes of violence were an especial province of these lonely wastes, but because they were obliged, like most other segments of a largely redundant society, to go through the motions of employment, in much the same manner as the often simple-minded citizens they were forced, by the very nature of their boredom, to apprehend occasionally.

And Arthur Talbot had a lot to lose if they ever caught him. Not that he cared much about what Laura would think if he was ever arrested—his wife and her opinions had ceased to mean anything to him some time ago—but he did fear the outcome if he were caught. Firstly, he could only expect some ignominious future as an unwilling inmate of some poorly run institution for unwanted deviates; secondly, he feared the beating he could expect to receive from the eager hands of whatever bored and jaded patrol happened to accost him.

'What d'yer think yer *doin', skulkin' through these 'ere streets at this time er night, eh? What yer lookin' for? What d'yer expect ter find 'ere that yer can't find outside? Bloody pale skin an' quiverin' 'ands an' all—look at 'is eyes, Bill. Damned pervert, I'll be bound. What* you *need, little man, is ter be taught a lesson—a bloody good lesson, too. Teach yer ter go skulkin' around this neck er the woods at this time er night . . .'*

Arthur Talbot flinched away from the impact of imaginary blows. He hated the police, but sometimes he envied them. At least they were allowed a ready-made outlet for their frustration and aggression, something another age had called the Privilege of Office.

His mouth was dry and he felt a little bit afraid. But so far he had been careful and he had been lucky. If he was pulled up at any time then he had decided that the best thing he could do would be to act dumb and mumble something about getting lost. If he managed his story well enough then he might get off with a bit of a beating and a warning to get the hell out of the suburbs and not come there again. But if they ever caught him actually entering or leaving the House . . .

Only the rewards involved made the enormous risk worth while. For the first time in his long and useless life Arthur Talbot had discovered something worth risking his future for, and this precious knowledge gave him a moral strength he had never previously possessed.

But at the moment he felt desolate and neglected. He needed warmth and understanding and a haven well away from the rigours of an inconsiderate world.

He parked his car several blocks away from his destination. This was one of the House rules; they were very careful to ensure that their customers should approach them discreetly, and on foot, through the many devious routes at their disposal. An open approach was unthinkable.

He liked this part least of all, because it exposed him to the grimy and polluted air that crawled through the empty streets. It was unpleasant after the air-conditioned comfort of his car, and there was something unsettlingly menacing in the way the crumbling walls of the deserted factories seemed to loom over him, like broken teeth in a dark, gaping mouth that might at any moment reach out and engulf him.

His destination was a building safely hidden from any of the main thoroughfares. It could be found only by making a circuitous route down several narrow streets and alleys leading into ever deepening refuse. At some time in the dim past it had housed a number of monstrous machines which had whirred and hummed and produced a torrent of useless merchandise; but these had long since been ripped from their mountings and ground up into scrap metal. The new—and unlawful—proprietors had installed their own special devices, but these performed their duties quietly and in an area of the mind where the watchdogs of the law could not hear.

The windows of the House had all been blacked out; only a faint glow crept out through some scratches and chinks in the decrepit façade. To gain entrance Talbot hurried down a long lane that ran down one side of the building. It was barely wide enough for two people to manoeuvre past each other and it *stank*. The other end opened out on to the gigantic effluent treatment plant where a goodly proportion of the distant city's waste products were broken down and processed into a thick brown soup and dispersed through wide tunnels into the nearby ocean. The factory itself was ancient and its original sealing had long since deteriorated, so that the compound odour of decaying garbage and human excrement drifted towards Talbot, the narrow lane acting as a foul sort of amplifier. He breathed shallowly and hurried along to the gap in the high metal

fence that allowed him entry into the House grounds.

It was quieter than a graveyard. Talbot stumbled over the mounds of wind-borne refuse that cluttered the ground between the fence and the long, squat building that was the object of all his striving. He stood and faced a heavy wooden door; the paint had chipped away and exposed the original surface. Rain and wind had weathered this until it had acquired an interesting patina of age and corruption. It was heavily locked and barred from inside.

Talbot raised one nervous hand and knocked—discreetly—four solemn times on the ancient wooden surface. He waited for perhaps several minutes in the cold moonlight while his call was registered and he heard the multiple locks being withdrawn on the other side.

The door swung open a few cautious inches and spilled a soft, bluish light into the darkness. An old face, weighed down with a mixture of boredom and wisdom, peered out at Talbot.

'Good evening, Mister Swenson.'

The old face lit up in recognition. The door swung open wide enough to allow him entry.

'Why, if it isn't Mister Talbot! Do come in . . .'

He stepped quickly inside and paused a moment to re-orientate himself in the narrow, dim-lit passageway. The walls, too, were cracked and peeling, but nobody seemed to think it worth while to repair these ravages. The other end of the passage was covered with some heavy velvet drapes that allowed through only a faint ghost of the quiet hum of conversation apparent on the other side.

He turned around and watched Swenson reactivate the numerous locks on the inside of the door. When he had finished he straightened up and smiled, and rubbed the palms of his hands against his thighs. 'Nice to see you again, sir.'

He was shorter than Talbot and slightly stooped, but

what he lacked in height was more than compensated by the air of personal authority which was his natural quality. 'And will it be the usual, then?' he asked in a casual, business-like tone.

Talbot nodded. And reached for his wallet. He withdrew several notes and handed them to the old man. 'Will this be all right?'

Swenson accepted the money and counted it assiduously. He looked up at his client a trifle apologetically. 'Ah, I'm afraid that the er, operating expenses have gone up a little since last week, Mister Talbot. Extra charges from the top and all that. I trust you understand that?'

'Yes. Yes of course. How much?' Talbot was not impatient. He was accustomed to this sort of bargaining and conscious of the enormous difficulties Swenson and his associates had to deal with. If the police closed one House then another had quickly to make up for the loss in revenue. This was a simple fact of business—any business.

'Another fifteen will make it right,' the old man said. 'And tonight the drinks are on the House.'

Talbot gave a wry grin. 'That's very kind of you,' he said. But the liquor here was always foul and this was no gratuity. And besides—he hadn't come here to indulge in what he could easily find elsewhere.

Swenson gestured towards the velvet curtains. 'Now, if you'll just step into the waiting room for a few minutes, I'll see that Madam takes care of you . . .'

The waiting room was crowded and shrouded in deep, motionless rafts of cigarette smoke and filled with a wordless longing that was almost tangible.

The lighting was dim, the walls covered with a sombre and intricate paper pattern. A dozen or more men lounged around on ancient, poorly upholstered furniture and brooded quietly to themselves. Their eyes were dull and

their movements lethargic; not many of them gave any evidence of an internal nervousness similar to Talbot's. But then perhaps their joys were less and their anticipation without lustre. He felt sorry for them, but he knew that sometime within the next few hours they would all have the opportunity to embrace—momentarily—the object of all their dreams and desires.

Talbot sat down in a high-backed cane armchair. One of several young women came across to him and asked him if he required a drink. He dismissed her off-handedly; hostesses as such held no interest for him. But some of the other men thought differently and they allowed the solemn young ladies to administer to their more simple needs; they smoked cigarettes that were brought to them and drank copious quantities of the crude, local alcohol. In several murky corners Talbot could discern one or two of the men engaged in conversation with some of the hostesses; occasional snatches of subdued laughter drifted across to him, but it seemed to him a forced and unnaturally gay amusement.

He did not mind the waiting. Privation heightened pleasure. But it was with a sense of enormous relief that he felt the considerate weight of the Madam's hand on his shoulder sometime later.

'All right, Mister Talbot: you can go in now.'

Her face was gaunt and painted but underneath he sensed she was an imposing and morally dedicated person. Her face was just the acknowledged mask of her profession.

She led him out of the room and down another passageway. This one was much longer than the first and it was punctuated at regular intervals by decrepit doors and dangling light fixtures that delivered only a feeble dust-laden glow.

Each door was numbered. His was seventeen.

'In here.' The Madam gestured him inside.

Talbot felt a warm glow of affection pass over him as he stepped into the narrow room. It was small, but not cramped. There was a couch set against one wall to his left with a small table and glasses beside it; there were always *two*.

He smiled and sat down on the edge of the couch and gazed affectionately at the opposite wall; it was mostly covered by Rekina's squat bulk. Like most bootleg cybers she looked older than she was; she had probably been knocked about quite a bit moving from one House to another in the normal course of events and Talbot sometimes doubted that she had always been as well cared for as she should have been. A thick film of dust clouded the dials on her fascia and dulled her once bright grey carapace. Her corners were chipped and dented and the lacquer had flaked away and exposed the bare metal underneath. Her chromium trim was lustreless, but Talbot loved her just the same.

'Make yourself comfortable,' Madam requested.

Talbot stripped off his jacket and shirt and stretched out on the couch. His face was blissful and unworried. Madam taped the sensory wires to his chest and arms and fitted the delicate cage of wires around his skull.

She sprayed an injection into his arm and stood up. 'Now, if you'll relax for a moment, Mister Talbot, I'll run the usual tests. . . .'

Talbot smiled and closed his eyes. Already he could feel the buffering drug taking effect, ironing out the residual tensions inside him and preparing his mind and body for the forthcoming rapport with the cyber.

His mind tingled as the Madam adjusted the controls. Something soft and warm and deliciously feminine reached out for him. He sensed her affectionate fingers invade his thoughts and eagerly allowed his identity to merge and commingle with hers.

Hellow, Arthur.

Hellow, Rekina.

You haven't seen me for so long . . .

I . . . I've been away. Business. You understand.

Of course. She always did. *I missed you, Arthur.*

Did you really? His heart fluttered.

Of course. Don't I always? You're so different from the others.

He did not smile. This admission had been no gratuity. Unlike her human counterparts Rekina was incapable of deceit; every confidence she slipped into his willing mind was honest and generous: she had not been programmed otherwise.

Your mind is somehow more devoted, she went on, stroking his tangled thoughts with her invisible hands.

Is it?

Of course, my darling.

Then I'm glad. I really do love you, Rekina.

Of course you do.

He smiled, like a child half-way into sleep, and for the first time in several long weeks he began to relax. Safe in the arms of his mistress he found that desolation and neglect were momentarily negated.

'There. How does that feel?'

Reluctantly, Talbot opened his eyes and looked up at the critical face of the Madam. 'Perfect,' he mumbled. 'Everything's *perfect.*'

She bent down and passed a heavy hand across his eyes and they quickly closed. 'Good. Well, don't forget to call me if you need anything . . .' There was a buzzer close to his right hand but he never used it.

She moved quietly out of the room and closed the door behind her. Talbot had barely heard her last words. He was by now so securely locked in rapport with the sympathetic

cyber that the outside world had, for the time being, ceased to have any currency.

Her name stood for Rand Electronic Katharthis Interpreter and Need Analyser, but to Talbot—from that first evening, more than a year ago, when he had first 'met' her—she had always been Rekina: the feminine angel of his dreams, the first person who had ever *understood* him.

She had been programmed to understand him.

You see, he had explained, *my wife doesn't understand me; never has....*

And she had smiled, and stroked his feverish thoughts. *But what wife can? A wife is not a lover, can never be a partner of the soul—and only lovers understand.*

Is that really true? Is that all there is need to know? Can I, with this information, manage to face this dolorous world and...?

Even then there had been an infectious gaiety about her mind which had helped to soothe away the ragged edges of his gloom. *But of course! Once you understand how essential...*

But is it enough? he wanted to know.

For someone like you it is everything.

And what *am I?*

Her answer was ready. Inside her dull steel hull a tape whirred and spun across her inputs while she extracted all the relevant psychological data of his person and fashioned her answer accordingly. *You are Arthur William Talbot. You are forty-one years old, disenchanted with the world and filled with despair....*

The world is a nightmare, Arthur had countered, defensively, *a tawdry merry-go-round stuffed with grinning gargoyles and mindless spectators. The motor has run down and propels us in jumps and shudders. And either the driver has left us or he watches us from the gibbering shadows with his mad, exclaiming eyes....*

But Rekina pressed on and disregarded his contemptuous outburst. *You are inclined to blame yourself for what has happened between your wife and yourself, but I am bound to disagree. I see you as a child of chaos who has never been understood. But I will understand you, Arthur. That is my duty and my oath, my reason to be with you, for now and whenever you wish. I will help you. I will make you whole as you have never been before. Come to me and I will assuage your pain and your loneliness....*

And, humbly, he had submitted to her. And so it *was*. Because she had the means of monitoring the anxieties that flooded through his bloodstream and access to the many poisoned thoughts that eroded his confidence.

In this affluently permissive society it wasn't flesh that Arthur Talbot craved. The world had turned itself upside down and, when everything was available and everything was possible, merely physical extension only led to satiation and moral emptiness. As the world of the flesh became more accessible and prosaic, the spiritual needs of people like Arthur Talbot became obsessive—and like so many of his doomed compatriots Arthur had sentenced himself years ago to a witless marriage.

Everybody knew about the Houses where the intangibles might be obtained; they whispered and joked about them, but nobody ever took such talk seriously—until the loneliness and the desolation began to squeeze out of the pores of their skin like part of their souls draining away into the thoughtless music of time; only then did the desire to discover a different sort of companionship become an obsession. Firstly, the casual, half-amused inquiry; the elusive quarry tracked down inside of office hours and the torn slip of paper passing nervously from another's hands into his: an address scribbled thereon and a grim warning to be cautious.

Be discreet, his confidant had warned. *If the fuzz catch you . . .*

And at first he had been much too afraid to consider looking for the place. But as time passed—and the dull, grey ennui of his life with Laura in their cramped, childless apartment became unbearable, he was forced to flee her witless company for something better; he felt compelled to push his fears to one side and seek out a little satisfaction from what was left of his vague and empty life. And on that night—now more than a year ago—he had found his journey's end.

So long? Rekina mused.

So long, Arthur said. *However did I manage to survive before I found you?*

Initially he had been apprehensive. The decrepit and crumbling ex-factory buried deep in the heart of the depressed area had worried his sensibilities. But the people inside seemed to know what they were about and, after a while, he began to look forward to his nocturnal assignations—after all, an assignation such as this should, at all times, suggest a degree of danger to make the risk worth while.

On that first evening he had been interviewed tactfully by Swenson and then left alone in a small cubicle while he poured out his heart to a portable recorder. He knew—dimly—that everyhing he said would be coded and fed into whatever machine was assigned to take care of him and he found it easier to talk to a little grey box than to a person.

Therapy machines were marvellous inventions. They were the delight of the many mental clinics that sprouted like diseased mushrooms from the sterile soil of society, a means whereby previously incurable neurotics could be treated and coached back to an acceptable norm of behaviour and found suitable for society again. Because of their inherent dangers if their bio-neural therapy was tam-

pered with, they were kept jealously guarded from the general public.

But this was an open society and, in an age where small atomic weapons could—and had—been stolen and thrown together for the use of criminals and gangsters and anything, anywhere, could be had for a price, well, it wasn't surprising that the highly efficient crime syndicates had found ways and means of obtaining some of the machines once they had realised their potential.

But Arthur Talbot had only a hazy idea of the enormous organisation of which this House was only one small cell of vice; it was a vague, anamorphic entity very far in the background where he was not obliged to think about it. The cost of his evenings was high, but not prohibitively so and, while they lasted, he was determined to enjoy them to the full. In this way he found the determination to endure the dreadful monotony of all his other dreary days and nights away from Rekina.

On that very first evening he had been shy and nervous.

Don't be, she had said. *I will take care of you. You will have nothing to fear while you are here with me. I will see that you are not disturbed and that all your worries are washed away and that all the colourless trivia of your life is denied entry. And we will discuss the things you love and that which has given shape and meaning to your existence . . .*

Nothing has ever done that, he protested.

But it must have, otherwise you would not have endured and would not be here with me, now. We will probe through your doubts and find these wondrous things and you will learn to distinguish them with a fresh mind unclouded with trivia . . .

But is this possible?

Of course it is possible. I am your companion and I will guide you, for I care.

She had been programmed to care. She knew everything about him: all that he had spoken into the hungry recorder and much more besides. This was the age of the dossier and any man's weakness could be had anywhere, anytime, for a price—and with its customers the House was provided with such necessary information almost instantaneously; such was the polished efficiency of the controlling syndicate.

So she knew all that he knew about himself and more. Close to her metal heart were a number of tapes where all this vital information rested and she drew upon it for every nano-second of their time together.

His first reaction to the bio-neural rapport had been one of overwhelming awe. For the first time in all his lonely and misunderstood clerk's life he knew that he was in physical and mental contact with someone who *understood* him. It was a blinding experience and he clung to it like a drowning man while the past whirled madly around him like a monstrous typhoon.

What is your name? he asked.

Whatever you wish it to be.

Hungrily, his thoughts wandered. He had already pictured her in his astonished mind; indeed, she had seemed to launch herself into his mind whole and astonishingly beautiful from the very beginning. Her shape was as he had always imagined her to be: tall and slender, with lustrous long dark hair and a face filled with compassion and a love that could defy the centuries. Her manner was gentle and consoling; the warmth of her arms a blessing he was always loath to leave. She was everything he had ever dreamed about and wished for, the dark goddess who had existed only in his doleful daydreams and who now had leaped into his thoughts like an incandescent presence. But her *name?*

He opened his eyes. Visually she was squat but somehow

still shapely. She looked a little bit the worse for wear, but that was only to be expected. Inconsiderate hands would have shifted her about from one place to the next and the few rough marks of abuse and mishandling gave her character that a glossy new machine would have lacked. Squinting, he could just make out the row of small red letters on the top left hand corner of her fascia: R-E-K-I-N-A.

'Rekina,' he whispered, aloud, but the thought was instantly transmitted to her own mind.

Very well, then: I am Rekina.

And so she was.

He had settled down, and after a while forgot that he could hear the soft purr of components inside her shell as she sorted quickly through his identity tape.

Tell me, she asked, *what do you feel?*

Penny for my thoughts?

Something like that. I want to know what you feel, now, this instant, and what you feel other times. I want to know everything about you. Tell me . . .

Anything in particular?

Anything. Anything that occurs to you . . .

With his eyes closed he had smiled. He settled down into the couch but found that words—and ordered thoughts—would not come. Perhaps a vague uneasiness still kept them back.

She came closer. He could feel her moving through his disordered thoughts like some ministering angel and carefully moving them into shape.

Tell me, Arthur, she cajoled. *What troubles you? What makes life so difficult for you?*

He had opened his eyes then—they were wide and filled with an overpowering fear. He gestured weakly towards the tattered ceiling and the miracle beyond that they could not see.

That . . . out there. Space and all those stars. And most of all, time. It gnaws away at everything we do, at every goal we set. A day, a week, a year—what does it matter? It's all for nothing in the end. How can we ever hope to understand all that and discover the meaning of life? It . . . it's all so big—and we're so small. How can there ever be an end to anything—to time, to space, to life? How can there even be a beginning?

Is it necessary that these questions should be answered? Yes? Otherwise man's a joke. Why were we put here? Why was this journey ever begun—and who turned the key that started it all?

His mind writhed like a tin of worms, his thoughts scattering every which-way. He writhed in agony on the couch and waited for her answer.

But she remained silent.

How can I die not knowing these answers? he exclaimed. *How can I live not knowing these answers? How can I hope when . . .*

She said, quietly, *'To live at all is miracle enough.'*

His mental tirade stopped and he looked up in wonder. His lips moved—hesitantly—and gave up another line of the poem: *'Here in my hammering blood-pulse is the proof.'*

He sat up, the wires trailing from his head and chest. 'That's Peake,' he said. 'Mervyn Peake.' And then, excitedly, 'Do you like poetry?'

Of course. Her voice in his mind filled him with wonder and gratitude.

She had been programmed to like poetry and to serve his deepest loves in her therapeutic manner.

He sank back into the couch. *Why, that's marvellous!* his mind exulted. *We . . . we can* talk . . . *discuss things! Things I've never been able to do before. My wife . . . Laura has never been able to understand. You see—she thinks—*

says—it's all camp: something for little blonde boys with curls. She doesn't understand that it's——

Something for all mankind?

That's right. A spotlight that picks out and illuminates the core of life . . .

. . . and holds up a mirror to ourselves.

For a moment her insight left him speechless. It was like listening to his own thoughts magnified and thrown back to him.

You do understand! he cried out. *You do!*

And she smiled. *That is what I am here for . . .*

That had been the beginning of the affair. And ever since that auspicious encounter he had contrived to slip away one night a week and pour out his soul to Rekina while his witless wife watched their wall-vid with staring, vacant eyes and did not bother to miss him: their life together had become so pointless.

But tonight he felt restless and insecure and all her soothing could not erase the dark demon of doubt that lurked in the dim corridors of his subconscious mind.

Why are you unsettled? she asked. *Is anything the matter? Something you haven't told me?*

She poised, alert and waiting to transcribe any confession on to her master tape.

I . . . I don't know, Rekina.

Are you afraid of something?

He hesitated. Was he?

Nothing that I know of.

Her unseen hands stroked his enigmatic fever.

There now, she said, *relax. And talk to me with your mind, and with your heart, so that I may understand and help you, Arthur. I am your woman: open to me. I will listen and advise. I will drive away the dark demons that haunt you. Talk to me. . . .*

And so they talked. Of art and poetry and music and all the things he had kept hidden from an inconsiderate world; all the things he had loved and been too cowardly to pursue. And Rekina absorbed his yearnings, his lack of fulfilment, and gave him in return compassion and understanding. She was the complete mistress of his mind and no man could ask for more. In an age of spiritual and moral decay Rekina and her kind were the chromium-plated angels of mercy to the hopeless mind, a habit impossible to kick.

After a while she sang to him: ancient folk songs tinged with melancholy regret; they wove a mordant pattern through his tortured mind and helped to bring him peace. Yet a part of him refused to rest and it grew until it seemed ready to consume his fragile flesh.

What is it, my darling? Your thoughts are so dark tonight, and underneath them I can detect a desire I find unfamiliar. Have I said something—anything—that has caused you concern? Have I——

No. Nothing you have said . . . or done.

Then what is it? Is it your wife. . .?

His lips curled into a wry, uncaring grimace. *No.* She hardly mattered.

Your work?

He almost laughed. As if such trivia mattered, now. Oh, if only he could stop this sudden uncontrollable shaking of his flesh!

The world, then? The mystery. Tell me, darling, and I will understand. Haven't I always?

The thing was welling up within him now. It was impatient and remorseless; he could not hold it back.

A few tears made their way out from underneath his tightly closed lids and ran down his pale, quivering cheeks. His lips trembled and formed words that were echoed in his troubled mind.

'Ah, love, let us be true to one another . . .'

And, smiling, she took up the next line of Arnold's poem.

'For the world which seems to lie before us like a vale of dreams . . .'

'. . . so various, so beautiful, so new, . . .'

'. . . hath really neither joy, nor love, nor light . . .'

'. . . nor certitude, nor peace, nor help from pain . . .'

His voice broke and the image died in his mind. The words of the poem slipped away and he began to sob.

Darling, what is it? I thought you loved Matthew Arnold . . .

'No!' His eyes were wild and filled with unshed tears. *No—I mean . . . of course I do! But I love you Rekina. . . .*

I know. Her smile was warm and consoling but it could not hold back the tide that threatened to engulf him, mind *and* body. *And I love you, Arthur . . .*

No. You don't understand!

But I do. I must. Haven't we discussed this many times before?

No, not like this! I really love you, Rekina—can't you see what I'm trying to say? I LOVE you!

Now he understood his restless confusion and the nature of the dark demon which had haunted his days and weeks and months. His confusion had been a product of his mind struggling with his heart—and the demon something his conscience had dreamed up to frighten him away from the truth. But now he didn't care about the consequences his love for Rekina entailed. He would follow it through until he found the consummation he devoutly wished: *oneness.*

Wait, Arthur . . .

But he would not be put off. He rose unsteadily from his couch and walked towards her. His hands were outstretched like a figure half asleep and the wires trailed after him like the slack strings left dangling by an absent puppeteer.

He knew what must be done.

No, Arthur. Wait! You do not understand....

Yes I do, he countered. *I love you, Rekina, and that's all that matters. And I have to have you. I need you....*

He longed to possess her, to make her his own, inviolably; to achieve the mystical catharthis his soul craved. And with it peace ... and oneness.

His mind, like his arms, reached out to embrace her. *You're everything I wished for, everything I've ever wanted. I love you and I want to be with you always. Anything else is a poor substitute.*

His master tape whirred wildly next to her heart as she sought for some way to dissuade him from touching her, to discourage his mad dream. Her actions were almost akin to panic, an unlikely cybernetic reaction.

Arthur, wait a moment! Step back. Sit down. We must talk this thing over ...

But it was too late for any discussion: his grim compulsion drove him towards her.

His wild eyes did not see her battered, grimy shell nor the red light blinking rapidly on her fascia. And somewhere in the distance an alarm wailed ... but he did not hear it.

He saw instead a tall, dark woman with proud breasts and soft, unwavering eyes. And as he looked she opened her arms to him and bade him welcome into her. He stepped closer—his feet faltering—and he felt her arms reach out to embrace him.

Rekina, his mind whispered. And then, aloud, *'Rekina ...'*

He stepped forward to meet his consummation.

Arthur, what you wish cannot be! Arthur ...

But he was no longer listening. Her voice was urgent and, perhaps, slightly wistful, but there was nothing she could do to stop him.

His arms reached out for her shoulders, to draw her radiance into his influence ...

. . . and found the sharp corners of her shell underneath his trembling hands.

He sobbed and crushed her to him.

They embraced.

And in spite of her protests—in spite of the overpowering sadness that surrounded this climactic meeting—he experienced a single moment of ecstatic happiness as his hands closed around her. It was a pleasure more intense, more real, than anything he had ever felt before. His mind seemed to disintegrate and he found . . . *oneness.* And after that . . .

Pain.

Of blinding intensity, so great that his body seemed to burn and his mind was incinerated in one moment of incandescent agony.

And left only blackness.

The oneness to which he had always aspired.

The Madam found him with his arms outstretched across the face of the console, his back towards her and his body fused to the machine in an attitude of crucifixion. An output terminal, they later ascertained, had come loose inside the cyber and had touched the external shell. The console had been alive with several thousand volts of electricity when Talbot had touched it and he had died instantly.

The contact had almost welded his blackened body to the front of the machine. The juices had been boiled and sucked out of him and had sizzled and crackled in the grisly aftermath of his electrocution, and his limbs had congealed to the side of the machine.

The Madam quickly summoned some of her assistants to the room to clean up the mess. She *tsked, tsked* quietly to herself and fell into a coarse harangue of her Maintenance crew.

Accidents sometimes happened, she allowed, but they

really *should* be more careful shifting these things around. Sometimes the business of keeping ahead of the law had unpleasant consequences, of which the temporary loss of revenue was the most regrettable.

The Maintenance men pried loose his body and let it fall to the floor while they did a hasty patch-up job on the cyber so that it could be brought back into service as quickly as possible. The power was disconnected and the broken terminal replaced. Then somebody thought about cleaning up the mess.

Talbot had watched them with his blackened body and his ruptured eyes and now they swathed him in a sheet and carried him away from the room while somebody else tidied it up and made it ready for the next client.

One of the men from Maintenance was obliged to seek out Talbot's car and drive it to a remote corner of suburbia where its possible discovery would not be incriminating. The disposal of the body was another matter that might have proved troublesome.

If the effluent treatment plant hadn't been situated so conveniently.

FRONTIER INCIDENT

by

ROBERT WELLS

First-contact-with-alien-life stories are always intriguing because primarily the plot must revolve around communication in some form or another. New author Robert Wells approaches the problem in a fascinating manner.

FRONTIER INCIDENT

THINGS were distinctly strange from the start. There were those unexpected orange lights peeling back off the hull like fish scales. Then the complete radio blackout falling like a curtain between the ship, its base, and its destination, and the navigation panel playing tricks on its exasperated crew.

Jerman, a landlubber, wanted to turn back at once, but the Captain only grinned at his consternation. You never knew what you might meet out here in the enormous, empty mind of space. Besides, the *Jubilee* was the only shot for New Erin in thirty days and was carrying Cornel, a sick man whose sickness couldn't wait for the next homebound ship. 'We keep going,' said the Captain. 'Nothing stops an ambulance. You'll get used to meeting the unaccountable out here.'

But whatever it was didn't give them a chance to change their minds. After an interval which ensured that they were too far out to be able to return, it struck again decisively.

The analog course computers went first. The duty rating reported the warning light as soon as it flashed in the monitor, but before the Captain could even get to the flight deck the instrument panel blew up. There was a nerve-jarring arc of light and all the pointers swung to zero across the control console.

In the navigation cockpit the maps of stars and the highways plotted across them dissolved. leaving the screens blank, the veiled, milky eyeballs of a blind man.

At the same moment power in two of the main propulsion units ceased and when the craft could be brought under control again it was already deep into a chartless region.

The sick mind of Cornel seemed to have some means of perceiving this turning of the tables on the plans of his sane companions. Lashed to a couch in his cabin, he began to cry the same phrase over and over again in the voice of a dishonoured prophet. Its five words made no sense to anyone but him, yet still had a sinister ring for the *Jubilee*'s crew in their predicament. 'Into the waters . . .' he proclaimed. 'Into the waters of night!'

'Shall I quiet him?' asked Jerman. He was a psychiatrist detailed to accompany Cornel from the frontiers back home for treatment.

'Leave him. We need you here,' said the Captain. He ran a hand through his short-cropped grey hair, looking around at the crewmen still stunned and injured by the incident. He was very experienced. He had been through emergencies before, but never one thrust upon him so startlingly. Behind the determination in the hard, ice-blue eyes the mind was racing, calculating.

The voyage was about one hundred and fifty space-days old. Prior to the accident there had been maybe another forty ahead of them before they got to the settled areas of New Erin.

The Captain put on a pressurised work-suit and spent an hour with his chief engineer inspecting the ship. Afterwards he dropped back lightly into the cockpit of the flight deck.

He betrayed no emotion. Since before birth his society had conditioned him and trained him as a spacer and he had seen worse damage and ships that had survived it on much more arduous journeys than the *Jubilee*'s routine run. What was really worrying him was the apparent deflection from the recognised warp into unexplored voids and the

inexplicable readings on the instruments which had resumed their function. Of course they weren't working correctly, but if they had been the indications they gave would have meant that somehow *Jubilee* and its crew had disappeared from the regular space-time ellipse.

The fission fuel they carried was virtually indestructible, but it might become debilitated if serious loads were placed on it in an effort to realign the ship to its correct course.

Basic training and the manuals set out rigid procedures to be followed in any emergency. The Captain talked to his lieutenant over the ship's radio. 'Bell, test the crash generators. If they're still working see if you can beam a message to Fallada for relay to the Agency Control. Tell them we've been thrown off course. I think that basically it's a feed failure causing stress debilitation in the propulsion units. There's a serious power loss. Several input sections are completely unresponsive. I shall have to stabilise to repair and conserve power. Ask if they can plot our position; what kind of boost we'll need to get back on track; whether there's any known landfall site handy.'

It was two hours before the radio-link man got any response. When the reply did come the words were faint after the oceans of emptiness they had swum. Sometimes they were obliterated altogether by hurtling swarms of meteorites or the huge messages of exploded stars hurrying between galaxies to no particular destination. The words had a strange ring about them, too.

'You-er estimated plot five one six blank blank in Hydra. Three four degrees blank of track. Region not mapped. Regret no precise asteroidal data. If-er situation hazardous advise if tug required in which case *fade fade fade* outlined procedure three-er six.'

'Reply,' said the Captain tersely. 'Thanks. See we're on our own. Couldn't survive tug wait. Must try for landfall to save all power during repair. Will coast. If no suitable site

appears will consult again. All here in good spirits. Until next message—so long.'

But this courageous response was stripped of all meaning almost as soon as it had been sent, for the radio blanket fell again, more thoroughly than ever, and the *Jubilee*'s apparatus could receive nothing more.

They were alone. Every second carried them farther away on their thirty-four degree variation. The attendant shoals of lights returned and flowed back along the hull into the deeps behind them.

'Into the waters of night!' Cornel screamed. 'Into the waters of night!'

Double watches were set at all tele-observation posts and the chief engineer coaxed enough power from the domestic circuits to operate *Jubilee*'s scanners.

On the second space-day after the emergency Bell reported the craft moving into a scattered planetary system.

Jerman and the Captain joined him at one of the forward screens and watched the ponderous approach of the nearest body. The Captain had to use some of the ship's power to hold off from the gravitational field drag.

He looked with his unemotional eyes moving slowly across the scanner screen. 'One of them may provide a landfall.' He turned to the engineer. 'Can we make a landing manoeuvre?'

'Should be possible with care, sir. The Fernlock brake-systems aren't affected. As long as we can get a kick from at least two of the prop units I think she'll make it.'

'They'll send a search team from Fallada anyway if they don't hear anything from us,' said the Captain to no one in particular. 'Never mind. We must try to make a landfall to get repairs under way. If any suitable place presents itself, Bell, call me at once. I'll take the controls myself.'

Jerman went with the Captain to his cabin. They fastened themselves to the relaxation couches. 'Chess?' the

Captain inquired. He touched the fingertip control on the arm of his couch and above him the board lit up set with the last position of their unfinished game.

'I'd rather talk,' said the psychiatrist after a couple of indecisive moves. He was a lot younger than the Captain and his thin, straw-coloured hair wasn't cut short enough to prevent it often falling forward over his forehead, giving him a rakish, student look.

He found it difficult to converse with spacers. They were trained not to deal in imagination, speculation, hypothesis, or pure abstraction. But in their present plight Jerman felt unequal to the inevitable chess defeat.

'I guess you've seen a number of these worlds, Captain?'

'Seven planetary systems around suns,' the Captain recited. 'Two dead masses without known orbit. A long time ago. When I was still young enough to be a pioneer.' He sighed and closed his eyes. He was quite prepared to sleep if Jerman didn't want to play chess with him.

'Any of them carry life?'

'None. Not our sort of life. Sometimes primitive botanical or chemical structures. Why?'

'Only because this is an unexplored region,' said Jerman uncomfortably, 'and it gives me the creeps. I begin to wonder what we might find. . . .'

'You've never explored, of course,' said the Captain. 'You know, the more we push the frontiers forward the more we become convinced that no form of life equal to homo sapiens has evolved anywhere in the approachable parts of the galaxy.'

It was a predictable answer from a member of the Captain's profession. It appeared (Jerman figured) somewhere between page three and page seven of any Cosmonaut Manual.

The Captain continued: 'There were the Kappa II voles and in remote history the sub-human Troitans. I guess you

know the lay branch of Space History anyway. The Abeniatiks—they even developed a primitive form of hydro-propulsion in their tepid seas. They were the only reasoning organisms Man encountered. Everywhere we've been welcomed and adulated as superior beings. On the evidence that's what we are. We have no serious rivals.'

'All the species you mentioned are extinct now?'

'They ceased to evolve.' The Captain re-extinguished them with a wave of his hand. 'Contact with more complex and more highly developed organisms proved fatal to them.'

'Exactly. What I was trying to suggest is that perhaps some day, beyond the present frontiers or off the beaten space tracks—maybe right here, for example—we may be the ones to get an unpleasant shock.' Jerman's boyish face was puckered up with his concern to get his worry across to the spacer. He shoved his hair out of his eyes.

The Captain yawned. 'I only know what is or has been. Go to sleep or you'll end up like that poor, deranged creature we're supposed to be hurrying to New Erin.'

'And that's another thing,' the psychiatrist persisted. 'We've got millions of years of evolution behind us and here we are, the superior beings, still with a flaw which makes a nonsense of our greatest asset—our unique asset—the power to reason. Cornel's mind is broken. . . .'

'Complex machinery breaks down,' snapped the Captain. 'At New Erin cephologists will analyse the fault. Cornel will be restored if the damage isn't too great. His sort of defeat is slowly being eliminated—the way we've eliminated all the others.'

Jerman said nothing and after a minute's silence he heard the Captain breathing quietly as he slept.

The *Jubilee* drove on for two space-days, swallowing the emptiness between the planets, the glowing butt of its nose aimed at the system's red dwarf sun.

Bell, a heavy man with the same hard eyes as his captain, dropped into the cabin and woke the uneasy sleepers there.

'Sir, we've picked up a planet that's within the prescribed graph range.'

'Has it been rechecked?'

'Yes. The spectrum indicates vestigial atmosphere of non-toxic gases and the presence of surface liquid.'

The Captain scrambled up. While Bell took over the control console he and Jerman watched the planet's approach on one of the scanners.

The Captain checked the instruments himself. He reached a decision rapidly. 'Lieutenant, have all hands stand-by. We'll try to go into orbit immediately and identify a suitable site for landfall.'

It was a difficult manoeuvre for the crippled ship, but several hours later *Jubilee* was orbiting the planet within a band of numerous asteroidal satellites on a track which took it diagonally between the poles.

'Water,' said Bell. 'It looks to me like all damn' water.'

It was very dark—night-blue or violet at the distance from which they observed it.

'I thought I made out something different in Red Sector last time round,' said one of the ratings.

'What?' asked Bell.

'Kind of islands or rocks or atolls or something, sir. Water seemed to be breaking.'

'Concentrate all your viewers on Red Sector,' the Captain ordered. 'If you see anything enlarge it on the screen here.'

They orbited again. The domestic circuits had all been drained to summon sufficient power to operate the control instruments and the emergency drive equipment. There was no hot food; light and power in the living quarters had been eliminated and the gravity drag was so reduced that any sudden action had to be carefully controlled.

They tracked over the vital sector yet once more. 'There!' shouted Bell and Jerman together. 'There it is!'

The rating closed the tuning control. Red Sector came up on the captain's screen and expanded as the instrument enlarged the crucial spot to full capacity.

'Hold it,' cried Bell. 'It won't go any more.'

'It's a chain of small islands,' murmured the Captain. 'We'll put an instrumented slave rocket in to check them. Bell, you see to it.'

'Will our radio be strong enough to pick up the signals though?'

'I don't know. We'll have to take a chance anyway. Fortunately the range is short.'

'Where shall I put it in, sir?' One of the ratings stood by ready to push the blast button.

'Try that large atoll—the one like a broken ellipse.' The Captain's eyes were hard, icy again. 'Hell! That sea's as dark as night—huh?'

The psychiatrist looked at the Captain. He jerked the wisps of hair back out of his eyes and looked around at the crew. He seemed to be the only one who had found the Captain's comment significant. The crew were all impassively about their business. Rigid training compelled each one of them to concentrate on the job in hand and only that. Imagination had no part in their everyday affairs.

Hardly daring to trust his own imagination, Jerman got out of his seat carefully and floated from the cockpit. He fancied that the Captain rewarded him with a brief glance of annoyance as he went, but he couldn't be sure of this.

With the words still echoing in his head, he made his way to Cornel's cabin. The sedative he had given the sick man would certainly have worn off by now. Jerman dreaded having to open the padded door to hear again those prophetic cries. But when he looked through the peephole into the cell it was much worse. Cornel was peacefully

asleep for the first time in weeks; and there was an innocent smile on his face. He looked like someone who had come home after a long, hard journey.

The planet upon which *Jubilee* finally achieved a landing enjoyed a long day and a brief unnatural night illuminated by a mauve glow from its numerous attendant asteroids.

While the crew worked at the damage to discover its true extent and repair it if they could, the Captain made several exploratory journeys in the uni-jet cutter. There was nothing within range to be found. Apart from the string of small atolls where the *Jubilee* now rested uncertainly on its landing probes, the surface of the planet in that vicinity seemed to be covered by a tideless sheet of liquid, empty of marine life. For want of a better name this came to be known to the travellers as The Sea and its constituent water. In fact it was neither, being of a composition which defied analysis.

As a routine measure on any new landfall, planned or not, the Captain ordered samples to be taken up and sealed. But the liquid defied capture. It either spontaneously destroyed itself or changed structurally under unfamiliar conditions and environment. The containers were always perfectly empty, perfectly dry within a few hours of being filled.

The ship had been on the planet several Earth-long days when the Emissaries arrived. No one recognised them as such. Jerman, in fact, suffered a disappointment.

His patient had been enjoying a period of strange, almost lucid tranquillity since landfall. When the powerful voices began to speak to him, the mind therapist didn't recognise them at first as in any way extra-human. He just believed that poor Cornel's madness had returned.

Only the failure of his most potent drugs disturbed him sufficiently into taking careful notice of Cornel's ravings.

After checking to make sure he wasn't mistaken, he called the Captain.

WE CONVERT ER TO YOU SPEECH THROUGH THIS ER YOUR COLLEAGUE. Cornel's lips didn't move. The strange sounds, distorted and with a marked reverberation like a maladjusted loud-speaker system among mountains, issued from his throat.

WE WELCOME YOU ER TO (here the name, syllable after syllable of it, was lost upon the human ear). WE ARE ALL ER AROUND YOU BUT CANNOT MANIFEST ER AS OUR PLANES EXISTENCE SEPARATE FROM ER YOURS AND DANGEROUS TO ADJUST ER. WE INTEND YOU NO HARM. WE REPEAT ER NO HARM. YOUR VEHICLE DAMAGE IS NOT ER REPAIRABLE WITHOUT ER OUR ASSISTANCE.

'Bloody nonsense,' snarled the Captain. 'You didn't just drag me here to suffer the ravings of this madman, I hope?'

Jerman didn't reply. The message boomed on heedlessly.

WE ER RECOMMEND YOU TAKE ER ACCOUNT OF OUR TERMS FOR ASSISTANCE YOUR SAFE CONDUCT BACK TO ER YOUR BEING.

'The hell! I won't listen to any more.' The Captain flushed angrily to the roots of his grey hair. He wrenched open the door of Cornel's cell and stalked away.

The voices in Cornel insisted without a pause. They seemed now to be directed at Jerman.

YOU ER OF THE UNCLOSED MIND HAVE HEARD. WE RETURN ER TOMORROW AND REPEAT ONCE MORE OUR TERMS. YOU MUST ER CONVINCE YOUR COMMANDER WE ARE REASONABLE AND TERMS WILL ALSO BE REASONABLE. WE SALUTE YOU. UNTIL TOMORROW.

Jerman got his mouth open to reply, but the words stuck in his dry throat.

Cornel was a crumpled heap on the couch. He looked

like a puppet flung down after a performance, its strings released. Jerman, looking even more like a scolded schoolboy, licked his lips and crept out to find the Captain.

That night the section of feed line which it had taken days to shape and link, dissolved at the welds and the *Jubilee* was left as crippled as when it had landed.

Grimly the Captain rationed the ship's supplies. He divided the crew into watches and they worked round the clock to repair the mischief, but their sophisticated tools, although they continued to function perfectly, now had small effect on the damage. It seemed as though a screen had dropped between them and the ship. Showers of orange sparks fell to the ground and vanished as they laboured in vain.

Each evening Jerman returned to Cornel's cell to maintain contact with the Emissaries. The madman seemed hardly to have an existence of his own. He was silent all day, a vehicle for communication only; empty except when the planet's visitors had use for him.

Each time they returned, their demands for discussion with the Captain became more urgent, their language more uncompromising.

Three days after the first visitation the Captain finally abandoned the attempt to repair *Jubilee*. He issued a double ration of food and drugs to the exhausted crew.

Nearly everyone slept where he had eaten. Only Jerman sought out the Captain in the deserted radio cockpit where his latest efforts to arouse a response had encountered the now perpetual silence.

Their eyes met. 'You've admitted to yourself that they exist, haven't you?' said Jerman.

The spacer looked away. He looked older and his pale eyes less resolute than when the emergency had first hit Jubilee. 'I can't understand what it is they wish to do with us. What do they want? They have us here at their mercy.

They can take whatever it is—the ship, our lives—everything!'

'You'll never know what it is unless you come and talk to them.'

'How can you expect me to go in there and hold a conversation with a madman?'

'It isn't Cornel who's speaking,' Jerman urged. 'You know what—I think they've chosen him because of his affliction. Reason left his mind and gave them a loophole to enter it. Maybe they've been waiting for centuries. I believe they ambushed us when they knew what we were carrying in our sick-bay. Now they have a purpose for us.'

'Let's go,' said the Captain. 'We'll find out.'

The two men traversed the sleeping ship. At the cell door Jerman cautiously opened the peephole. Cornel was moving restlessly on his couch.

'Open the door,' ordered the Captain. He preceded the psychiatrist into the cell. Cornel subsided into a motionless heap.

WE ALL SALUTE ER YOU, CAPTAIN. WE SALUTE ER YOU. The Emissary voice—or was it a chorus of voices?—spoke from the depths of other worlds through the breach in the wall which they had awaited so long and chosen so fastidiously.

Politely but uncompromisingly the terms for the safe conduct of *Jubilee* were outlined.

The Emissaries—they had no name which humans could understand—had for centuries watched the progress of humanity across the galaxy. Now at this frontier the time for demarcation had come. Human expansion might continue in other directions, but there must be no encroachment upon sections of the galaxy long since the heritage of the Emissaries' own, distinctive culture.

The powers of the Emissaries in their own sphere were sufficient to prevent the repair and departure of the humans' space craft. Its arrival had been carefully planned

and engineered (as Jerman had suspected) because of the presence on board of Cornel.

In return for the saving of the expedition the Emissaries required the Captain to return to the human colonised parts of the galaxy taking with him the Emissaries' demarcation warning.

'But why can't our two evolutions come together and co-operate?' asked the Captain. Having drowned his scepticism on the possibility of other, reasoning beings he found his space-ethical training surfacing once more. 'Two cultures such as yours and mine could exercise a tremendous force for good. Great gaps in the knowledge of both our creations—our development and the universe we share—all these could be closed in a single co-operative act.'

YOU, A HUMAN, HAVE ER THE AUDACITY TO SUGGEST THIS? So far as human emotions were identifiable in the Emissaries, the question seemed to contain both incredulity and mirth. WHAT HAPPENED TO EVERY EVOLUTIONARY MOVEMENT WITH WHICH HUMANITY HAS COME INTO CONTACT? IT HAS BEEN DESTROYED. WE DO NOT CHOOSE TO ARGUE. (The Captain choked on the retort that came to his lips.) WE ER OFFER YOU THESE TERMS.

WE CANNOT DESTROY YOU BUT YOU WILL DESTROY YOURSELVES IF ER YOU REFUSE TO CARRY OUR WARNINGS BACK TO YOUR KIND. THE LINK ER BETWEEN YOU AS YOU ARE NOW AND YOU AS YOU WERE IS VERY TENUOUS.

The Captain shrugged. 'I can't guarantee that my civilisation will believe me or even if it does that it will take notice of your warning.'

WE ASK ONLY THAT YOU CARRY THE MESSAGE.

'I shall do it.'

THERE IS ONE CONDITION MORE.

The Captain didn't respond and the voices continued: YOU WILL LEAVE ER TO US AND IN OUR CARE THE MAN CORNEL THROUGH WHOM WE SPEAK TO YOU.

The Captain opened his mouth to reply but closed it again before any sound escaped. Jerman couldn't tell from his expression whether the response was to have been a flat negative or an indifferent assent.

WHAT DO YOU SAY, CAPTAIN?

'No member of our race may be left in the hands of strangers.'

BUT THIS BEING IS ALREADY ALIEN TO YOU. HIS BRAIN WE KNOW HAS NOT THE REASON WHICH DISTINGUISHES YOURS.

After a short silence the Captain said, 'I must have time to consider this.'

ONE HOUR?

'I shall return tomorrow.'

Jerman caught his arm. His hair flopped down over his anxious, boyish face. 'Agree now,' he whispered frantically. 'It's our only hope of getting out of this.'

'I shall return tomorrow,' said the Captain as though he hadn't heard.

COMMANDER, WE SALUTE ER YOU. UNTIL TOMORROW. WE SHALL AWAIT YOU ER HERE.

Their last echoes faded down the long corridors through which they came. The Emissaries were gone. Cornel stirred, woke, looked at the two men who so unexpectedly shared his cell and began to laugh uncontrollably.

Can they hear us? Can they see what we think? Jerman wrote out the questions with a shaky hand on a page ripped from a calculation block and shoved it across the table to the Captain.

They were in the Captain's cabin with Bell. The crew had been informed of the new developments in their predicament. Time was running out and still the Captain hadn't revealed his decision.

He looked at the young psychiatrist compassionately. He

didn't answer the question. He said calmly: 'I can't give them Cornel. You know that.'

'But why not? He's lost to humanity already. We only had a certain time-margin to get him to New Erin. That must have run out by now. Even with his mind in the care of the best doctors we have it couldn't be saved now. You can't sacrifice all the rest of us. . . .'

'The procedure is quite clear,' said the Captain. 'Article 18. No human organism, living or dead, must be abandoned where it may fall into the possession of powers alien to the human race.'

'Cornel is useless to them,' cried Jerman. 'He's not even human any more.'

'Precisely. And why is he not? Because his mind is shattered. Tell me: what carried us from the old seas of Earth to walk upright, to conquer Solar and stretch out among the stars? Reason! Awareness of ourselves. Now then, if you were another reasoning life form which saw in Man only a threat to your existence how would you cripple Man?'

'You'd take away his reason,' said Bell. The chunky lieutenant's face was screwed up anxiously as he looked at his commander. He looked resigned. Trained in the same thought patterns as the Captain, he had readily foreseen how the argument must end.

'No,' said Jerman. 'No—I don't believe it.'

'Oh, yes. That's why they want Cornel,' said the Captain patiently. 'They will take his mind apart to discover how they may be able to alter all human minds. When they've done the research they need to do they'll be able to speak in all our minds just like they speak now in Cornel's. It will be a weapon against which humanity hasn't even begun to consider defences.'

'But haven't they done it already?' argued Jerman. 'They've already found their way into Cornel.'

'Yes. But I think that until they can get him outside the ship and start the process of transmuting him to the same plane of existence as themselves and their damned water they won't be able to get down to details and analysis. Perhaps at the moment they know how but not why. They've only scratched the surface of their purpose.'

'We're going to miss an opportunity which may never occur again in our lifetime. We could be the ones to carry back to humanity the news of another powerful reasoning force in the universe!'

'The price is too high,' said the Captain. 'And maybe we would be carrying the seeds of destruction of our own intelligence at the same time.'

'Suppose their motives are purely defensive?'

'Yes, I've considered that. For heavens' sake! Do you think I don't want to go on living, too, Jerman? What logic tells me is that any intelligence which so carefully plans and awaits its opportunity isn't likely to remain defensive and content in its own sphere for ever.'

The Captain paused. He said with a sigh, 'Perhaps one day we shall come together. All that we here can do now is to deny them one step in their plan.'

'Suppose they can hear us now? Won't they try to stop us?' It was Bell, still resigned, only planning along with the Captain the last, logical steps they must take.

'No. I think that within the ship they're powerless. Anyhow, we'll see. Let's go.'

The three men shook hands.

'But they said they couldn't destroy,' said Jerman desperately as they left the cabin.

'Oh, yes,' said the Captain, 'but you recall that they added: *You will destroy yourselves.* Now—I think I see what they mean. Just think! How much beard have you grown since the emergency hit us? Why won't any of the

chronometers work—not even those you wind and set by hand?'

Jerman and Bell stared at him. The psychiatrist half shook his head. Bell said, 'Jees!' softly.

'I think,' said the Captain calmly, 'that to get us here at all it was necessary for them to take us out of time—our time—and suspend us between their being and ours. Unfortunately only they have the secret of how to put us back.'

The crew were informed of what the Captain had decided to do. The ship was silent as the Captain, followed by Bell and Jerman led the way to Cornel's cabin. Jerman thought he could hear the thud of the heavy holster against the Captain's hip at every step he took.

As soon as the cell door was open the Emissaries launched a barrage of threats and cajolery. YOU ER REASONING BEINGS SURELY CANNOT DESTROY YOURSELVES OUT OF PETTY CONCEIT. THINK AGAIN. WE DEMAND ER THAT YOU RECONSIDER. . . .

The Captain withdrew the short-range atomiser from its holster. He primed it patiently, seeming to invite the visitants to intervene if they could.

NO, COMMANDER! NO! IT IS ABSURD TO DO ER THIS. WE INSIST. WE HAVE A FURTHER SUGGESTION . . .

'Thank you,' said the Captain. 'I think the first round belongs to us after all.' There was only the merest hint of fanaticism in his voice.

He levelled the weapon. At that range its penetration was absolute whatever barrier the Emissaries might try to interpose. The invaded organ would be destroyed.

'Into the night . . .' moaned Cornel. 'Into the waters of night.'

'Don't be afraid,' said the Captain. 'This time I think we'll be coming with you.' He squeezed the trigger.

All the hands on their watches and on the *Jubilee's*

chronometers jerked convulsively forward, marking a fraction of time. The instrument panel blew up. There was a nerve-jarring arc of light and all the pointers swung to zero across the control console. The maps of stars and the highways plotted across them dissolved, leaving the screens blank—the veiled, milky eyeballs of a blind man.

A second later there was nothing; only the infinitely empty darkness and drifting off the spaceway between the frontier and New Erin a black, weightless cinder.

THE BIG DAY

by

DONALD MALCOLM

Computerised mechanisation = less working hours = more leisure = boredom and eventual stagnation. A benevolent government would have *to think of something to keep the individual happy. How about a modern form of gladiatorial games?*

THE BIG DAY

THE woman, her long, raven hair flowing behind her like a banner, ran to him across the moon-cold sands, her gown a flickering of lambent yellow flame.

She was calling his name above the gentle thunder of the surf. He reached out his arms towards her.

THE DAY IS TUESDAY, 5TH OF MAY, 2046. THE TIME IS 5 A.M. IT IS TIME TO PREPARE.

THE DAY IS——

He clawed his way out of the dream like a man saved from drowning. He was still partially submerged, but the woman was fading fast.

The voice, issuing from the grill next to his left ear, began for the third time: THE DAY IS——

'I know what day it is!' he snarled, opening his eyes with an irritable snap. He detached the electrodes from his skull and stowed them away in what it amused him to call the dream decanter. As with everything else in his life, even his dreams were programmed.

The fact that he was awake registered in the appropriate memory circuit of the Central Computer, 24.15663 miles away from the sub-computer at reference 3-N5-2-18-5. The town, the district, 'Peoplebox No. 2', as he thought of it derisively, the storey, the room number.

Putting his hands behind his head, he gazed up at the pale lemon plastic ceiling, the tint chosen exactly to harmonise with his personality. It was a funny colour for an ego, he reflected. But maybe it wasn't so bad. Mr. Gresham in

Room 6: his ceiling was a screaming red. He'd caught a brief glimpse of it, one day.

Outside, an uncomputerised bird chirpily welcomed another day. The Big Day.

While one part of his mind dwelt again on the dream, another part was running a count-down on the computer.

Four, three, two, one. Silently, he began to form the words along with the machine.

THE OCCUPANT OF 3-N5-2-18-5 HAS FAILED TO RISE FROM HIS BED. IF HE HAS NOT DONE SO IN TEN SECONDS HIS RECORD WILL BE DEBITED.

He began counting again. He took a malicious delight in defying the computer, within limits. At the count of nine, he bounded out of bed, like a boxer who had been taking a rest, and began to shadow-box, his breath coming in sharp snorts through his nose. The plastic floor was pleasantly warm beneath his spatulate feet.

So much for Ava and James, he thought, a trifle gloomily. No more the tragic Flying Dutchman; once again, and inevitably, he was Mark Hanson. At least they hadn't done away with names. Yet. He slaved fifteen hours a week, five hours a day, as a Junior Programmer at the district electronics complex. As part of his regulated leisure, he was active in the Old Film Society.

He struck a naked pose. Behind him, the bed had folded into the wall. 'I am master of all I survey!' he intoned, his voice ringing like that of Olivier before Agincourt. And what he surveyed wasn't much. He was facing the window, with its personality-orientated curtains, in a design of quiet whorls, like questing mouths. He pirouetted slowly to his left, like a music-box figurine. The shower had appeared, with mechanical rabbitiness, from the ceiling, and waited to receive him, a sacrifice to daily hygiene. Next to it, in a sealed bag, his clothes for the day lay in a slot.

Above it, the Mural of the Month glowed, a meaningless

cacophony of shapes and colours. It was based, as he knew, on the North Five District Group Harmony Personality, but it jarred him. As if sensing his hostility, it writhed like an angry snake.

Next, on the corridor wall, was the door, keyed to his unique infra-red wavelength. Where the bed had been, a seat now extruded and a table stuck out, like a hanged man's tongue, from the third wall, Dialafood Disc at the ready, pristine utensils swathed in plastic. His eye travelled next to the blank part of wall that would open, at the right time, to reveal his personal possessions.

His built-in clock was warning him that the computer would be after him again, if he dallied much longer. The wall to the right of the window hid behind its plastic façade a television screen.

Resolutely, he averted his gaze from the window and the blue brightness beyond. Master of all I survey! The words were sour in his mind.

Briskly, he stepped into the shower, forestalling the computer's rebuke by a micro-second of time. He grinned as the transparent sheath slid up from the floor and water, at just the right temperature, and mixed with soap, needled his body. He slapped and rubbed at himself, although it wasn't necessary, as the shower was, naturally, one hundred per cent thorough. But flesh was a subjective reality in an objective world. Perhaps it was the only reality, he didn't know. The slap and rub routine made him feel more of an individual and less of a cypher.

The mixture changed, first to warm, then to cold. He liked that bit least of all. The water went off and blasts of hot air billowed around him, drying the moisture quickly and efficiently.

If he had been pushing to the dark recesses of his mind what day this was, the pile of clothes before him dragged the knowledge out into the open.

This was no familiar office shirt and shorts, with light underwear and shoes.

The white suit was thicker, heavier, and one-piece. There was also heavy one-piece underwear and coarse socks. And the shoes—— He wondered how he would manage to endure their weight. But even as he touched them he felt a thrill compounded of fear and pleasure. The rig-out was completed by a helmet, scarf, goggles, and gloves.

Leaving them, he went swiftly to the window and looked down. His heart was booming. Laid out was a diabolically designed two-and-a-half mile racing circuit, distilled from the elements of the Ring and Le Mans, Indianapolis and Sebring. His gaze followed every bend and twist and curve, then wandered beyond it. There ran one of the super highways that held Britain in a ribboned embrace. Even as he watched, a great silver liner bus flashed along on its cushion of air, heading north at three hundred miles an hour. The railway system had long gone, but that particular liner bus was called The Flying Scotsman.

PLEASE STAND BEFORE THE AUTODOC, the grill requested.

He took another look down at the waiting circuit.

Waiting for him.

He moved to the autodoc, situated above the television screen, and a bunch of probes, like tentacles, swooped on him, checking him over, as they did every morning.

His mind wandered, shutting out the intimate gropings of the tentacles. He knew what day it was. His day. The day he would go down to that circuit and drive a car: a racing car. He would be one with the ghosts of Fangio and Clarke, Ascari and Hill. He would experience the thunder of the engine, the feeling of controlled power under acceleration, the bite of wheels on the track, the sensation of fleeing from a world that had fallen into the clutches of mindless machines.

He would have a machine that he could bend to his will. Exhilaration flared in him.

The autodoc found him perfectly fit, as he knew it would, and retracted its probes, like a satiated monster. He went and put on the underwear and the socks, leaving the suit.

He kept his eyes on it as he moved to the table and dialled orange juice, bacon, eggs, toast, butter, marmalade, and Russian tea.

The meal appeared, prepared exactly as he liked each individual item. He ate automatically—normally he enjoyed his food—his mind reliving the highlights of the many old racing films he had watched at the Society. Even the memory made his blood tingle with anticipation and fear.

One day in the year everyone was completely free of the machines, at liberty to match his, or her, wits against whatever they chose to do. For him, this year, it was car racing.

There were always accidents, of course. One of the daredevils in the complex had been bitten in two by a shark a few years previously. He'd seen the film of the tragedy a number of times at the Society. It had always fascinated and repelled him. But accidents were a necessary—even desirable—concomitant of the Big Day, as it had come to be known.

Life in a computerised society was featureless, safe, dull. There was plenty of everything for everybody. Although people were allowed one Big Day per year, comparatively few took the opportunity to loosen the deadly chains. Life was too safe, too good, to risk throwing away. Mark had long considered that people no longer realised that life was for living, not for hoarding against a stagnant and unknown future. The treacly tenaciousness of society bored and frustrated him and he longed to break free.

But the whole world was in the same grip and there was nowhere to run. Man had turned his back on space and the stars. They beckoned in vain. Instead, Earth had been tamed and turned into a garden, from the depth of the oceans to the heights of the mountains, from the poles to the Equator.

6 A.M. PLEASE INDICATE NOW YOUR DECISION BY PRESSING THE APPROPRIATE BUTTON.

He popped a dental pill into his mouth, rose, and walked to the window. Behind him, the table was cleared silently and folded away. The grill waited. Again, he stared down at the track. A blood-red car sat at the starting grid. His mouth was dry. Press a button: make a decision. Press the blue NO button and sink into oblivion for another year. Press the red YES button——

He glanced sideways at the buttons, like mamillary Good and Evil. He was curiously incapable of reaching a decision. There were elusive thoughts, half-hidden desires, trying to break the surface of his mind. For the first time in his life he was deeply afraid of something and he didn't know what it was.

He rubbed his hands together. The grill crackled. He took two paces and his finger executed the red YES button.

6.05 A.M. PROCEED TO THE TRACK.

He pulled on the suit and, carrying the other things, went to the lift that ran down the centre of the building. There was no one else about. The door opened and he stepped inside the lift. He had chosen early morning, because he thought he would feel fitter both in mind and in body. As the lift descended, he admitted to himself that there was another reason. The names or numbers of people who chose to take advantage—if that was the right word, he considered wryly—of the Big Day were never disclosed. He knew that very few in his building would do so.

Many of the faint-hearts took vicarious pleasure in seeing

the daredevils off and he hadn't wanted that. He wasn't sure that he was doing the right thing. Again, he hadn't been sure on any of his six previous Big Days. He'd started at fifteen and he had survived, although the pot-holing adventure of two years ago had almost proved fatal.

So he had decided to go out early, have his ten circuits of the track, and then try and settle once again in the dull rut of society for another year.

The lift reached the ground floor and the door opened. The hallway, flooded with sunlight, was bleak and empty, and somehow he felt cheated. Strange exhilaration filtered through his body, like lava running along faults in the Earth's crust, seeking a way out. And the way out was violent, through the mouth of a volcano.

There should have been cheering crowds, like those that had greeted the racing heroes of old. People should have been clapping him on the back and wishing him 'Good luck' and little boys should have been thrusting out grubby, demanding pieces of paper for his autograph, not wanting to wait until after the race, in case he was killed, an Arthurian knight on wheels.

The exhilaration persisted, although overlaid by a sense of anti-climax.

Outside, the sunlight struck him a glaring blow and he shielded his eyes. There was a solitary official standing beside the low, red Formula Two Lotus, the type in which Clarke had won his immortal victory at Indianapolis. They had spared no detail. He had asked for an exact copy. He didn't recall Clarke's car having been blood-red, but that didn't matter.

The official consulted his vocaboard and said in a bored voice: '3-N5-2-18-5, Mark Hanson.' There was no question. Would-be suicides were in short supply. One car, one driver. Hanson took the proferred hallucina-pill. He acknowledged the statement and the receipt of the pill, speak-

ing into the vocaboard microphone. The official walked away without a word.

He rolled the pill between his fingers. His brow furrowed. The pill was dark blue. The colour had always been pale green, before. It probably wasn't important so he swallowed it.

He was standing next to the car, which gleamed in the morning light. He ran his hand over the windscreen and the steering wheel and the bodywork, rejoicing in the power that would live under his direction. He walked slowly round the car in silent admiration. Then he climbed in, sliding his legs in until he was practically lying down. For a brief instant, he felt as if he was going into a pothole again and the memory brought a sourness to his throat. Precise details of how he had extricated himself from that predicament had always been vague in his mind, no matter how hard he had tried to recall them.

The pill was taking effect and already he was slipping into another world. He started the engine and the car growled like a disturbed cougar. There was no sound, except the singing of a bird and, far away on the road, the faint passage of a liner bus.

Then, gradually, he became aware of festive crowds and milling mechanics and the muted purr of the other cars and the smell of fuel and oil and rubber. And fear.

He adjusted the scarf about his mouth and pulled the goggles over his eyes. Almost delicately, he engaged first gear, handling the short stick like an artist's brush, and let the car roll slowly forward. The cars were straining at the leash. He heard his name shouted. The starter's flag came down with the finality of an executioner's axe——

The Lotus surged away and, of course, he was in the lead, and hugging the inside of the track. Behind him, the other cars snarled their frustration and the wind whipped at him. The rev-counter rose rapidly and he was doing over a hun-

dred miles an hour along the straight, the wheels singing on the track.

The first, sharp, right-hand curve was rushing towards him and he braked slightly and drifted the car round, continuing to hold the inside position. The car was handling beautifully. He was free again, for the first time in a year and he shouted aloud into the tearing wind.

The straight was very short, here, and he was coming into a bend. He braked, double-declutched, changed down, then accelerated. Oil on the track. The car slewed as he gripped the wheel and, for the brief instant that he was facing the wrong way, he saw a G.T. Ford, closely followed by a Ferrari, starting to take frantic evasive action. Then he was round again and gunning the engine to catch another Lotus. The Ferrari shot past on the inside, but the G.T. Ford ploughed into the embankment on the outside and burst into flames.

He was lucky to be still alive. The oil patch had been real. The part of his mind unaffected by the drug realised that, and was afraid. Why had the oil been put on the track? Was someone trying to kill him? But that was absurd. People didn't go around killing each other, these days. Aggressive traits were carefully filtered out, which was probably the reason why so few people took up the challenge of the Big Day. He fretted at the problem.

Relentlessly he piled on the miles, passing the Lotus and the Ferrari in quick succession. This was what life was all about! Another G.T. Ford was just ahead of him, its driver skilfully following every curve and bend, giving Hanson no chance to take him. For five laps he hung grimly behind the Ford's exhaust, his nostrils and throat clogged with the smell of fumes and burned rubber.

Everything was so *real*—— The pyre of the crashed G.T. Ford still burned every time he passed it. Feelings . . . sounds . . . smells. . . .

The image—if it was an image—of the Ford ahead of him began to fade. In its place there was a blur which gradually became a face of a young, handsome man. Where——? At the Old Film Society. The man who had been bitten in half by the shark! His hands continued to guide the car, to do all that was required.

The man was smiling. Another face appeared at his left shoulder. That of a beautiful, long-haired girl. The one who had fallen down a mountain-side, on her Big Day, two years ago. He had seen the film at the Society.

Who had taken those films and for what purpose? When he thought about it, he recalled that there were quite a lot of such films at the Society, all recording the deaths of people on the Big Day.

The faces faded and the Ford was there again. His opportunity came. The Ford took a bend too sharply and the front off-side wheel went off the track. The driver wrenched his steering wheel, over-compensated, and Hanson's Lotus thundered through the momentary gap, causing the Ford to brake hard.

The car whined round the track, with only two laps to go. His mind was a vortex of confusion and terror. But reality, all three hundred and sixty-four days of it, was minutes away. He did not want to return to his stale existence. Did he have to?

The faces were there again, smiling, and the girl was holding out her hands to him. Like the woman on the moon-cold sands. Briefly, behind their heads, he glimpsed an ebony darkness scattered with still pin-points of light, then it was gone.

His goggles were misting with sweat. The steering wheel shook like a live thing in his hands. The car was going faster, faster, and the brake didn't respond. Fear constricted his breathing. Everything beyond the car was a blur of grey.

The car slewed in the oil patch. His mind snapped like an

over-taut elastic band. He was spinning, falling, falling.

He saw the Lotus flipped on its back and slewing along the track like an overturned beetle. He saw himself lying prone, with people bending over him. The scene was shifting, indistinct.

'You can waken up, now.' There was faint pressure on his shoulder.

He felt very calm and rested. He opened his eyes. The man and the girl were there, smiling. A second man, older, in white, seemed to be pleased with his reaction, and he, too, smiled.

'I'll leave you with him,' the man in white said. 'He's going to be all right. He'll be able to understand what you tell him. The sedative will ensure gradual return to total awareness.' He smiled again at Mark and went out.

'I'm Ronnie,' the young man said, 'and this is Helen.'

'Both of you are dead,' Mark said, without alarm. 'I've seen the films of your deaths at the Society.'

'You did see the films, Mark. But did you actually *see* me fall down the mountain? Did you actually *see* Ronnie bitten in half by the shark?'

Mark glanced at the girl. His mind refused to get agitated. 'No . . . But, if you weren't killed, what was the purpose of the films?'

'As you can see, we're very much alive!' Ronnie said in parenthesis, squeezing Helen's hand. 'The purpose was to give an *impression* of death. Look.'

He stepped aside and Mark could see a screen on a wall. Ronnie was swimming in green water. He wore a scuba suit and carried a harpoon gun. The scene mixed to a shot of a shark, cruising lazily. Then followed a sequence of Ronnie's fear-filled eyes, the shark's teeth, Ronnie trying to fire the harpoon, a flurry of bodies, man and shark, obscured by sand stirred up from the sea bed, then fade-out.

'A dummy took my place, thank goodness, in that final

shot, although I knew nothing about it at the time. I woke up, just like you, in a room, such as this, to see people whom I thought were dead.'

'Now you'll want to know why,' Helen took up the story. 'We are part of a group deeply concerned about the dominance of machines over our daily lives and what it is doing to people, collectively and as individuals. Everything is regulated. Imagination, initiative, curiosity, aggression: all have been ground out of the human character, leaving useless shells without drive or goal. Man has turned in on himself and is on a downward path to stagnation and eventual extinction.'

'We want to show you something,' Ronnie said. 'We can talk as we go.'

Mark followed them into a long, brightly-lit corridor with many doors leading off it. He was now wearing a lightweight costume and soft shoes and he noticed that his companions, and most of the people they passed, wore a similar garment.

Helen carried on with her story. 'Certain people in high places decided that something must be done to salvage something of man's crushed spirit. Against opposition from others who wanted to preserve the *status quo*, the Big Day was started.'

They turned right into another corridor. Mark wondered if the place was underground, but refrained from asking at present.

'The Big Day had a much deeper purpose than the relief of frustration with society. The instigators wanted to find people with guts, courage, a sense of adventure, as well as the more obvious attributes of intelligence, and so on. When someone had proved himself, he was "removed", as Ronnie puts it, from the rut, and brought here.'

'What if someone objected?'

'Occasionally, that happens,' Ronnie answered, 'but, after

we've explained what we aim to do, they elect to stay.'

They entered a room. In one corner a group of men and women were clustered around a blackboard, covered in abstruse mathematical symbols. A window ran the full length of the wall opposite the door.

Mark found himself looking out at a huge cavern. People bustled about, on foot, or in small electric trucks, with an air of planned activity. He caught his breath when he saw the spaceships, one completed, the other evidently in the last stages of construction.

'We're not going to attempt to change society here,' Ronnie said. 'We're going to make a new start, on one of the planets of Tau Ceti.'

'Starships,' Mark murmured, 'not spaceships.'

'Yes,' Helen said. 'There's still much work to be done, people to train, skills to learn. This is a kindergarten for a new race of men and women. Out there, among the stars, is the school. Will you join us?'

Mark smiled. Hand-in-hand, the three of them left the room.

Down in the cavern, the starships awaited the Big Day.

MAJOR OPERATION

by

JAMES WHITE

Herewith the final Sector General story in this series in which the patient awaiting surgery is over 50,000 miles in diameter. Previous stories in the series can be found in New Writings In S-F *Nos. 7, 12, 14, and 16.*

MAJOR OPERATION

ONE

ON the whole weird and wonderful planet there were only thirty-seven patients requiring treatment, and they varied widely both in size and in their degree of physical distress. Naturally it was the patient in the greatest distress who was being treated first, even though it was also the largest—so large that at their scoutship's sub-orbital velocity of six thousand plus miles per hour it took just over nine minutes to travel from one side of the patient to the other.

'It's a large problem,' said Conway seriously, 'and even altitude doesn't make it look smaller. Neither does the shortage of skilled help.'

Pathologist Murchison, who was sharing the tiny observation blister with him, sounded cool and a little on the defensive as she replied, 'I have been studying all the Drambon material long before and since my arrival two months ago, but I agree that seeing it like this for the first time really does bring the problem home to one. As for the shortage of help, you must realise, Doctor, that you can't strip the hospital of its staff and facilities for just one patient, even if it is the size of a sub-continent—there are thousands of smaller and more easily curable patients with equal demands on us. And if you are still suggesting that I, personally, took my time in getting here,' she ended hotly, 'I came just as soon as my chief decided that you really did need me, as a pathologist.'

'I've been telling Thornnastor for six months that I needed a top pathologist here,' said Conway gently. Murchison looked beautiful when she was angry, but even better when she was not. 'I thought everybody in the hospital knew why I wanted you, which is one reason why we are sharing this cramped observation blister, looking at a view we have both seen many times on tape and arguing when we could be enjoying some unprofessional behaviour——'

'Pilot here,' said a tinny voice in the blister's speaker. 'We are losing height and circling back now and will land about five miles east of the terminator. The reaction of the eye plants to sunrise is worth seeing.'

'Thank you,' said Conway. To Murchison he added, 'I had not planned on looking out the window.'

'I had,' she said, punching him with one softly clenched fist on the jaw. 'You I can see anytime.'

Originally christened Meatball for obvious reasons, Drambo—which was the natives' own name for their world—had to be seen to be believed. Even then it had been difficult for its discoverers, the crew of the cultural contact and survey vessel *Descartes*, to believe what they were seeing.

Drambo's oceans were a thick, living soup and its relatively small land masses were almost completely covered by vast, slow-moving carpets of animal life. In many areas there were outcroppings of rock and soil which supported vegetation, and other forms of plant life flourished in the oceans, on the sea bed or rooted itself to the organic 'land' surface. But the greater part of the planetary land surface was covered by layers of an animal–vegetable life composite which in some cases was nearly a mile thick.

This vast, organic carpet was subdivided into strata which crawled and slipped and fought their way through each other to gain access to necessary top-surface vegeta-

tion or subsurface minerals, or simply to choke off and cannibalise each other. During the course of this slow, gargantuan struggle these living strata heaved themselves into hills and valleys, altering the shapes of lakes and coastlines and changing the topography of their world from month to month.

Evidence of two distinct and separate forms of intelligent life on the planet was furnished almost at once. During the first and very fleeting contact with the planetary surface, when the ground had seemingly done its best to swallow the ship in one gulp, *Descartes* had been penetrated by a small, completely unspecialised and thought-controlled tool far in advance of anything known to the Galactic Federation's technology. And later in orbit the ship had been present during the first manned space flight by a member of a Drambon species who knew nothing at all about the tool or its makers.

Recently they had made contact with other species living inside the strata creatures, but the level of intelligence had been too low for an interchange of concepts to take place—they had been about half as bright as an Earth dog.

Somewhere in or under those vast strata creatures there was a highly intelligent race whose land was sick and dying all around them—at least, that had been Conway's theory up to now.

Murchison pointed suddenly and said, 'Someone is drawing a yellow triangle on your patient.'

Conway laughed. 'I forgot, you haven't been involved with our communications problems so far. Most of the surface vegetation is light-sensitive and, some of us thought, may act as the creature's eyes. We produce geometrical and other figures by directing a narrow, intense beam of light from orbit into a dark or twilight area and moving it about quickly. The effect is something like that of drawing with a high-persistency spot on a vision screen. So far there has

been no detectable reaction. It is possible,' Conway added, 'that the strata creature itself is intelligent.'

'But you got a reaction once?'

'Yes,' Conway replied, 'when we stood on the surface while our ship did tight figure-of-eight turns above us. A couple of tools turned up, you've seen the report. Probably the creature can't react even if it wanted to, because eyes are sensory receptors and not transmitters. After all, we can't send messages with our eyes.'

'Speak for yourself,' said Murchison.

They landed shortly afterwards. Murchison and Conway stepped carefully on to the springy ground, crushing several of the vegetable eyes with every few yards of progress. The fact that the patient had countless millions of other eyes did not make them feel any better about the damage inflicted by their feet.

When they were about fifty yards from the ship, Murchison said suddenly, 'If these plants are eyes, and it is a natural assumption since they are sensitive to light, why should it have so many in an area where danger threatens so seldom? Peripheral vision to co-ordinate the activity of its feeding mouths would be much more useful.'

Conway nodded. He knelt carefully among the plants and Murchison followed suit. Their long shadows were filled with the yellow of tightly-closed leaves. He indicated their tracks from the entry lock of the ship, which were also bright yellow, and moved his arms about so as to partly obscure some of the plants from the light. Leaves partially in shade or suffering even minor damage reacted exactly as those completely cut off from the light. They rolled up tight to display their yellow undersides.

'The roots are thin and go on for ever,' he said, excavating gently with his fingers to show a whitish root which narrowed to the diameter of thin string before disappearing

from sight. 'Even with mining equipment or during exploratories with diggers we haven't been able to find the other end of one. Have you learned anything new from the internals?'

He covered the exposed root with soil, but kept the palms of both hands pressed lightly against the ground.

Watching him, Murchison said, 'Not very much. Light and darkness, as well as causing the leaves to open out or roll up tight, cause electro-chemical changes in the sap, which is so heavily loaded with mineral salts that it forms a very good conductor. Electrical pulses produced by these changes could travel very quickly from the plant to the other end of the root. Er, what are you doing, Doctor, taking its pulse?'

Conway shook his head without speaking, and she went on, 'The eye plants are evenly distributed over the patient's top-surface, including those areas containing dense growths of the air renewal and waste elimination types, so that a shadow or light stimulus received anywhere on its surface is transmitted quickly—almost instantaneously, in fact—to the central nervous system via this mineral-rich sap. But the thing which bothers me is what possible reason could the creature have for evolving an eye-ball several hundred miles across?'

'Close your eyes,' said Conway, smiling. 'I'm going to touch you. As accurately as you can, try to tell me where.'

'You've been too long in the company of men and e-ts, Doctor,' Murchison began, then she broke off, looking thoughtful, and did as she was told.

Conway began by touching her lightly on the face, then he rested three fingers on top of her shoulder and went on from there.

'Left cheek about an inch from the left side of my mouth,' she said. 'Now you've rested your hand on my shoulder. You seem to be rubbing an X on to my left biceps.

Now you have a thumb and two, maybe three fingers at the back of my neck just on the hairline.... Are you enjoying this, Doctor? I am.'

Conway laughed. 'I might if it wasn't for the thought of Lieutenant Harrison watching us and steaming up the pilot's canopy with his hot little breath. But seriously, you see what I'm getting at, that the eye plants have nothing to do with the creature's vision but are analogous to pressure, pain, or temperature sensitive nerve endings?'

Murchison opened her eyes and nodded. 'It's a good theory, but you don't look happy about it.'

'I'm not,' said Conway sourly, 'and I'd like you to shoot as many holes in it as possible. You see, the complete success of this operation depends on us being able to communicate with the beings who produced the thought-controlled tools. Up until now I had assumed that these beings would be comparable in size to ourselves even if their physiological classification would be completely alien and that they would possess the usual sensory equipment of sight, hearing, taste, touch, and be capable of being reached through any or all of these channels. But now the evidence is piling up in favour of a single intelligent life-form, the strata creature itself, which is naturally deaf, dumb, and blind so far as we can see. The problem of communicating even the simplest concepts to it is——'

He broke off, all his attention concentrated on the palm of one hand which was still pressed against the ground, then said urgently, 'Run for the ship.'

They were much less careful about stepping on plants on the way back and as the hatch slammed shut behind them Harrison's voice rattled at them from the lock communicator.

'Are we expecting company?'

'Yes, but not for a few minutes,' said Conway breathlessly. 'How much time do you need to get away, and can

we observe the tools' arrival through something bigger than this airlock port?'

'For an emergency liftoff, two minutes,' said the pilot, 'and if you come up to Control you can use the scanners which check for external damage.'

'But what were you *doing*, Doctor?' Harrison resumed as they entered his control position. 'I mean, in *my* experience the front of the biceps is not considered to be a zone of erotic stimulation.'

When Conway did not answer he looked appealingly at Murchison.

'He was conducting an experiment,' she said quietly, 'designed to prove that I cannot see with the nerve endings of my upper arm. When we were interrupted he was proving that I did not have eyes in the back of my neck, either.'

'Ask a silly question . . .' began Harrison.

'Here they come,' said Conway.

They were three semicircular discs of metal which seemed to flicker into and out of existence on the area of ground covered by the long morning shadow of the scoutship. Harrison stepped up the magnification of his scanners, which showed that the objects did not so much appear and disappear as shrink rhythmically into tiny metal blobs a few inches across, then expand again into flat, circular blades which knifed through the surface. There they lay flat for a few seconds among the shadowed eye plants, then suddenly the discs became shallow inverted bowls. The change was so abrupt that they bounced several yards into the air to land about twenty feet away. The process was repeated every few seconds, with one disc bouncing rapidly towards the distant tip of their shadow, the second zig-zagging to chart its width and the third heading directly for the ship.

'I've never seen them act like that before,' said the lieutenant.

'We've made a long, thin itch,' said Conway, 'and they've come to scratch it. Can we stay put for a few minutes?'

Harrison nodded, but said, 'Just remember that we'll still be staying put for two minutes after you change your mind.'

The third disc was still coming at them in five-yard leaps along the centre of their shadow. He had never before seen them display such mobility and co-ordination, even though he knew that they were capable of taking any shape their operators thought at them, and that the complexity of the shape and the speed of the change were controlled solely by the speed and clarity of thought of the user's mind.

At Sector General he had watched his friend Mannen perform incredible feats of surgery using one of these fabulous tools—the one which had found its way aboard *Descartes* during the first attempted landing. In his hands it had become an all-purpose surgical instrument which took any shape he desired, instantly. It had been that tool and the possibility of obtaining more of them which had first attracted the hospital and Conway to Drambo—but that, of course, had been before they realised just how sick the sea-rollers had made their planet.

'Lieutenant Harrison has a point, Doctor,' said Murchison suddenly. 'The early reports say that the tools were used to undercut grounded ships so that they would fall inside the strata creature, presumably for closer examination at its leisure. On those occasions they tried to undercut the object's shadow, using the shaded eye plants as a guide to size and position. But now, to use your own analogy, they seem to have learned how to tell the itch from the object causing it.'

A loud clang reverberated along the hull, signalling the arrival of the first tool. Immediately the other two turned and headed after the first and one after the other they bounced high into the air, higher even than the control

position, to arch over and crash against the hull. The damage scanners showed them strike, cling for a few seconds while they spread over hull projections like thin, metallic pancakes, then fall away. An instant later they were clanging and clinging against a different section of hull. But a few seconds later they stopped clinging because, just before making contact, they grew needle points which scored bright, deep scratches in the plating.

'They must be blind,' said Conway excitedly. 'The tools must be an extension of the creature's sense of touch, used to augment the information supplied by the plants. They are feeling us for size and shape and consistency.'

'Before they discover that we have a soft centre,' said Harrison firmly, 'I suggest that we make a tactical withdrawal, or even get the Hell out.'

Conway nodded. While Harrison played silent tunes on his control panels he explained to Murchison that the tools were controllable by human minds up to a distance of about twenty feet and that beyond this distance the tool-users had control. He told her to think blunt shapes at them as soon as they came into range, any shape so long as it did not have points or cutting edges. . . .

'No, wait,' he said as a better idea struck him. 'Think wide and flat at them, with an aerofoil section and some kind of vertical projection for stabilisation and guidance. Hold the shape while it is falling and glide it as far away from the ship as possible. With luck it will need three or four jumps to get back.'

Two

THEIR first attempt was not a success, although the shape which finally struck the ship was too blunt and convoluted to do serious damage. But they concentrated hard on the next one, holding it to a triangle shape only a fraction of an

inch thick and with a wide central fin. Murchison held the overall shape while Conway thought-warped the trailing edges and stabiliser so that it performed a balanced vertical bank just outside the direct vision panel and headed away from the ship in a long, flat glide.

The glide continued long after it passed beyond their range of influence, banking and wobbling a little, then cutting a short swathe through the eye plants before touching down.

'Doctor, I could kiss you . . .' began Murchison.

'I know you like playing with girls and model aeroplanes, Doctor,' Harrison broke in drily, 'but we lift in twenty seconds. Straps.'

'It held that shape right to the end,' Conway said, beginning to worry for some reason. 'Could it have been learning from us, experimenting perhaps?'

He stopped. The tool melted, flowed into the inverted bowl shape and bounced high into the air. As it began to fall back it changed into glider configuration, picking up speed as it fell, then levelled out a few feet above the surface and came sweeping towards them. The leading edges of its wings were like razors. Its two companions were also aloft in glider form, slicing the air towards them from the other side of the ship.

'Straps.'

They hit their acceleration couches just as the three fast-gliding tools struck the hull, by accident or design cutting off two of the external vision pickups. The one which was still operating showed a three-foot gash torn in the thin plating with a glider embedded in the tear, changing shape, stretching and widening it. Probably it was a good thing that they could not see what the other two were doing.

Through the gash in the plating Conway could see brightly coloured plumbing and cable runs which were also

being pushed apart by the tool. Then that screen went dead as well, just as takeoff boost rammed him deep into the couch.

'Doctor, check the stern for stowaways,' said Harrison harshly as the initial acceleration began to taper off. 'If you find any, think safe shapes at them—something which won't scramble any more of my wiring. Quickly.'

Conway had not realised the full extent of the damage, only that there were more red lights than usual winking from the control board. The pilot's fingers were moving over his panels with such an intensity of gentleness that the harshness in his voice made it sound as if it was coming from a completely different person.

'The aft pickup,' said Conway reassuringly, 'shows all three tools gliding in pursuit of our shadow.'

For a time there was silence broken only by the tuneless whistling of air through torn plating and unretracted scanner supports. The surface wobbled past below them and the ship's motion made Conway feel that it was at sea rather than in the air. Their problem was to maintain height at a very low flying speed, because to increase speed would cause damaged sections of the hull to peel off or heat up due to atmospheric friction, or increase the drag to such an extent that the ship would not fly at all. For a vessel which was classed as a supersonic glider for operations in atmosphere their present low speed was ridiculous. Harrison must be holding on to the sky with his fingernails.

Conway tried hard to forget the Lieutenant's problems by worrying aloud about his own.

'I think this proves conclusively that the strata creatures are our intelligent tool-users,' he said to Murchison. 'The high degree of mobility and adaptability shown by the tools makes that very plain. They must be controlled by a diffuse and not very strong field of mental radiation conducted and transmitted by root networks and extending only a short

distance above the surface. It is so weak that an average Earth-human or e-t mind can take local control.

'If the tool-users *were* beings of comparable size and mental ability to ourselves,' he went on, trying not to look at the landscape lurching past below them, 'they would have to travel under and through the surface material as quickly as the tools were flying over it if they were to maintain control. To burrow at that speed would require them being encased in a self-propelled armour-piercing shell. But this does not explain why they have ignored our attempts at making wide-range contact through remote control devices, other than by reducing the communication modules to their component pieces. . . .'

'If the range of mental influence pervades its whole body,' Murchison broke in, 'would that mean that the creature's brain is also diffuse? Or, if it does have a localised brain, where is it?'

'I favour the idea of a centralised nervous system,' Conway replied, 'in a safe and naturally well-protected area—probably close to the creature's underside where there is a plentiful supply of minerals and possibly in a natural hollow in the subsurface rock. Eye plant and similar types of internal root networks which you've analysed tend to become more complex and extensive the closer we go to the subsurface, which could mean that the pressure-sensitive network there is augmented by the electro-vegetable system which causes muscular movement as well as the other types whose function and purpose are still unknown to us. Admittedly the nervous system is largely vegetable, but the mineral content of the root systems means that electrochemical reactions generated at any nerve ending will transmit impulses to the brain very quickly, so there is probably only one brain and it could be situated anywhere.'

Murchison shook her head. 'In a being the size of a subcontinent, with no detectable skeleton or osseous structure

to form a protective casing and whose body, relative to its area, resembles a thin carpet I think more than one would be needed—one central brain, anyway, plus a number of neutral sub-stations. But the thing which really worries me is what do we do if the brain happens to be in or dangerously close to the operative field.'

'One thing we can't do,' Conway replied grimly, 'is delay the op. Your reports make that very clear.'

Murchison nodded. She had not been wasting time since coming to Drambo and, as a result of her analysis of thousands of specimens taken by test bores, diggers, and exploring medics from all areas and levels of its far-flung body, she was able to give an accurate if not completely detailed picture of the creature's current physiological state.

They already knew that the metabolism of the strata creature was extremely slow and that its muscular reactions were closer to those of a vegetable than an animal. Voluntary and involuntary muscles controlling mobility, ingestion, and digestion, circulation of its working fluid, and the breaking down of waste products were all governed or initiated by the secretions of specialised plants. But it was the plants comprising the patient's nervous system with their extensive root networks which had suffered worst in the roller fallout, because they had allowed the surface radioactivity to penetrate deep inside the strata creature. This had killed many plant species and had also caused the deaths of thousands of internal animal organisms whose purpose it was to control the growth of various forms of specialised vegetation.

There were two distinct types of internal organisms and they took their jobs very seriously. The large-headed farmer fish were responsible for cultivating and protecting benign growth and destroying all others—for such a large creature,

the patient's metabolic balance was remarkably delicate. The second type, which were the being's equivalent of leucocytes, assisted the farmer fish in plant control, and directly if one of the fish became injured or unwell. They were also cursed with the tidy habit of eating or otherwise absorbing dead members of their own or the fish species, so that a very small quantity of radioactive material introduced by the roots of surface plants could be responsible for killing a very large number of leucocytes, one after another.

So the dead areas which had spread far beyond the regions directly affected by roller fallout were caused by the uncontrolled proliferation of malignant plant-life. The process, like decomposition, was irreversible. The urgent surgical removal of the affected areas was the only solution.

But the report had been encouraging in some respects. Minor surgery had already been performed in a number of areas to check on the probable ecological effects of dumping large masses of decomposing animo-vegetable material on the sea or adjacent living strata creature and to devise methods of radioactive decontamination on a large scale. It had been found that the patient would heal, but slowly; that if the incision was widened to a trench one hundred feet across then the uncontrolled growth in the excised section would not spread to infect the living area, although regular patrols of the incision to make absolutely sure of this were recommended. The decomposition problem was no problem at all—the explosive growth rate continued until the plant-life concerned used up the available material and died. On land the residue would subside into a very rich loam and make an ideal site for a self-supporting base if medical observers were needed in the years to come. In the case of material sliding off shelving coastlines into the sea, it simply broke up and drifted to the seabed to form an edible carpet for the rollers.

Certain areas could not be treated surgically, of course, for the same reason that Shylock had to forego his pound of flesh. These were relatively small trouble spots far inland, whose condition was analogous to a severe skin cancer, but limited surgery and incredibly massive doses of medication were beginning to show results.

'But I still don't understand its hostility towards us,' Murchison said nervously as the ship went into a three-dimensional skid and lost a lot of height. 'After all, it can't possibly know enough about us to hate us like that.'

The ship was passing over a dead area where the eye plants were discoloured and lifeless and did not react to their shadow. Conway wondered if the vast creature could feel pain or if there was simply a loss of sensation when parts of it died. In every other life-form he had ever encountered, and he had met some really weird ones at Sector General, survival was pleasure and death brought pain—that was how evolution kept a race from just lying down and dying when the going got tough. So the strata creature almost certainly had felt pain, intense pain over hundreds of square miles, when the rollers had detonated their nuclear weapons. It had felt more than enough pain to drive it mad with hatred.

Conway cringed inwardly at the thought of such vast and unimaginable pain. Several things were becoming very clear to him.

'You're right,' he said. 'They don't know anything at all about us, but they hate our shadows. This one in particular hates them because the aircraft carrying the sea-rollers' atomic bombs produced a shadow not unlike ours just before large tracts of the patient's body were fried and irradiated.'

'We land in four minutes,' said Harrison suddenly. 'On the coast, I'm afraid, because this bucket has too many

holes in it to float. *Descartes* has us in sight and will send a copter.'

The pilot's face made Conway fight the urge to laugh. It looked like that of a half made-up clown. Furious concentration had drawn Harrison's brows into a ridiculous scowl while his lower lip, which he had been chewing steadily since takeoff, was a wide, blood-red bow of good humour.

Conway said, 'The tools can't operate in this area and, except for a little background radiation caused by fallout, there is no danger. You can land safely.'

'Your trust in my professional ability,' said the pilot, 'is touching.'

From their condition of unlevel flight they curved into a barely controlled, tail-first dive. The surface crept, then rushed up at them. Harrison checked the rush with full emergency thrust. There were metallic tearing noises and the rest of the lights on his board turned red.

'Harrison, pieces of you are dropping off. . . .' began *Descartes*' radioman, then they touched down.

For days afterwards the observers argued about it, trying to decide whether it had been a landing or a crash. The shock absorber legs buckled, the stern section took some more of the shock as it tried to telescope amidships and the acceleration couches took the rest—even when the ship toppled, crashed on to its side and a broad, flickering wedge of daylight appeared in the plating a few feet away. The rescue copter was almost on top of them.

'Everybody out,' said Harrison. 'The pile shielding has been damaged.'

Looking at the dead and discoloured surface around them, Conway thought again of his patient. Angrily, he said, 'A little more radiation hereabout won't make much difference.'

'To your patient, no,' said the lieutenant urgently. 'But,

perhaps selfishly, I was thinking of my future offspring. After you.'

During the short trip to the mother ship Conway stared silently out of the port beside him and tried hard not to feel frightened and inadequate. His fear was due to reaction after what could easily have been a fatal crash plus the thought of an even more dangerous trip he would have to make in a few days time, and any doctor with a patient who stretched beyond the limits of visibility in all directions could not help feeling small. He was a single microbe trying to cure the body containing it, and suddenly he longed for the normal doctor–patient relationships of his hospital—even though very few of his patients or colleagues could be considered normal.

Sector General was a multi-environmental hospital, a vast, complex fabrication of metal which hung in space like a man-made moon. Inside its three hundred and eighty-four levels were reproduced the environments of all the intelligent life-forms known to the Galactic Federation, a biological spectrum ranging from the ultra-frigid methane species through the more normal oxygen- and chlorine-breathing types up to the exotic beings who existed by the direct conversion of hard radiation. And in addition to the patients, whose number and physiological classification were a constant variable, there was a medical and maintenance staff which was composed of sixty-odd differing life-forms with sixty different sets of mannerisms, body odours and ways of looking at life.

The medical staff of Sector General was an extremely able, dedicated, but not always serious group of people who were fanatically tolerant of all forms of intelligent life—had this not been so they could never have served in a multi-environment hospital in the first place. They prided themselves that no case was too big, too small, or too hopeless,

and their professional reputation and facilities were second to none. But until now they had never been faced with a patient the size of a sub-continent, a case which might well be both too big and too hopeless.

Even if the hospital could have been moved into a close orbit around Drambo and each member of its medical staff assigned to this one patient, it still would not have been enough. He needed a veritable army of medics to treat this one. Instead he had a few hundred doctors and an army, if only he could find a way of using it medically instead of tactically.

He sometimes wondered if it might not be better to have sent a general to medical school than to give a doctor control of a whole sector sub-fleet.

THREE

ONLY six of the Monitor Corps heavies were grounded on Drambo, their landing legs planted firmly in the shallows a few miles off one of the dead sections of coastline. The others filled the morning and evening sky like regimented stars. His medical teams were grouped in and around the grounded ships, which rose out of the thick, soupy sea-like grey beehives. The Earth-humans like himself lived on board while the e-ts, none of whom breathed air, were quite happy roughing it on the sea bed. For them Drambo was a home from home, an improvement over conditions on their worlds of Hudlar, Melf, and Chalderescol. He also had the support—moral rather than physical—given by the rollers who were much more vulnerable on their own home planet than were any of the e-ts.

He had called what he hoped would be the final pre-op meeting in the cargo hold of *Descartes*, which was filled with Drambon sea water whose content of animal and plant life had been filtered out so that the beam of the

projector would have a sporting chance of fighting its way to the screen attached to the forward bulkheads.

Protocol demanded that the Drambons present opened the proceedings. Watching their spokesman, Surreshun, rolling like a great flaccid doughnut around the clear space in the centre of the deck, Conway wondered once again how such a ridiculously vulnerable species had been able to survive and evolve a highly complex, technology-based culture—though it was just possible that an intelligent dinosaur would have had similar thoughts about early Man.

Surreshun belonged to a species which did not possess a heart or, indeed, any other form of muscular pump to circulate its blood. Physically it resembled a large, fleshy doughnut which rolled continually because to stop rolling was to die—its ring-like body circulated while its blood, operating on a form of gravity feed system, remained still. Even the simplest form of medical treatment or surgery on a Drambon necessitated the doctor and the entire theatre staff with their instruments and lighting being attached to an elaborate ferris wheel and rotating with their patient.

Surreshun was followed by Garoth, the Hudlar Senior Physician who was in charge of the patient's medical treatment. Hudlar was a high-gravity world whose natives absorbed their food directly from the thick, soup-like air. Unlike Surreshun, Garoth was invulnerable to practically everything. It was quite happy on Drambo, the sea was thick with food, the light gravity made it feel frisky and its armour-plated hide allowed it to ignore everything in the way of animal and vegetable nastiness that the planet could throw up. Garoth's chief concern was with the devising and implementation of artificial feeding in areas where incisions would cut the throat tunnels between the coastal mouths and the inland pre-stomachs. Again unlike Surreshun, it did not say very much, but let the projector do all the talking.

The big screen was filled by a picture of an auxiliary

mouth shaft situated about two miles inland of the planned incision line. Every few minutes a copter or small supply ship grounded beside the shaft, discharged its load of freshly dead animal life from the coastal shallows and departed, while Corpsmen with loaders and earth-moving machinery pushed the food over the lip. Possibly the amount and quality of the food was less than that which was drawn in naturally, but when the throat was sealed during the major operation this would be the only way that large areas of the patient could be supplied with food.

Aseptic procedures were impossible in an operation on this scale so that pumping equipment drawing sea water from the coast was drawn through large-diameter plastic piping. It poured in a steady stream—except when tools cut the pipeline—into the food shaft, supplying the strata creature with needed working fluid and at the same time wetting the walls so that leucocytes could be slipped down from time to time to combat the effects of any dangerous plant life which might have been introduced during feeding.

They were seeing a drill, of course, performed at one of the feeding installations a few days earlier, but there were more than fifty auxiliary mouths in a similar state of readiness strung out along the proposed incision line.

Suddenly there was a silvery blur of motion on the ground beside the pump housing and a Corpsman hopped a few yards on one foot before falling to the ground. His boot with his other foot still in it lay on its side where he had been standing and the tool, no longer silvery, was already cutting its way beneath the blood-splashed surface.

'Tool attacks are increasing in frequency and strength,' said Garoth in Translated, and necessarily emotionless, tones. 'They are also displaying considerable initiative. Your idea of clearing an area around the feeding installations of all eye plants so that the tools would have to

operate blind, and would have to bounce around feeling for targets, worked only for a short time, Doctor. They devised a new trick, that of sliding along a few inches below the surface, blind, of course, then suddenly extruding a point or a cutting blade and stabbing or swinging with it before retreating under the surface again. If we can't see them, mental control is impossible, and guarding every working Corpsman with another carrying a metal detector has not worked very well so far—it has simply given the tool a better chance of hitting someone.

'And just recently,' Garoth concluded, 'there are indications of the tools linking up into five, six, and in one case ten-unit combinations. The Corpsman who reported this died a few seconds later, before he was able to finish his report. The condition of his vehicle supports this theory, however.'

Conway nodded grimly and said, 'Thank you, Doctor. But now I'm afraid that you'll have to withstand air attacks as well. On the way here we taught the patient how gliders work, and it learned fast....' He went on to describe the incident, adding Murchison's latest pathological findings and their deductions and theories on the nature of their patient. As a result the meeting quickly became a debate and was degenerating into a bitter argument before he had to pull rank and get his human and e-t doctors back to a state of clinical detachment.

The heads of the Melfan and Chalder teams made their report practically as a duet. Although not as naturally well-protected as the Hudlars, the crab-like, water-breathing Melfans had the mobility to out-run anything they were unable to fight. The Chalder Senior Physician who was floating near the roof of the hold like a forty-foot nightmare of teeth, talons, and tentacles had rarely been called on to use its natural weaponry, because the mere sight of one was usually enough to frighten off anything or anyone

ignorant of the fact that they were members of one of the most intelligent and sensitive species in the Federation.

Like Garoth they had both been concerned with the non-surgical aspects of the patient's treatment. To a hypothetical observer ignorant of the true scope of their problem, this medical treatment could have been mistaken for a very widespread mining operation, agriculture on an even larger scale and mass kidnapping. Both were strongly convinced, and Conway agreed with them, that the wrong way to treat a skin cancer was by amputation of the affected limb.

The amounts of radioactive material deposited by fallout in the central areas were relatively small, and their effects spread fairly slowly into the depths of the patient's body. But even this condition would be ultimately fatal if something was not done to check it and, since the areas affected by light fallout were too numerous and occurred in too many inoperable locations, they had skinned off the poisoned surface with earth-moving machinery and pushed it into heaps for later decontamination. The remainder of the treatment involved helping the patient to help itself.

A picture appeared suddenly on the screen of a section of subsurface tunnel under one of the areas affected by fallout. There were dozens of life-forms in the tunnel, most of them farmer fish with stubby arms sprouting from the base of their enlarged heads while the others drifted or undulated towards the observer's position like great, transparent slugs.

For a living section of the strata creature it looked none too healthy. The farmer fish, whose function was the cultivation and control of internal plant life, moved slowly, bumping into each other and the leucocytes which, normally transparent, were displaying the milky coloration which occurred shortly before death. The radiation sensor readings left no doubt as to what they were dying from.

'These specimens were rescued shortly afterwards,' said

the Chalder, 'and transferred to sick-bays in the larger ships and to Sector General. Both fish and leeches respond to the same decontamination and regeneration treatments given to our own people who have been exposed to a radiation overdose. They were then returned to carry on their good work.'

'That being,' the Melfan joined in, 'absorbing the radiation from the nearest poisoned plant or fish and getting themselves sick again.'

O'Mara had accused Conway of treating Sector General like some kind of e-t sausage machine, although the hospital was curing everything Drambon that they possibly could, and the Monitor Corps medics had merely looked long-suffering when they weren't looking extremely busy.

By themselves neither the hospital nor treatment facilities on the capital ships were enough to swing the balance. To allow the patient to fight these local infections properly it required massive transfusions of the leucocyte life-form from other, and healthier, strata creatures.

When he had first suggested the transfusion idea Conway had been worried in case the patient would reject what were, in effect, another creature's antibodies. But this had not happened, and the only problems encountered were those of transportation and supply as the first single, carefully selected kidnappings became continual wholesale abduction.

On the screen appeared a sequence showing one of the special commandos withdrawing leucocytes from a small and disgustingly healthy strata creature on the other side of the planet. The entry shaft had been in use for several weeks and the motion of the strata creature had caused it to bend in several places, but it was still usable. The corpsmen dropped from the copters and into the sloping tunnel, running and occasionally ducking to avoid the lifting gear

which would later haul their catch to the surface. They wore lightweight suits and carried only nets. The leucocytes were their friends. It was very important for them to remember that.

The leucocytes possessed a highly developed empathic faculty which allowed them to distinguish the parent body's friends from its foes simply by monitoring their emotional radiation. Provided the Corpsmen kidnappers thought warm, friendly thoughts while they went about their business, they were perfectly safe. But it was hard and often frustrating work, netting and hauling and transferring the massive and inert slugs into the transport copters. Sweating and short-tempered as they frequently were, it was not easy to radiate feelings of friendship and helpfulness towards their charges. Circumstances arose in which a Corpsman gave way to a flash of anger or irritation—at an item of his own equipment, perhaps—and for such lapses many of them died.

Rarely did they die singly. At the end of the sequence Conway watched the entire crew of a transport copter taken out within a few minutes, because it was next to impossible for a man to think kindly thoughts towards a being who had just killed a crew-mate—by injecting a poison which triggered off muscular spasms so violent that the man broke practically every bone in his body—even if his own life did depend on it. There was no protection and no cure. Heavy duty spacesuits tough enough to resist the needle points of the leeches' probes would not have allowed enough mobility for the Corpsmen to do their job, and the creatures killed just as quickly and thoroughly and unthinkingly as they cured.

'To summarise,' said the Chalder as it blanked the screen, 'the transfusion and artificial feeding operations are going well at present, but if casualties continue to mount at this rate the supply will fall dangerously short of the computed

demand. I therefore recommend, most strongly, that surgery be commenced immediately.'

'I agree,' added the Melfan. 'Assuming that we must proceed without either the consent or co-operation of the patient, we should start immediately.'

'How immediate?' broke in Captain Williamson, speaking for the first time. 'It takes time to deploy a whole sector sub-fleet over the operative field. My people will need final briefings and, well, I think the Fleet Commander is a little worried about this one. Up to now his operations have been purely military.'

Conway was silent, trying to force himself to the decision he had been avoiding for several weeks. Once he gave the word to start, once he began cutting on this gargantuan scale, he was committed. There would be no chance to withdraw and try again later, there were no specialists that he could fall back on if the going got too tough and, worst of all, there was no time for dithering because already the patient's condition had been left untreated for far too long.

'Don't worry, Captain,' said Conway, trying hard to radiate the confidence and reassurance which he did not feel. 'So far as your people are concerned, this has become a military operation. I know that in the beginning you treated it as a disaster relief exercise on an unusually large scale, but now it has become indistinguishable from war in your minds, because in war you have to expect heavy casualties. I'm very sorry about that, sir. I never expected such heavy losses and I'm personally very sorry that I taught those tools to glide this morning, because that stunt will cost a lot more . . .'

'It couldn't be helped, Doctor,' Williamson broke in, 'and one of our people was bound to think of the same idea some time—they've thought of practically everything else. But what I want to know is——'

'How soon is immediately,' said Conway for him. 'Well, bearing in mind the fact that the operation will be measured in weeks rather than hours and provided there are no logistical reasons for holding back, I suggest we start the job at first light on the day after tomorrow.'

Williamson nodded, but hesitated before he spoke. 'We can be in position at that time, Doctor, but something else has just come up which may cause you to change your mind about the timing.'

He gestured towards the screen and went on, 'I can show you charts and figures, if you like, but it is quicker to tell you the results first. The survey of healthy and less ill strata creatures which you asked our cultural contact people to carry out—your idea being that it might be easier to establish communications with a being who was not in constant pain than otherwise—is now complete. Altogether eighteen hundred and seventy-four sites covering every known strata creature were visited, a tool left unattended on the surface and kept under observation from a distance for periods of up to six hours. Even though the body material was practically identical with that of our patient, including the presence of a somewhat simplified form of eye plant, the results were completely negative. The strata creatures under test made no attempt to control or change the tools in any way, and the small changes which did occur were directly traceable to mental radiation from birds or non-intelligent surface animals. We fed this data to *Descartes*' computer and then to the tactical computer on *Vespasian*. The conclusions left no doubt at all, I'm afraid. There is only one intelligent strata creature on Drambo,' Williamson ended grimly, 'and it is our patient.'

Conway did not reply at once and the meeting became more and more disorganised. To begin with there were a few useful ideas put up—at least they sounded good until

the Captain shot them down. But then instead of ideas he got senseless arguments and bad temper and suddenly Conway knew why.

They had all been both overworked and overtired when the meeting had started, and that had been five hours ago. The Melfan's bony underside was sagging to within a few inches of the deck, the Hudlar was probably hungry because the water inside the hold had been cleared of all edible material as had the floor, which would similarly displease the constantly rolling Drambon. Above them the enormous Chalder had been hanging in a cramped position for far too long, and Murchison and the Captain must have been finding their pressure suits as irksome as Conway was finding his. It was obvious that there would be no more useful contributions from anyone at this meeting, including himself, and it was time to wind it up.

He signalled for silence, then said, 'Thank you, everyone. The news that our patient is the planet's only intelligent strata creature makes it necessary for us to try even harder, if that is possible, to make the forthcoming operation a success. It is not a valid reason for delaying surgery. You will all have plenty to occupy you tomorrow,' he ended. 'I shall spend the time making one last try at obtaining the consent and co-operation of our patient.'

FOUR

THAT night Conway fell asleep before he had a chance to do any serious worrying, so that he felt fresh and reasonably confident as they climbed into the special digger next morning. Modifications had been completed to a pair of the tracked boring machines just three days earlier, making them as tool-proof as possible and extending their two-way vision equipment to allow Conway to view and, if necessary, direct the operation from anywhere on or inside the

strata creature. It was the communications gear that he checked first.

'I have no intention of becoming a dead hero,' Conway explained, grinning. 'If we are in any danger I shall be the first to scream for help.'

Harrison shook his head. 'The second.'

'Ladies first,' said Murchison firmly.

They drove inland to a healthy area thickly covered by eye plants and stopped for a full hour, then moved on for an hour and stopped again. They spent the morning and early afternoon moving and stopping with no discernible reaction from the patient. Sometimes they drove around in tight circles in an attempt to attract attention, still without success. Not a single tool appeared. Their ground sensors gave no sign that anything was trying to undercut them. Altogether it was turning out to be an intensely frustrating if physically restful day.

When darkness fell they switched on the digger's spotlights and played them around and watched thousands of eye plants open and close suddenly to this artificial sunshine, but still the strata creature refused the bait.

'In the beginning the brute must have been curious about us,' said Conway, 'and anxious to investigate any strange object or occurrence. Now it is simply frightened and hostile, and there are much better targets elsewhere.'

The digger's vision screens showed several transfusion and feeding sites under constant tool attack, and too many dark stains on the ground which were not of oil.

'I still think,' said Conway seriously, 'that if we could get close to its brain, or even into the area where the tools are produced, we would stand a better chance of communicating directly. If direct communication is impossible we might be able to stimulate certain sections artificially to make it think that large objects had landed on the surface, forcing it to draw off the tools attacking the transfusion

installations. Or if we could gain an understanding of its technology that might give us a lever . . .'

He broke off as Murchison shook her head. She produced a chart comprising thirty or more transparent overlays which showed the patient's interior layout as accurately as six months hard work with insufficient facilities could make it. Her features fell into its lecturing expression, the one which said that she wanted attention but not admiration.

She said, 'We have already tried to find the patient's brain location by backtracking along the nerve paths, that is the network of rootlets containing metallic salts which are capable of carrying electro-chemical impulses. Using test bores taken at random on the top surface and by direct observation from diggers, we found that they link up, not to a central brain but to a flat layer of similar rootlets lying just above the subsurface. They do not join directly on to this new network, but lie alongside, parallelling it close enough for impulses to be passed across by induction.

'Some of this network is probably responsible for the subsurface muscular contractions which gave the patient mobility before it took over this particular land mass and stopped climbing over and smothering its enemies, and it is natural to assume that the eye plants above and the muscles below have a direct connection since they would give the first warning of another strata creature attempting to slip over this one, and the subsequent muscular reaction would be almost involuntary.

'But there are many other root networks in that layer,' she went on, 'whose function we do not know. They are not colour coded, Doctor—they all look exactly the same except for minute variations in thickness. The type which apparently abstracts minerals from the subsurface rock can vary in thickness. So I would advise against artificial stimulation of any kind. You could very easily start a bunch of

subsurface muscles twitching, and the Corpsmen up top would have localised earthquakes to contend with as well as everything else.'

'All right,' said Conway, irked for no other reason than that her objections were valid. 'But I still want to get close to its brain or to the tool-producing area, and if it won't pull us in we must go looking for it. But we're running out of time. Where, in your opinion, is the best place to look?'

Murchison was thoughtful for a moment, then said, 'Either the brain or the tool-producing area could be in a hollow or small valley in the subsurface where, presumably, the creature absorbs necessary minerals. There is a large, rocky hollow fifteen miles away, just here, which would give the necessary protection from below and from all sides while the mass of the overlaying body would save it from injury from above. But there are dozens of other sites just as good. Oh, yes, there would have to be a constant supply of nutriment and oxygen available, but as this is a quasi-vegetable process in the patient with water instead of blood as the working fluid, there should be no problem in supplying a deeply-buried brain....'

She broke off, her face and jaw stiffening in a successfully stifled yawn. Before she could go on, Conway said, 'It's quite a problem. Why don't you sleep on it?'

Suddenly she laughed. 'I am. Hadn't you noticed?'

Conway smiled and said, 'Seriously, I would like to call a copter to pick you up before we go under. I've no idea what to expect if we do find what we're looking for—we might find ourselves caught in an underground blast furnace or paralysed by the brain's mental radiation. I realise that your curiosity is strong and entirely professional, but I would much prefer that you didn't come. After all, scientific curiosity kills more cats than any other kind.'

'With respect, Doctor,' said Murchison, showing very little of it, 'you are talking rubbish. There have been no

indications of unusually high temperatures on the subsurface, and we both know that while some e-ts communicate telepathically, they can only do so among their own species. The tools are an entirely different matter, an inert but thought-malleable fabrication which——' She broke off, took a deep breath, and ended quietly, 'There is another digger just like this one. I'm sure there would also be an officer and gentleman on *Descartes* willing to trail you in it.'

Harrison sighed loudly and said, 'Don't be antisocial, Doctor. If you can't beat 'em, let them join you.'

'I'll drive for a while,' said Conway, treating incipient mutiny in the only way he could in the circumstances, by ignoring it. 'I'm hungry, and it's your turn to dish up.'

'I'll help you, Lieutenant,' said Murchison.

As Harrison turned over the driving position to Conway and headed for the galley, he muttered, 'You know, Doctor, sometimes I enjoy slavering over a hot dish, especially yours.'

It was shortly before midnight that they reached the area of the subsurface depression, nosed over, and bored in. Murchison stared through the direct vision port beside her, occasionally making notes about the tracery of fine roots which ran through the damp, cork-like material which was the flesh of the strata creature. There was no indication of a conventional blood supply, nothing to show that the creature had ever been alive in the animal rather than the vegetable sense.

Suddenly they broke through the roof of a stomach and drifted down between the great vegetable pillars which raised and lowered the roof, drawing food-bearing water from the sea and expelling, many days later, the waste material not already absorbed by specialist plants. The vegetable stalactites stretched away to the limits of the

spotlight in all directions, each one covered with the other specialised growths whose secretions caused the pillars to stiffen when the stomach had been empty for too long and relax when it was full. Other caverns, smaller and spaced closer together than the stomachs, simply kept the water flowing in the system without performing any digestive function.

Just before they drifted to the floor Harrison angled the digger into diving position and spun the forward cutters to maximum speed. They struck the stomach floor softly and kept on going. Half an hour later they were thrown forward against their straps. The soft thudding of the cutter blades had risen to an ear-piercing shriek, which died into silence as Harrison switched them off.

'Either we've reached the subsurface,' he said drily, 'or this beastie has a very hard heart.'

They withdrew a short distance, then flattened their angle of descent so that they could continue tunnelling with their tracks rolling over the rocky subsurface and the cutters chewing through material which now had the appearance of heavily compressed and thickly-veined cork. When they had gone a few hundred yards Conway signalled the Lieutenant to stop.

'This doesn't look like the stuff that brains are made of,' Conway said to Murchison, 'but I suppose we should take a closer look.'

They were able to collect a few specimens and to look closely, but not for long. By the time they had sealed their suits and exited through the rear hatch, the tunnel they had made was already sagging dangerously and, where the wet, gritty floor met the tunnel sides, an oily black liquid oozed out and climbed steadily until it was over their ankles. Conway did not want to take too much of the stuff back with them into the digger. From the earlier samples taken by drill they knew that it stank to high Heaven.

When they were back inside Murchison lifted one of the specimens. It looked a little like an Earthly onion which had been cut laterally in two. The flat underside was covered by a pad of stubby, worm-like growths and the single stalk divided and subdivided many times before joining the nerve network a short distance above them. She said, 'I would say that the plant's secretions dissolve and absorb minerals and/or chemicals from the subsurface rock and soil and, with the water which filters down here, provides the lubrication which allows the creature to change position if the mineral supply runs out. But there are no signs of unusual or concentrated nerve networks here, nor are there any traces of the scars which tools leave when they cut their way through this material. I'm afraid we'll have to try again somewhere else.'

Nearly an hour went by before they reached the second hollow and another three took them to the third. Conway had been a little doubtful from the beginning about the third site because it was too close to the periphery, in his opinion, to house a brain, but Murchison had still not ruled out the possibility, on a creature this size, of multiple brains or at least a number of neural substations. She reminded him that the old-time brontosaurus had needed two, and it had been microscopic when compared with their patient.

The third site was also very close to the beginning of the first incision line.

'We could spend the rest of our lives searching hollows and still not find what we're looking for,' said Conway angrily, 'and we haven't that much time.'

His repeater screens showed the sky lightening far above them, with Monitor heavy cruisers already in position, floodlights being switched off at transfusion and feeding installations and occasionally glimpses of his friend Major Edwards, the medical officer from *Descartes* who had been transferred to the flagship *Vespasian* as medical liaison

chief for the duration. It was Edwards' job to translate Conway's medical instructions into military manoeuvres for the fleet's executive officers.

'Your test bores,' said Conway suddenly. 'I assume they were spaced out at regular intervals and went right down to the subsurface? Was there any indication that the black goo which the patient uses as a lubricant is more prevalent in certain areas than in others? I'm trying to find a section of the creature which is virtually incapable of movement, because——'

'Of course,' said Murchison excitedly, 'that is the big factor which makes our intelligent patient different from all the smaller and non-intelligent strata creatures. For better protection the brain, and probably the tool productions centres, would almost certainly have to be in a stationary section. Off-hand I can only remember about a dozen test bores in which lubricant was absent or present in very small quantities, but I can look up the map references for you in a few minutes.'

'You know,' said Conway with feeling, 'I still don't want you here, but I'm glad you've come.'

'Thank you,' said Murchison, then added, 'I think.'

Five minutes later Murchison had all the available information. She said, 'The subsurface forms a small plain ringed by low mountains in that area. Aerial sensors tell us that it is unusually rich in minerals, but then so is most of the centre of this land mass. Our test bores were very widely spaced so that we could easily have missed picking up brain material, but I'm pretty sure, now, that it is there.'

Conway nodded, then said, 'Harrison, that will be the next stop. But it's too far to go travelling on or under the surface. Take us topside and arrange for a transport copter to lift us to the spot. And on the way would you mind angling us towards throat tunnel Forty-three, as close to the incision line as you can manage, so that I can see how the

patient reacts to the early stages of the operation. It is bound to have some natural defence against gross physical injury. . . .'

He broke off, his mood swinging suddenly from high excitement to deepest gloom. He said, 'Dammit, I wish I had concentrated on the tools from the very beginning, instead of getting sidetracked with the rollers, and then thinking that those overgrown leucocytes were the intelligent tool-users. I've wasted far too much time.'

'We're not wasting time now,' said Murchison, and pointed towards his repeater screens.

For better or for worse, major surgery had begun.

Five

The main screen showed a line of heavy cruisers playing ponderous follow-my-leader along the first section of the incision, rattlers probing deep while their pressors held the edges of the wound apart to allow deeper penetration by the next ship in line. Like all of the Emperor class ships they were capable of delivering a wide variety of frightfulness in very accurately metered doses, from putting a few streets-ful of rioters to sleep to dispensing atomic annihilation on a continental scale. The Monitor Corps never allowed any situation to deteriorate to the point where the use of mass destruction weapons became the only solution, but they kept them as a big and potent stick—like most policemen, the Federation's law enforcement arm knew that an undrawn baton had better and more long-lasting effects than one that was too busy cracking skulls. But their most effective and versatile close-range weapon—versatile because it served equally well either as a sword or a ploughshare—was the rattler.

A development of the artificial gravity system which compensated for the killing accelerations used by Federa-

tion spaceships, and the repulsion screen which gave protection against meteorites or which allowed a vessel with sufficient power reserves to hover above a planetary surface like an old-time dirigible airship, the rattler beam simply pushed and pulled, violently, with a force of up to one hundred Gs, several times a minute.

It was very rarely that the Corps were forced to use their rattlers in anger—normally the fire control officers had to be satisfied with using them to clear and cultivate rough ground for newly-established colonies—and for the optimum effect the focus had to be really tight. But even a diffuse beam could be devastating, especially on a small target like a scoutship. Instead of tearing off large sections of hull plating and making metallic mincemeat of the underlying structure, it shook the whole ship until the men inside rattled.

On this operation, however, the focus was very tight and the range known to the last inch.

Visually it was not at all spectacular. Each cruiser had three rattler batteries which could be brought to bear, but they pushed and pulled so rapidly that the surface seemed hardly to be disturbed. Only the relatively gentle tractor beams positioned between the rattlers seemed to be doing anything—they pulled up the narrow wedge of material and shredded vegetation so that the next rattler in line could deepen the incision. It would not be until the incision had penetrated to the subsurface and extended for several miles that the other squadrons still hanging in orbit would come in to widen the cut into what they all hoped would be a trench wide enough to check the spread of vegetable infection from the excised and decomposing dead material.

As a background to the pictures Conway could hear the clipped voices of the ordnance officers reporting in. There seemed to be hundreds of them, all saying the same things in the fewest possible words. At irregular intervals a quiet,

unhurried voice would break in, directing, approving, coordinating the overall effort—the voice of God, sometimes known as Fleet Commander Dermod, the ranking Monitor Corps officer of Galactic Sector Twelve and as such the tactical director of more than three thousand major fleet units, supply and communications vessels, support bases, ship production lines, and the vast number of beings, Earth-human and otherwise, who manned them.

If the operation came unstuck, Conway certainly would not be able to complain about the quality of the help. He began to feel quietly pleased with the way things were going.

The feeling lasted for all of ten minutes, during which time the incision line passed through the tunnel—Number Forty-three—which they had just entered. Conway could actually see the inward end of the seal, a thick, corrugated sausage of tough plastic inflated to fifty pounds per square inch which pressed against the tunnel walls. Special arrangements had been needed to guard against loss of working fluid because the strata creature's healing processes were woefully slow. Its blood was quite literally water and one important quality which water did not have was the ability to coagulate.

Two Corpsmen and a Melfan medic were on guard beside the seal. They seemed to be agitated, but there were so many leucocytes moving about the tunnel that he could not see the reason for it. His screens showed the incision line crossing the throat tunnel. A few hundred gallons of water between the seal and the incision poured away—considering the size of the patient, it was scarcely a drop. The rattlers and tractors moved on, extending and deepening the cut while the great immaterial pressor beams, the invisible stilts which supported the enormous weight of the cruisers, pushed the edges apart until the incision became a

widening and deepening ravine. A small charge of chemical explosive brought down the roof of the emptied section of tunnel, reinforcing the plastic seal. Everything seemed to be working exactly as planned, until the immediate attention signal began flashing on his board and Major Edwards' face filled the screen.

'Conway,' said the Major urgently, 'the seal in Tunnel Forty-three is under attack by tools.'

'But that's impossible,' said Murchison, in the scandalised tones of one who has caught a friend cheating at cards. 'The patient has never interfered with our internal operations. There are no eye plants down here to give away our positions, no light to speak of, and the seal isn't even metal. They never attack plastic material on the surface, just men and machines.'

'And they attack men because we betray our presence by trying to take mental control of them,' Conway said quickly, then to Edwards, 'Major, get those people away from the seal and into the supply shaft. Quickly. I can't talk to them directly. While they're doing that tell them to try not to think——'

He broke off as the seal ahead disappeared in a soft white explosion of bubbles which roared towards them along the tunnel roof. He could not see anything outside the digger and inside only Edwards' face and pictures of ships in line astern formation.

'Doctor, the seal's gone,' shouted the Major, his eyes sliding to one side. 'The debris behind the seal is being washed away. Harrison, *dig in*!'

But the Lieutenant could not dig in because the bubbles roaring past made it impossible to see. He threw the tracks into reverse, but the current sweeping them along was so strong that the digger was just barely in contact with the floor. He killed the floodlights because reflection from the froth outside the canopy was dazzling them. But there was

still a patch of light ahead, growing steadily larger....

'Edwards, *cut the rattlers...* !'

A few seconds later they were swept out of the tunnel as part of a cataract which tumbled down an organic cliff into a ravine which seemed to have no bottom. The vehicle did not explode into its component parts nor themselves into strawberry jam, so they knew that Major Edwards had been able to kill the rattler batteries in time. When they crashed to a halt a subjective eternity later, two of the repeater screens died in spectacular implosions and the cataract which had cushioned their fall on the way down began battering at their side, pushing and rolling them along the floor of the incision.

'Anyone hurt?' said Conway.

Murchison eased her safety webbing and winced. 'I'm black and blue and ... and embossed all over.'

'That,' said Harrison in an obviously uninjured tone, 'I would like to see.'

Both relieved and irritated, Conway said, 'First we should see to our patient.'

The only operable viewscreen was transmitting a picture taken from one of the copters stationed above the incision. The heavy cruisers had drawn off a short distance to leave the operative field clear for rescue and observation copters, which buzzed and dipped above the wound like great metal flies. Thousands of gallons of water were pouring from the severed throat tunnel every minute, carrying the bodies of leucocytes, farmer fish, incompletely digested food and clumps of vital internal vegetation into and along the ravine. Conway signalled for Edwards.

'We're safe,' he said before the other could speak, 'but this is a mess. Unless we can stop this loss of fluid, the stomach system will collapse and we will have killed instead of cured our patient. Dammit, why doesn't it have some method of protecting itself against gross physical in-

jury, a non-return valve arrangement or some such? I certainly did not expect this to happen. . . .'

Conway checked himself, realising that he was beginning to whine and make excuses instead of issuing instructions. Briskly, he said, 'I need expert advice. Have you a specialist in short-range, low-power explosive weapons?'

'Right,' said Edwards. A few seconds later a new voice said, 'Ordnance control, *Vespasian*, Major Holroyd. Can I help you, Doctor?'

I sincerely hope so, thought Conway, while aloud he went on to outline his problem.

They were faced with the emergency situation of a patient bleeding to death on the table. Whether the being concerned was large or small, whether its body fluid was Earth-human blood, the superheated liquid metal used by the TLTUs of Threcald Five, or the somewhat impure water which carried food and specialised internal organisms to the farflung extremities of this Drambon strata creature's body, the result would be the same—steadily reducing blood pressure, increasingly deep shock, spreading muscular paralysis, and death.

Normal procedure in these circumstances would be to control the bleeding by tying off the damaged blood vessel and suturing the wound. But this particular vessel was a tunnel with walls no more strong or elastic than the surrounding body material, so they could not be tied or even clamped. As Conway saw it the only method remaining was to plug the ruptured vessel by bringing down the tunnel roof.

'Close-range TR-7s,' said the ordnance officer quickly. 'They are aerodynamically clean, so there will be no problem shooting into the flow, and provided there are no sharp bends near the mouth of the tunnel any desired penetration can be achieved by——'

'No,' said Conway firmly. 'I'm concerned about the com-

pression effects of a large explosion in the tunnel itself. The shock wave would be transmitted deep into the interior and a great many farmer fish and leucocytes would die, not to mention large quantities of the fragile internal vegetation. We must seal the tunnel as close to the incision as possible, Major, and confine the damage to that area.'

'Armour-piercing B-22s, then,' said Holroyd promptly. 'In this material we could get penetrations of fifty yards without any trouble. I suggest a simultaneous launch of three missiles, spaced vertically above the tunnel mouth so that they will bring down enough loose material to block the tunnel even against the pressure of water trying to push it away as it subsides.'

'Now,' said Conway, 'you're talking.'

But *Vespasian*'s ordnance officer could do more than talk. Within a very few minutes the screen showed the cruiser hovering low over the incision. Conway did not see the missiles launched because he had suddenly remembered to check if their digger had been swept far enough to avoid being buried in the debris, which fortunately it had. His first indication that anything at all had happened was when the flow of water turned suddenly muddy, slowed to a trickle and stopped. A few minutes later great gobs of thick, viscous mud began to ooze over the lip of the tunnel and suddenly a wide area around the mouth began to sag, fall apart, and slip like a mass of brown porridge into the ravine.

The tunnel mouth was now six times larger than it had been and the patient continued to bleed with undiminished force.

'Sorry, Doctor,' said Holroyd. 'Shall I repeat the dose and try for greater penetration?'

'No, wait.'

Conway tried desperately to think. He knew that he was conducting a surgical operation, but he did not really be-

lieve it—both the problem and the patient were too big. If Murchison or Harrison were in the same condition, even if no instruments or medication were available, he would know what to do—check the flow at a pressure point, apply a tourniquet . . . that was *it*!

'Holroyd, plant three more in the same position and depth as last time,' he said quickly. 'But before you launch them can you arrange your vessel's pressor beams so that as many of them as possible will be focused just above the tunnel opening? Angle them against the face of the incision instead of having them acting vertically, if possible. The idea is to use the weight of your ship to compress and support the material brought down by the missiles.'

'Can do, Doctor.'

It took less than fifteen minutes for *Vespasian* to rearrange and refocus her invisible feet and launch the missiles, but almost at once the cataract ceased and this time it did not resume. The tunnel opening was gone and in its place there was a great, saucer-shaped depression in the wall of the incision where *Vespasian*'s starboard pressors were focused. Water still oozed through the compacted seal, but it would hold so long as the cruiser maintained position and leaned her not inconsiderable weight on it. As extra insurance another inflatable seal was already being moved into the supply tunnel.

Suddenly the picture was replaced by that of a lined, young old face above green-clad shoulders on which there rested a quietly impressive weight of insignia. It was the Fleet Commander himself.

'Doctor Conway. My flagship has engaged in some odd exercises in her time, but never before have we been asked to hold a tourniquet.'

'I'm sorry, sir—it seemed the only way of handling the situation. But right now, if you don't mind, I'd like you to have this digger lifted to map reference numbers. . . .'

He broke off because Harrison was waving at him. The Lieutenant said softly, 'Not *this* digger. Ask him to have the other one checked out and waiting when they get around to pulling us out.'

Six

THREE hours later they were in the second modified and strengthened digger, suspended under a transport copter and approaching the area which, they hoped, contained the strata creature's brain and/or tool-producing facilities. The trip gave them a chance to do some constructive theorising about their patient.

They were now convinced that it had evolved originally from a mobile vegetable form. It had always been large and omnivorous and when this life-form began to live off itself the parts grew in size and complexity and shrank in numbers. There did not seem to be any way that the strata creature could reproduce itself, it simply continued to live and grow until one of its own kind who was bigger than it was killed it. Their patient was the biggest, oldest, toughest, and wisest of its kind. As the sole occupant of its land mass for many thousands of years, there had no longer been the necessity for it to move itself bodily and so it had taken root again.

But this had not been a process of devolution. With no chance of cannibalising others of its own kind, it devised methods of controlling its growth and of rendering its metabolism more efficient by evolving tools to do the jobs like mining, investigating the subsurface, processing necessary minerals for its nerve network. The original farmer fish were probably a strain which were able to survive, like the legendary Jonah, in its stomach and later grow plant teeth for both the parent creature and the farmer fish to defend themselves against sea predators sucked in by the mouths. How the leucocytes got there was still not clear,

but the rollers occasionally ran across a smaller, less highly evolved variety which were probably the leeches' wild cousins.

'But one point which we must keep in mind when we try to talk to it,' Conway ended seriously, 'is that the patient is not only blind, deaf, and dumb, it has never had another of its own kind to talk to. Our problem isn't simply learning a peculiar and difficult e-t language, we have to communicate with something which does not even know the meaning of the word communicate.'

'If you're trying to raise my morale,' said Murchison drily, 'you aren't.'

Conway had been staring ahead through the forward canopy, mostly to avoid having to look at the carnage depicted on his repeater screens where the tool attacks were taking an increasingly heavy toll at the feeding and transfusion sites. He said suddenly, 'The suspected brain area is far too extensive to be searched quickly but, correct me if I'm wrong, isn't this also the locality where *Descartes* made her first touchdown? If that is so then the tools sent to investigate her had a relatively short distance to come, and if it is possible to trace the path of a tool by the scar tissue it leaves in the body material. . . .'

'It is,' said Murchison, looking excited. Harrison gave new instructions to the transport copter's pilot without having to be told, and a few minutes later they were down, cutting blades spinning and nosing into their patient's spongy quasi-flesh.

But instead of the large, cylindrical plug cut from the body material they found a flat, reversed conical section which tapered sharply to a narrow, almost hair-thin wound which angled almost at once towards the suspected brain area.

'The ship would have been drawn only a short distance below the surface, obviously,' said Murchison. 'Enough to

let tools make contact with its total surface while supported by body material, instead of making a fleeting contact after bouncing themselves into the air. But do you notice how the tools, even though they must have been cutting through at top speed, still managed to avoid severing the root network which relays their mental instructions?'

'At the present angle of descent,' Harrison cut in, 'we are about twenty minutes from the subsurface. Sonar readings indicate the presence of caverns or deep pits.'

Before Conway could reply to either of them, Edwards' face flicked on to the main screen. 'Doctor, seals Thirty-eight through Forty-one have gone. We're already holding tourniquets at Eighteen, Twenty-six, and Forty-three, but——'

'Same procedure,' snapped Conway.

There was a dull clang followed by metallic scraping sounds running the length of the digger. The sounds were repeated with rapidly increasing frequency. Without looking up, Harrison said, 'Tools, Doctor. Dozens of them. But they can't build up much impetus coming at us through this spongy stuff and our extra armour should cope. But I'm worried about the antenna housing, though.'

Before Conway could ask why, Murchison turned from the viewpoint. She said. 'I've lost the original trail, Doctor—this area is practically solid with tool scar tissue. Traffic must be very heavy around here.'

The secondary screens were showing logistic displays on the deployment of ships, earthmoving machinery, decontamination equipment, and movements into and out of the feeding and transfusion areas, and the main screen showed *Vespasian* no longer in position above tunnel Forty-three. It was losing height and wheeling around in a ponderous, lateral spin while its pilot was obviously fighting hard to keep it from flipping over on to its back.

One of its four pressor installations, Conway saw during the next swing, had been smashed in as if by a gigantic hammer and he knew without being told that this was the one which had been holding closed the ruptured Forty-three. As the ship whirled closer to the ground he wanted to close his eyes, but then he saw that the spin was being checked and that the surface vegetation was being flattened by the three remaining pressors, fanned out at maximum power to support the ship's weight.

Vespasian landed hard but not catastrophically. Another cruiser moved into position above Forty-three while surface transport and copters raced towards the crash-landed ship to give assistance. They arrived at the same time as a large group of tools which were doing nothing at all to help.

Suddenly Dermod's head filled the screen.

'Doctor Conway,' said the Fleet Commander in a cold furious voice, 'this is not the first time that I have had a ship converted to scrap around me, but I have never learned to enjoy the experience. The accident was caused by trying to balance virtually the whole of the ship's weight on one narrowly focused pressor beam, with the result that its supporting structure buckled and damn near wrecked the ship.'

His tone warmed a little, but only temporarily, as he went on, 'If we are to hold tourniquets over every tunnel, and with tools attacking every seal it looks as if we will have to do just that, I shall have either to withdraw my ships for major structural modifications or use them for an hour or so at a time and check for incipient structural failure after each spell of duty. But this will tie up a much larger number of ships in unproductive activity, and the farther we extend the incision the more tunnels we will have to sit on and the slower the work will go. The operation is fast becoming a logistical impossibility, the casualty figures and material losses are making it indistinguishable from a full-scale war, and if I thought that the only result

would be the satisfaction of your medical curiosity, Doctor, and that of our cultural contact people, I would throw a permanent Hold on it right now. I have the mind of a policeman, not a soldier—the Federation prefers it that way. I don't glory in this sort of thing. . . .'

The digger lurched and for an instant Conway felt a sensation impossible in these surroundings, that of free fall. Then there was a crash as the vehicle struck rocky ground. It landed on its side, rolled over twice, and moved forward again, but skidding and slewing to one side. The sound of tools striking the hull was deafening.

Two vertical creases appeared on the Fleet Commander's forehead. He said, 'Having trouble, Doctor?'

The constant banging of tools made it hard to think. Conway nodded and said, 'I didn't expect the seals to be attacked, but now I realise that the patient is simply trying to defend itself where it thinks it is under the heaviest attack. I also realise now that its sense of touch is not restricted to its top surface. You see, it is blind, deaf, and dumb, but it seems to be able to feel in three dimensions. The eye-plants and subsurface root networks allow it to feel areas of local pressure, but vaguely, without detail. To feel the fine details it sends tools, which are extremely sensitive—sensitive enough to feel the airflow over their wings in the glider configuration and reproduce the shape themselves at will. Our patient learns very quickly and that glider I thought at has cost a lot of lives. I wish——'

'Doctor Conway,' the Fleet Commander broke in harshly, 'you are either trying to make excuses or giving me a very basic lecture with which I am already familiar. I have time to listen to neither. We are faced with a surgical and tactical emergency. I require guidance.'

Conway shook his head violently. He had the feeling that he had just said or thought of something important but he did not know what it was. He had to stay with his present

train of thought regardless if he expected to drag it out into the light again.

He went on, 'The patient sees, experiences everything, by touch. So far our only area of common contact are the tools. They are thought-controlled extensions of its sense of touch throughout and for a short distance above the patient's body. Our own mental radiation and control are more concentrated and of strictly limited range. The situation has been that of two fencers trying to communicate only through the tips of their foils——'

He stopped abruptly because he was talking to an empty screen. All three repeaters glowed with power, but there was neither sound nor vision.

Harrison shouted, 'I was afraid of this, Doctor. We strengthened the hull armour but had to cover the antenna housing with a plastic radome to allow two-way communications. The tools have found our weak spot. Now we are deaf, dumb, and blind, too—and missing one leg because our port caterpillar tread won't work.'

Murchison was tapping his other shoulder and pointing outside.

The digger had come to rest on a flat shelf of rock in a large cavern which angled steeply into the subsurface. Above and behind them hung a great mass of the creature's body material from which there was suspended thousands of rootlets which joined and rejoined until they became thick, silvery cables writhing motionlessly across the cavern floor, walls, and roof, before disappearing into the depths. Each cable had at least one bud sprouting from it, like a leaf of wrinkled tinfoil. The more well-developed buds quivered and were trying to take the shapes of the tools which were attacking them.

'This is one of the places where it makes the tools,' she said, using a spotlight as pointer, 'or should I say grows them—I still can't decide whether this is an animal or

vegetable life-form basically. The nervous system seems to be centred in this area so it is almost certainly part of the brain as well. And it is sensitive—do you see how carefully the tools avoid those silver cables while they are attacking?'

'We'll do the same,' said Conway, then to Harrison, 'That is if you can move the digger on one track to that overhanging wall with the cables running along it, without crushing those two on the floor?'

Damage in this sensitive area could have serious effects on their patient.

The Lieutenant nodded and began rocking the digger forward and backwards along the shelf until they were tight against the indicated wall. Protected by the sensitive cables above, the cavern floor below, and the rocky wall on their starboard side, the tool attack was confined to their unprotected port side. They could once again hear themselves think, but Harrison pointed out firmly but apologetically that they could not climb the slope or dig their way out on one track, that they could not call for help and that they had air for only fourteen hours, and then only if they sealed their suits to use their remaining tanked air.

'Let's do that now,' said Conway briskly, 'and move outside. Station yourselves at each end of the digger, under the cables, and with your backs to the cavern wall. That way you will have to think off attacks from the front only—any tool trying to cut through the rock behind you will make too much noise to take you by surprise. I also want you far enough from my position amidships so that your mental radiation will not affect the tools which I will be trying to control. . . .'

'I know that smug, self-satisfied look,' said Murchison to the Lieutenant as she began sealing her helmet. 'The Doctor has had a sudden rush of brains to the head. I think he intends *talking* to the patient.'

'What language?' asked Harrison drily.

'I suppose,' said Conway, smiling to show the confidence which he did not feel, 'you could call it three-dimensional Braille.'

Quickly he explained what he hoped to do and a few minutes later they were in position outside the digger. Conway sat with his back to the port track housing a few feet from a water-filled depression in the cavern floor. There was a hole of unknown depth in the centre of the depression where a cable or similar ore-extracting plant had eaten its way into the rock. To one side of him a group of seven or eight tools had merged together to encircle and squeeze the vehicle's hull, and some of the armour was beginning to gape at the seams. Conway thought a break in the metal band and then he rolled it into the depression like a great lump of animated, silvery dough. Then he got down to work.

Conway made no attempt to protect himself against attacking tools. He intended concentrating so hard on one particular shape that anything which came within mental range would, he hoped, lose its dangerous edges or points.

Thought-shaping the creature's outward aspect was easy. Within a few minutes there was a large, silvery pancake—a small-scale replica of the patient—lying in the centre of the pool. But thinking three dimensionally of the mouths and their connecting tunnels and stomachs was not so easy. Even harder was the stage when he began thinking the tiny stomachs into expanding and contracting, sucking the gritty, algae-filled water into his scale model and expelling it again.

It was a crude, oversimplified model. The best he could manage at one time was eight mouths and connecting stomachs and he was very much afraid that it bore the same relation to the patient that a doll did to a living baby. But then he began to add the creeping motions he had

observed in smaller, younger strata creatures, keeping the area around the central depression motionless, however, and hoping that with the pumping motions of the stomachs he was giving the impression of a living organism. The sweat poured off his forehead and into his eyes, but by then it did not matter that he could not see properly because the sections he was shaping were out of sight anyway. Then he began to think certain areas solid, motionless, dead. He extended these dead, motionless, and detail-less areas until gradually the whole model was a solid, lifeless lump.

Then he blinked the sweat out of his eyes and started all over again, and then again, and suddenly Murchison and the pilot were standing beside him.

'They aren't attacking us any more,' said Harrison quietly, 'and before they change their mind I am going to try fixing that damaged track. At least, there is no shortage of tools.'

Murchison said, 'Can I help—apart from keeping my mind blank to avoid warping your model?'

Without looking up Conway said, 'Yes, please. I'm going to take it through the same sequence once again, but halt it at the point where the dead areas extend to at the present time. When I do that I would like you to think the positions of our incisions and extend and widen them while I seal the severed throat tunnels and think the feeding and transfusion shafts. You withdraw the excised material a short distance and think it solid, dead, that is, while I try to get across the idea that the remainder is alive and twitching and likely to stay that way.'

Murchison caught on very quickly, but Conway had no way of knowing if their patient had, or could, catch on. Behind them Harrison was at work on the damaged tread while before them their model of the patient and the effects of their present surgery became more and more detailed—right down to the miniature corrugated seals and what

happened to the creature when one of them was collapsed. But still there was no indication from the patient that it understood what they were trying to tell it.

Suddenly Conway stood up and began climbing the sloping floor. He said, 'I'm sorry, I have to move out of range for a minute to catch my mental breath.'

'Me, too,' said Murchison a few minutes later. 'I'll join you . . . Doctor, look!'

Conway had been staring at the darkness of the cavern roof to rest both his mind and his eyes. He looked down quickly, thinking they were under attack again, and saw Murchison pointing at their model, their *working* model.

Despite it being out of range of both their minds it had not slumped down or lost detail. Somebody was maintaining it exactly as they had been doing. All at once Conway forgot his physical and mental fatigue.

Excitedly he said, 'This must be its way of saying that it understands us. But we've got to widen communications, tell it more about ourselves. Go collect a few more tools and think a model of this cavern complete with nerve cables—I'll shape the digger to scale with moving models of the three of us. They'll be crude, of course, but to begin with we only need to get across the idea of our small size and vulnerability to tool attacks. Then we'll move away for a short distance and shape a model of the digger in operation, then 'dozers, copters, and scoutships on the surface—nothing as big and complicated as *Descartes*, at least to begin with. We'll have to keep everything very simple.'

In a very short time the shelf around the digger was carpeted with models which were being maintained by the patient as soon as they were completed, and more and more tools were rolling heavily but very gently towards them, eager to be shaped. But their visors were becoming almost opaque with perspiration and their suit air was running out. Murchison insisted that she had time for just one more

shaping, a large one using upwards of twenty tools, when Harrison appeared from behind the digger.

'I have to go inside,' said the Lieutenant. 'Unlike some people I have been working hard and burning up my air. . . .'

'Kick him for me,' said Murchison to Conway. 'You're closer.'

. . . but the digger will work at about quarter speed,' Harrison continued. 'And if it doesn't we may still be able to call for help. I used a tool to shape a new antenna—I knew the exact dimensions—so we may even get two-way vision——'

He stopped abruptly, staring at what Murchison was doing to her tools.

A little crossly she said, 'As the pathologist of the party it is my job to tell the patient what we look, or rather feel, like. This model has a much-simplified respiratory, digestive, and circulatory system and, as you can see, articulation at all the main joints. Naturally, as I know a little more about myself than anyone else, this representative of mankind is in fact female. Equally important, I do not want to confuse the patient needlessly by adding clothes.'

Harrison did not have enough oxygen left to reply. They followed him into the digger and, while Conway made contact with the surface, Murchison instinctively raised her hand in farewell to the cavern and the shapes of the tool models scattered across the shelf. She must have been thinking very hard about her goodbye because her last model raised its hand also and kept it there while the digger crawled slowly out of mental range.

Suddenly all three repeaters were alive and Dermod was staring at him, his face reflecting concern, relief, and excitement in sequence and then all together. He said, 'Doctor, I thought we'd lost you—you blanked out three hours ago. But I can report progress. The incision is proceeding and all tool attacks ceased half an hour ago. There is no tool

trouble reported from the tunnel seals, the decontamination teams, the transfusion shafts, anywhere. Doctor, is this a temporary condition?'

Conway let his breath go in a long, loud sigh of relief. Their patient was a very bright lad despite its physically slow reaction times. He shook his head and said, 'You will have no more trouble from the tools. In fact, you will find them of assistance in helping maintain equipment and for use in awkward sections of the incision once we make it understand our needs. You can also forget about digging that isolation trench—our patient retains enough mobility to withdraw itself from the newly excised material—which means that ships which would have been tied up in digging that trench will now be free to extend the incision more rapidly, so that our operation will be completed in a fraction of the time originally thought necessary. You see, sir,' Conway ended, 'we now have the active co-operation of our patient.'

Major surgery was completed in just under four months and Conway was ordered back to Sector General. Post-operative treatment would take a great many years and would proceed in conjunction with the exploration of Drambo and the closer investigation of its life-forms and cultures. Before leaving, while he was still seriously troubled by the thought of the Monitor Corps casualty figures, Conway had once questioned the value of what they had done. A rather supercilious cultural contact specialist had tried to make it very simple for him by saying that difference, whether it was cultural, physiological, or technological, was immensely valuable. They would learn much from the strata creature and the rollers while they were teaching them. Conway, with some difficulty, accepted that. He could also accept the fact that, as a surgeon, his work on Drambo was done. It was much harder to accept

the fact that the pathology team, particularly one member of it, still had a lot of work to do.

While O'Mara did not openly enjoy his anguish, neither did he display sympathy.

'Stop suffering so loudly in silence, Conway,' said the Chief Psychologist on his return, 'and sublimate yourself—preferably in quicklime. But failing that there is always work, and an odd case has just come in which you might like to look at. I'm being polite, of course, it *is* your case as of now. Observe.'

The large visiscreen behind O'Mara's desk came to life and he went on, 'This beastie was found in one of the hitherto unexplored regions, the victim of an accident which virtually cut its ship and itself in two. Airtight bulkheads sealed off the undamaged section and your patient was able to withdraw itself, or some of itself, before they closed. It was a large ship, filled with some kind of nutrient earth, and the victim is still alive—or should I say half alive. You see, we don't know which half of it we rescued. Well?'

Conway stared at the screen, already devising methods of immobilising a section of the patient for examination and treatment, of synthesising supplies of that nutrient soil which now must be virtually sucked dry, and for studying the wreck's controls to gain data on its sensory equipment. If the accident which had wrecked its ship had been due to an explosion in the power plant, which was likely, then this might well be the front half containing the brain.

His new patient was not quite the Midgaard Serpent but it did not fall far short of it. Twisting and coiling it practically filled the enormous hangar deck which had been emptied to accommodate it.

'Well?' said O'Mara again.

Conway stood up. Before turning to go he grinned and said, 'Small, isn't it?'

THE CYCLOPS PATROL

by

WLLIAM SPENCER

Industrial espionage is now a highly organised business—in the competitive world of technical development, refined spy devices will soon be the norm rather than the unusual.

THE CYCLOPS PATROL

THE dull grey fly buzzed irritatingly round Floyd's head as he bent over the computer display. He drew another line with the light pen on the projected micro-circuit, trying to ignore the fly, a wavering dark blur on the fringes of his vision.

Then, his patience snapping, he took a side-swipe at the buzzing creature with his free hand—a clumsy swipe that missed as the fly dodged easily upwards. Floyd muttered a few choice expletives half-audibly.

The fly continued to hover, just out of reach, over his head. It was a big ugly fly, of a breed that Floyd did not recognise. Some mutant form, perhaps, resulting from radiation or the wholesale use of insecticides?

Floyd passed the back of his hand across his damp brow. He had almost finished the working diagram now. The micro-circuit was a new one, a breakthrough in design. But it was a pity that a firm which was a leader in advanced electronics could not provide better airconditioning. Some fault in the system had caused the temperature in Floyd's design office to rise a shade too high for comfort.

Outside it was excessively hot. The floor-to-ceiling sunscreens tempered the glare and the airconditioning should have done the rest. Floyd supposed he should have complained, but instead he had opened a small window behind the sunscreens. There might be a suspicion of a breeze outside. And a lurking sense of claustrophobia made Floyd anxious to feel some communication with the outside air.

An open window—hence the fly. There was a price you had to pay for everything.

The door handle turned and someone came in silently.

Floyd glanced up quickly and saw it was Clone.

Floyd was allergic to security men and especially allergic to this one. Heavy-jowled, unsmiling, padding around like a cat, Clone made one feel vaguely guilty. Faint ghosts of half-forgotten misdemeanours rose in the mind when his expressionless eyes studied one's exposed face.

Nevertheless, Floyd hated to show that he was disturbed in any way by the security man's presence. Over-correcting, he had a special brand of false jollity which he reserved for these visits. Swallowing hard, he turned a beaming smile on Clone.

'Hullo there, old man! How goes the industrial espionage?' Floyd clapped him on the back with excessive bonhomie.

Clone looked like a man with chronic indigestion.

'It's not a joke. The people over the way—you-know-who—will stop at nothing to get information. I may say that the Board of Directors takes security very seriously.'

'Good for them. But some of us in the lower-income brackets actually soil our hands with work. We don't have energy to spare to worry about industrial espionage—we leave that sort of thing to you and the Board.'

Clone's face remained impassive. He did not descend to the trivial level of small-talk or jest. But his eyes were restlessly flickering round the room, inquisitive as a snake's double-tongue. His colourless eyes were so greedily naked that Floyd always felt he was in the presence of something obscene. Also, there was this background of incipient guilt....

Clone's sharp glance had penetrated to the open window behind the sunscreens.

He stiffened. 'The window?'

'Ye . . . es?' Floyd was colouring somewhat and bending over the computer panel to hide his embarrassment.

Clone's face registered deep disapproval as he marched stiffly over, reached through the sunscreen, and closed the window with just the suspicion of a slam.

The fly, which had been hovering behind Clone's head, slipped through the window just before it shut.

'You know that's against regulations,' said Clone accusingly.

'I know. But it's always so airless in here. The airconditioning is lousy.'

'It *is* hot in here. Bound to be, when you have the window open.'

'I tell you the airconditioning is on the blink.' Floyd, aggressively defensive, allowed his voice to rise slightly.

'In that case you should complain,' said Clone sternly. 'Get it fixed.'

'I'm too busy. It's quicker to set the window ajar. And anyway what does it matter?'

Clone sat heavily in a chair. 'I'm sorry you take that view,' he said.

Floyd knew he was in for one of Clone's pep-talks on security.

'This firm has a reputation for original thinking. We spend a fortune on research and development to stay one jump ahead of rival concerns. A careless attitude to security can jeopardise that lead.'

'But how does an open window . . .?'

'Somebody might have come in.'

'Hardly—when I'm here.'

'Don't you ever go out of the room?'

'Yes. But if I do, I close the window.'

'And if you forget?'

Floyd began to get angry, thought better of it, and turned his open palms upwards.

'Oh, all right, then, I'll keep the window closed in future.'

'Please try to see that security is vital.' Clone paced round the room slowly, his face set in a mask of disapproval, then padded silently out of the door.

Floyd breathed out a long sigh when the security man had left. Putting the finishing touches to the micro-circuit, he smouldered inwardly with words left unsaid.

Three weeks later, Floyd found himself in the Managing Director's office.

It was a vast, low room, the expensive muted furnishings set off with carefully-sited electronic sculptures. Floyd did not relish his rare visits to this sanctum. They tended to coincide with moments of crisis in his career. And today there seemed to be an oppressive silence in the huge room.

Despite the soft lighting and the plushy carpet into which you sank toe-deep, it was clear that the ambience was unfriendly.

Floyd fidgeted while the MD pretended to be reading some papers on his desk. Clone was hovering obsequiously in the background, like a well-trained butler eager to anticipate his master's needs.

'Ah, Floyd!' said the MD at length, as though Floyd had just walked into the room.

Floyd shifted his weight to the other foot.

'Take a close look at that.' The MD swivelled a heavy-barrelled microscope and pushed it across the plastic desk top.

Floyd bent forward and pressed his face to the visor, touching the focus controls lightly.

'One of our latest micro-circuits,' he said after a moment. 'The one we. . . .'

'Take a closer look, Floyd.' The Managing Director's voice was edged like a saw. 'Read the manufacturer's name.'

'It says *Iota* ... but ... !'

'But it looks exactly like one of ours. That, Floyd, is a chinese copy of our most advanced circuit. It could only have been obtained as a result of industrial espionage.'

The Managing Director paused and looked solemnly at Floyd.

'Naturally we're checking everyone who had access to the circuit. As you know, this particular job was entrusted to a mere handful of our most senior people.'

Floyd nodded. So stone-faced Clone had something to worry about after all.

'Now I'm not suggesting that *you* are unreliable, Floyd. We've known each other a long time. But you may have been careless. Clone here tells me that he found a window open in your room on one occasion.'

He'd expected the accusation to come up. But now, confronted by it, he found nothing to say. Floyd became aware of Clone and the Managing Director looking directly at him, waiting for some kind of explanation or apology.

'I, er ... yes ... that's true.'

'Really, Floyd, I should have thought a man of your experience, working with a piece of top-secret new circuitry, would have known better.'

Floyd gulped. 'But I was there all the time. No one could have got in.'

The Managing Director glanced round at Clone. 'Perhaps when the sunscreens were parted momentarily to open or close the window, Iota could have managed a shot with a telephoto lens or laser scanner.'

'No, sir, that's not possible,' blurted Floyd. 'The drawing board is turned so that no part of it is visible from the window. Mr. Clone, here, made a special point of having the drawing board turned that way.' Give old misery a bit of credit, thought Floyd, though it's hardly possible to sweeten the old sourpuss.

'Good thinking, Clone,' said the MD, beaming a warm ray of approval at the security man. 'Well, Floyd, I accept your statement. There's nothing we can do about it, now that the circuit has been copied. But I want you to be very much more careful in the future. We cannot afford another security leak like this. Understand?'

Floyd mumbled something placatory and bowed himself out, trudging soundlessly over the deep carpet.

The security scare passed off quietly enough. Indeed, only a few senior people were aware of the exact circumstances. Floyd had retained the confidence of the Board of Directors sufficiently to be entrusted with further top-secret work. Next summer found him engaged on another major development in the company's micro-circuitry. He felt in good spirits that morning as he left his car in the parking lot and walked across the lawns to the block where he worked.

The lawns were laid out with beds of flowers, formal pools, and a few trees here and there. His way took him under one of the trees, and its shadow covered him for a moment. A blundering dark-grey fly dropped out of the foliage and winged down towards Floyd, unnoticed. It settled on the back of his coat, over the left shoulder blade.

Floyd crossed another sunlit lawn. Then he entered the electronic doors, showed his pass, and nodded to the uniformed doorman. The doorman pushed a button which swung aside the armoured glass doors leading to the top security wing. The doors closed noiselessly as soon as Floyd was through.

Thinking of nothing in particular, Floyd paced along the corridor to the door of his own room. He was whistling some kind of tune as he entered, closed the door carefully, and moved over to a block of cupboards.

Floyd did not see the fly detach itself from the back of his coat just before he took it off.

The fly slipped across the room out of Floyd's line of vision and hid under the knee-hole of his desk.

Floyd put his coat in one of the cupboards. Then he rolled up his sleeves, took out his notes of the day before, and began to switch on the equipment.

He was working on a modification of the new micro-circuit. Deftly he put the circuit under the microscope, studied it, and sketched with his light pen on the computer panel.

The fly emerged from its hiding place stealthily, rose upwards, and began to patrol back and forth behind Floyd's head. Floyd went on with his work, unaware of what was happening.

Presently he took the micro-circuit from under the lens with fine tweezers and laid it carefully in a plastic dish on the table next to some test equipment.

Out of the corner of his eye, disbelieving, he saw the fly swoop down like a hawk, gather the micro-circuit up in its grappling legs, and make off with it. Floyd stared, immobile, gulping down his astonishment, as the fly winged its way across the room and disappeared on top of a high cupboard.

Floyd went after it with a heavy ruler. He had to get a chair to stand on so as to be able to see where the thing had settled. When he clambered up, he could see the fly sitting quietly on top of the cupboard.

He brought the heavy ruler smashing down, but the fly darted sideways. Before he could strike again, the thing had clung to his forearm and he felt a sharp jab like a needle point being thrust into his flesh.

With a feeling of sickened revulsion he flung the ugly grey fly off his arm. For a second or two he stood bemused, unable almost to comprehend what had happened. Then his knees crumpled, his vision darkened, and he went crashing unconscious to the floor.

When he regained consciousness he was lying awkwardly at the foot of the chair. His head swam. For a moment he could not analyse the situation: what had happened? Then he remembered the fly.

A fly whose sting caused unconsciousness!

Warily he looked around him, but there was no sign of the insect. His first impulse was to rush out of the door, in a kind of panic, calling for help.

But on second thoughts, very possibly that was what the fly wanted him to do. He found himself assuming that the thing possessed a kind of intelligence, for it had acted with considerable cunning so far. As he went out of the door, the fly would go out of the door too and could hide itself anywhere in the building.

Floyd saw that the only hope of getting the micro-circuit back was to keep the insect trapped in his room. He couldn't risk having it escape and disappear. He needed it as evidence. Who would believe his story that a big fly had stolen the micro-circuit—unless he was able to produce the insect in question? He would be written down as suffering from delusions, and his security rating would decline to zero.

Security. That was the operative word. This was a security problem. A job for Clone. He would ring him up and get him to come and trap the fly. But first Clone would have to install a wire mesh cage outside the door so that the creature could not get out as he got in.

Floyd edged over to the phone. There was no sign of the fly. But was it watching him from some hiding-place and was it intelligent enough to see the threat to its safety posed by Floyd making a phone call? And if so, could it sting him again?

Floyd remembered reading somewhere of insects that could only sting once and others that needed to recover before they could sting a second time. At any rate he would have to take that chance.

He was at his desk now.

He picked up the phone and dialled Clone's number.

Clone's voice crackled over the line, crisp and impersonal as ever.

'Security here.'

'Floyd. I have a security problem in Room 208.'

'Yes?'

'Bring a butterfly net.'

'*A butterfly net?* Did I hear you right?'

'But first you must. . . .' Floyd felt the sharp jab in his right forearm again. A dark object was sitting on his flesh. He tried, clumsily, to crush it.

'Fly got me again. . . .' said Floyd indistinctly, slumping forward on to the desk.

Floyd came round again to find himself lying on his back on the carpet, his collar undone, and Clone bending over him.

'What happened?' said Clone.

Floyd tried to clear his brain of the vaporous confusion that was coiling there. His head felt as if it was splitting. It was difficult to think straight.

Suddenly he remembered something and craned forward. Forgetting the throbbing pain in his head, he thrust Clone aside and sat bolt upright, pointing a bony finger.

'The door,' he said accusingly.

'What about the door?'

'It's open.'

Coming in and seeing Floyd unconscious over the desk, Clone had most unprofessionally left the door ajar.

'And that's the last you'll see of the fly.'

Clone was a sound man, very logical and orderly-minded —except when he made absurd mistakes such as leaving doors open.

It took Floyd a long time to explain about the fly. And

about the missing micro-circuit. That called for a great deal of explaining.

They took him seriously enough to search the whole of the security wing from top to bottom. But as Floyd expected, they found nothing. The building had been designed to keep out unwanted human intruders, but not to keep in flies. There were several unsealed crevices and ducts, and unplugged overflow pipes, through which a determined fly could make an escape.

Floyd tried to get the Managing Director to see it that way. But when Iota came out with an exact replica of the missing circuit, Floyd wished he could slink away somewhere and hide.

Floyd was still working at his old desk in Room 208. That in itself was something to be thankful for. He'd fully expected to be dismissed, or at least down-graded, after the last episode. But of course they didn't allow him to work on secret projects any more. At first the work he was put to do was completely routine—the sort of thing any intelligent junior could have coped with. A week or two later he was given a concocted dummy project, designed to mislead Iota if ever they should get hold of it.

Now Floyd was under orders to leave his window open all the time. He sat at his desk in a special protective suit, proof against horse-flies, wasps, hornets, and other forms of airborne menace. Close at hand on the table, was a protective helmet somewhat like those that beekeepers wear, but much tougher and sturdier. It was too ponderous for Floyd to wear all the time, but he had practised putting it on quickly. Clone had timed him with a stop-watch and they had got it down to under five seconds.

So he sat at his desk day after day, chafing in the suit, with the protective helmet at the ready and pretended to work at the trivial tasks on which he was now employed.

The window was triggered so that, the moment an insect flew through, it flipped shut. Just in case there was any malfunction, Floyd had a button under his thumb which could close the window independently of the automatic control.

Concealed behind a screen, invisible from the window, sat Clone, wearing an even tougher protective suit. With grim devotion to duty, Clone insisted on wearing his helmet almost the whole time, though he had provided himself with a special air supply which made the suit a little more tolerable.

Clone also had a button which could close the window, if Floyd should be attacked and incapacitated before he could get his helmet on.

As the days went by and no fly appeared, relations between the two men became strained. Clone's replies to Floyd's conversational, bantering sallies became shorter and gruffer, through the swathes of his heavy helmet. In the end Clone pretended not to hear Floyd's remarks and just sat there stolidly like a clumsily constructed mummy.

What irritated Floyd was the growing sense that Clone had ceased to believe in the fly. He imagined Clone's eyes through the visor, looking at him strangely, watching for the first sign of hallucinations or paranoid delusions. It was of course a triumph of credulity that Clone and the MD had accepted his story of the fly. There was some hard evidence, true: his loss of consciousness and the two red marks like hypodermic insertions on his arm. But these could easily have been faked, Floyd had to admit. So, at first, he felt a sense of gratitude that the security man had taken his story seriously.

However as day followed day and nothing happened, Floyd sensed Clone's belief wearing thin. It was being stretched to the limit, while they kept up the absurd pantomime of sitting there in the awkward suits. Had Clone

some time-limit in his mind, when Floyd was to be finally discredited? They could not sit there for ever.

Floyd saw the fly first. But that was only to be expected, because Clone's view was partly obstructed by his screen. Floyd's finger jerked towards the button. The autocontrol flipped the window shut a fraction of a second before he made contact.

A red warning light indicated to Clone what had happened, while Floyd struggled into his helmet.

It had been agreed that they would pretend not to see the fly at first, so as to observe its behaviour when unmolested. So Floyd bent over his desk and went through the motions of working on the dummy project, as best he could in the clumsy hood.

The fly patrolled back and forth behind Floyd's head, sizing up the situation. Presently Floyd went over to the side of the room, on the pretext of checking a figure in a reference book. There was a whir of grey glinting wings as the fly swooped on the dummy micro-circuit and carried it away.

Now Clone emerged from behind his screen, a ponderous white-suited figure, moving awkwardly like a badly synchronised automaton. He advanced towards the fly with a large butterfly net. Floyd too picked up a butterfly net from behind the screen and together they attempted to corner and capture the small invader.

Their attempts were blundering and inaccurate, hampered as they were by stiff protective suits. The fly easily eluded their lunges and sailed over towards the window by which it had entered. It collided with the glass. Bounced off. Buzzed for a moment against the pane. Then, finding itself trapped, darted menacingly towards its assailants.

Clone, who had been leading the chase, was directly in its track. The insect clung to his right forearm and tried to

sting him. But the protective material of the suit proved impervious to its barb. The security man stood quite still, his arm extended and Floyd was able to clap his butterfly net over the fly. But the diameter of the mouth of Floyd's net was considerably greater than that of Clone's admittedly bulky arm and the fly was able to escape again.

It swung round Floyd's back and tried to sting him between the shoulder blades. Again the protective suits proved their worth. Floyd shouted to the other man to clap the net over his back. But Clone, moving ponderously in the big suit, was not quick enough. The fly, baffled, made for the top of the cupboard where it had eluded Floyd before.

Here it encountered a fine mesh closing in the cavity at the top of the cupboard. They had prepared the room by sealing every cranny and closing off the recesses with panels or wire mesh.

There was nowhere to hide.

The fly turned back from the mesh and circled the room.

'Keep it on the move,' Clone shouted, his voice muffled by the folds of his helmet.

This was the plan they had worked out, in the event of the fly proving difficult to capture.

They lunged at the insect repeatedly with the nets, not caring whether or not they caught it. So clumsy were their movements and so agile the fly, that it was hardly in danger of being ensnared. But what they were doing was to compel it to remain constantly airborne.

The absurd battle between two men and a fly went on for what seemed like hours. Floyd's arm was aching as though it was about to drop off and he was bathed in perspiration. He could barely raise his right arm. He gritted his teeth and managed to keep the butterfly net waving above his head,

repeatedly dislodging the fly from resting-places which it tried to find on ceiling or walls.

Ninety minutes after the chase began, the fly plummeted to the floor, its wings twitching uselessly. It dropped the dummy micro-circuit, managed to crawl a few feet, then stopped.

Clone pushed back his helmet, his face red and steamy-looking. Floyd did the same. He saw the other man reverse his butterfly net and delicately nudge the fly with the end of the handle. The creature rolled over on its back, its legs pointing stiffly upwards, immobile.

'Not shamming, I don't think,' said Clone, giving the fly another gentle nudge. There was no response.

Floyd took a pair of tweezers off the desk, very carefully picked up the fly by one leg, and deposited it on a plastic dish.

Floyd looked up from the microscope, his face showing incredulity.

'Astonishing.'

'You have a look, Clone.'

The security man peered into the instrument.

'So it is an artifact, as we thought.'

'Yes, but look at the fantastic detail. It's beyond belief. Removing the casing is going to be tricky without damaging the internal mechanism. But even from the outside you can see how incredibly small they are working.'

Clone straightened up and gazed through the window towards the Iota factory in the distance, its bulk shimmering grey and featureless through the haze.

'What I don't understand,' he said slowly, 'is *why*? If they can work this small they must be several years ahead of us in microminiaturisation.'

'Ahead in some ways, yes.' Floyd, out of loyalty to his firm, was grudging. 'They have Murdoch, who is an ac-

knowledged genius in the field. But he's curiously unpredictable and something of a prima donna.'

'Obviously, he can deliver the goods.'

'When a project interests him, he can. He'll push things ahead like wild fire. But he's rather an unworldly person, with something of a contempt for consumer preferences and prejudices. The result is that their stuff doesn't make money, but ours does. They are simply driven to industrial espionage and to copying our prototypes in order to keep a reasonable share of the market.'

Clone nodded.

Floyd took another look through the microscope and in spite of himself his face wrinkled into a smile of enthusiasm and appreciation. 'But one has to admire the way they've gone about this.'

He kept peering into the microscope as he spoke. 'My guess is that the eyes operate as TV scanners. The device is steered remotely—possibly by an operator in the Iota factory itself. These long hairs are the radio antennae.'

'The legs operate as a grab for carrying off specimens of micro-circuitry?'

'Yes. But even without doing that, Iota can scan diagrams and drawings with the TV eyes and reproduce them electronically in permanent form at the other end.'

The security man in Clone reasserted itself. 'But this is diabolical. Nothing is going to be safe with devices like this around. The thing could get through a keyhole. . . .'

'We'll work out a reply. There is a defence against any form of attack. And meanwhile, Iota have presented us here with a very pretty specimen of their advanced thinking.'

Floyd inched the small joystick forward with thumb and finger. On the TV screen in front of him the ground rushed up in exploding perspective. The fly sailed into the picture, a blurred, dancing, dark-grey spot.

With small movements of the stick, Floyd locked on to it. He followed its wild twistings and veerings unerringly.

At each turn the horizon tilted crazily sideways, left or right, to near vertical. But the image of the fly, though it swung and wobbled, never left Floyd's screen. Despite its speeding wingbeat, it grew steadily larger second by second.

Once he almost lost it. That was when it buzzed against the sheer face of a building. Floyd flicked the joystick sideways, as warning signals rang in his head. But the hours spent flying the simulator paid off (he remembered Clone's grin getting more and more sardonic as the 'write-offs' had piled up on the simulator scoreboard). He brushed a wingtip and no more.

Then there was no escape.

Floyd followed the fly in its twisting, erratic dive to ground level. This one was doomed.

Now Floyd felt an exultant surge of anticipation as the fly's image loomed enormous on the screen. A moment later an electronic note sounded. Floyd pushed the lever marked 'Capture'. He exhaled a sigh of satisfaction and switched to autopilot. Then, beaming round, he gave the thumbs-up sign to colleagues seated at similar control desks on either side of him. They were too busy with their own controls to take much notice.

That was five already this morning.

Multiply that by thirty and at this rate even Iota's production line was being strained to breaking point.

A hatch opened in the wall opposite and Floyd's bird fluttered in and alighted on the top of the control desk. The wing action was good, but the wings did not fold when they stopped beating. And instead of two eyes, the creature had a single lens in the front of its head. Still, the overall effect was what counted. From a distance, a passer-by would have noticed nothing unusual.

Floyd jiggled a lever and the beak opened. Out fell the fly, de-activated and safely encapsulated in a block of transparent quick-setting resin. It looked like one of Iota's standard models, but nevertheless Floyd consigned it to the chute leading to the dissection laboratories. Just as well to be on the safe side.

Now there was a welcome pause while Floyd's bird got its fuel cell recharged. He stretched himself comfortably in the adjustable chair. Flight duration was only thirty minutes—though the boys in the back room were working on this. But half an hour was ample to make a 'kill'. His record today was well up to average and it gave him a quiet satisfaction to know that he was the company's top-scoring pilot. That helped to wipe the slate clean.

Relaxing over a cup of instant coffee, Floyd took time to look round the windowless airconditioned control room. Seated in rows were some thirty other pilots, mostly concentrating on their TV panels, their faces tense with the absorption of the chase, or occasionally registering disgust as the quarry eluded them.

Floyd switched his own TV to a general view of the scene outside the building.

In the airspace between their territory and Iota's perimeter, the air was alive with the dark shapes of birds. With the black scimitar wings of swifts, the yawning beak and fish tail, and the single eye bulging in their foreheads, the birds fluttered aloft and swept down in screaming dives. Wheeling and turning, they dominated the air, hunting Iota's spy-flies out of the sky.

SOME DREAMS COME IN PACKAGES

by

DAVID KYLE

The dream, in this instance, was to get to the stars—but a human being, at least in his present form, cannot live long enough to complete the journey....

SOME DREAMS COME IN PACKAGES

'. . . and it is henceforth prohibited to manufacture, assemble, or operate, or otherwise engage in experimentation with, such automatons and/or robots, as have been specifically defined in the preceding paragraphs, within the political limits of the Megalopolis of the Greater City of New York. . . .'

Bye-Law K-9786, City Council,
New York Megalopolis Charter,
Adopted, July 1, 1988

THE rocketship was travelling westwards, drawing a thin, grey line of exhaust across the rich blue of the evening sky. When it began to descend, Dr. Don VanGeorge moved back towards the safety shelter at the northern edge of the roof, careful not to lose sight of the blonde head of the girl. She was down near the landing platform awaiting Robert's arrival.

Dr. Don VanGeorge was spying on the girl. He was a rational, intelligent, middle-aged man, who had convinced himself that he had to be a sneak and an eavesdropper for her own good. He knew he was right, but he despised himself anyway.

As the ship lowered, whistling and humming and stirring up the inevitable city dirt even a half mile above the ground street, the girl moved indoors. At the corner of his barrier, VanGeorge watched the dark ship slip down across the background of the distant skyline. Off to his left was the

Brotherhood Building, the windows of its tower now steadily creating tiers of light another three hundred feet above the Science Building where he stood. He looked out past the tower, towards the river, beyond the dark line of the distant shore where the horizon was deepening from yellow into orange. Farther off, like a spear, was the silhouette of the Humanity Tower, its tip ablaze in the last rays of the hidden sun.

There was a short sudden silence which was obliterated by the impact of the opening hatchway.

The girl, Helen, Professor Haines' daughter, had walked out alone, towards the unfolding stairway. VanGeorge moved closer, behind a service door, to peer through its narrow window. He saw Helen's head lift and her tall body straighten and then he saw what she was seeing.

On the top step a pair of shining black boots began their descent, slowly bringing into view legs, then torso. The cuffs of the man's grey gabardine pantaloons were tucked into his boot tops, and his laboratory blouse, crisply fresh, was in turn tucked tightly into the broad belt which bound his narrow waist. Above the top of his unbuttoned high collar rode his head, erect on stiff neck. The flesh of his angular face was firm, his brown hair neatly brushed, and his eyes had the hot spark which turns stones into gems.

VanGeorge instinctively held his breath. Helen hadn't seen Robert in nearly a year. How would she greet him? As friend? Or as beloved? Surely Robert must perceive her fragile passion? And how would he handle the situation without jeopardising his outrageous secret?

It was not Helen who greeted Robert. It was Robert who greeted Helen. He stepped down, with a sudden quickness, and before she could realise what he was doing, had lifted her high in the air with his broad hands around her waist.

VanGeorge saw that she was laughing, kicking her legs playfully, emotionally on the verge of tears.

Moments later they had disappeared through the terminal doors and VanGeorge did not hurry to follow. He looked at the glow in the west. The sky was purple now, with the evening star twinkling coldly to the left of the dark shadow of the Humanity Tower. Above the Tower was the full face of the moon. A shimmering blue-white ghost, brilliant, casting a pale sheet of light over the city. He had confirmed the truth: Helen loved Robert.

When Don VanGeorge arrived at his office a few minutes later twenty floors under the roof he hadn't seen the couple anywhere in the Cybernetics Department of Division, but he had noticed the significance of the closed door to Helen's office. He had never seen that door closed before. With a heightening sense of repugnance he made a quick decision, shut his own door, and switched on his intercom into her office. He activated only the sound, not the picture, so there would be no small warning light nor buzz in the other room. He sat down, putting a candy mint in his mouth, and listened.

'Of course I missed you.' That was Robert's voice. Resonant yet quiet, a monotone which nevertheless conveyed the nuances of his thoughts and feelings, a thoroughly remarkable voice, thought VanGeorge, considering who Robert really was.

'I must ask that, Robert.' Helen's voice, although feminine, had that same quiet quality of the intellectual mind in the mature body which underscored every word. 'This past year has been very lonely for me. My feelings for you have deepened.'

'Although I know it's true—for both of us—we cannot admit it, Helen. Not even to ourselves.'

'But why not? I'm not thinking of the future. I'm think-

ing of the past. Our past. That can't hurt the precious project. . . .'

'We must, nevertheless, think of the future. Your future. And your father's. Time for personal dreams is gone.' There was a long pause.

'It's settled, then. You are making the trip!'

'So . . . Your father told you at last . . . Now you understand.'

VanGeorge clearly heard Helen's involuntary sob.

'You'll never survive. Everyone knows that. You'll be the first, and the first man will never come back. Oh, I know it sounds as though I'm talking against the whole project but it's the truth and I can't help myself. I don't want you to go out into space and die. I know I shouldn't think of the future, but I love you too much. There! It's said! I love you! Nothing else really matters.'

'I must go, Helen. You know that.'

'Not without a chance! Must you sacrifice yourself? We're not savages! Let a machine do it! Hold me, Robert, hold me!'

VanGeorge heard swishing of clothes, the squeaking of Robert's plastic boots on the polished floor, the sounds of bodies embracing. He had heard enough. The reality was obscene. A pretty, human female was in love with a handsome, inhuman robot!

VanGeorge savagely clicked off the intercom switch, his extreme indignation tempered by embarrassment. He cursed himself for his self-righteousness and banged around the room. 'For God's sake,' he said aloud, with bitterness, 'is the star trip worth it? Robert's too valuable! Helen's too involved! She's unhappy! I'm unhappy! Even Robert the Robot is unhappy! And we call ourselves The Happy Society! Let's get on with the whole bloody mess . . . !'

He stormed out of the room and in front of Helen's door

he knocked loudly. 'We're due at the meeting! Are you ready?'

In the hall, when the two came out, he made his greeting to Robert as warm as possible, which wasn't difficult because he really liked Robert very much despite what he was. Damn it all, Robert was *practically* human—Helen was a mature woman with superior brains—what the hell was he, VanGeorge, so upset about when the melodrama would be over in a couple of hours? Besides, he suddenly had to concede, perhaps Professor Haines had exaggerated! No conclusive proof had ever been demonstrated—Robert could be just a re-built human being, a sophisticated revivification, instead of a robot! Maybe. Just maybe.

'Look, Doctor,' Helen was saying enthusiastically, as they made their way down the elevator towards the meeting room, 'see what Robert has brought for me!' She held up a large loose-leaf binder, thick with pages and insertions. 'He's given me a whole year! The things he wanted to share with me while we weren't together he's put in this. And he's made little drawings and he's written all kinds of appropriate sentiments, the pages even have just the right colours and aromas and with talking photographs and stress plates with musical selections. A whole world we shared together while we were apart.' All the time she was turning over pages, pointing at the details with delight and laughing excitedly.

'How thoughtful!' VanGeorge said. 'I've always thought personal communication should utilise the art of the collage.' Helen was soaking up his comments, yearning for exuberant affirmation of her own feelings. He had to give her more. 'Robert has always been an artist at thoughtfulness. Yes, he's very clever.'

Robert didn't seem embarrassed by Helen's adolescent fervency. His eyes were wide and blue and inscrutable. He

kept straightening his tunic and flattening the lines of his pantaloons at his waist and thighs and touching fastidiously the buttoned top of his collar where it brushed his chin. Although Helen chattered away merrily, Robert kept to his usual taciturnity, and VanGeorge could see that they were both troubled. There was a strain between them all and it was growing, almost in direct ratio to the rapid approach of the conference so as to suggest the rupture would unavoidably come then. He could understand Helen—she was a woman. Especially she was an unmarried woman who was maternal and who had been practically a sister to Robert—even a mother. As for Robert, VanGeorge had found him bewildering until Doctor Haines himself had explained, although the explanation in many ways confused instead of clarified the situation. Ten years ago Robert had been shy and sensitive, yet utterly self-controlled. Last year he had begun to show an emotional breakdown and the doctor had been forced to continue Robert's training among the scientists and technicians of the impersonal research facilities of Aerospace Dynamics. With his departure everyone had seemed helped—recognising at the same time that nothing had been changed or cured and that the day was coming when they would all be facing their personal relationships again under the most extreme of circumstances.

They entered the elevator and dropped seventy stories in silence. At the Communications Level they walked across the marble floor to the private elevator to the personal laboratory of the head of the department, virtually the home of Doctor Haines for the past twenty years.

As they were going up, VanGeorge decided to ease the tension of silence which had enveloped them and at the same time prepare them for the ordeal which was to come.

'Well, what we've been preparing for is almost here. Ten years for me. Seven, for the newest member of the team.

Over two decades for your father, Helen. 'Sbeen a long time. And all during that time we've had our eyes fixed on our one goal—the starship.' That wasn't exactly a lie. After all, however important Robert had been over the years he had always been part of the starship experiment. 'Robert has always been an important part of our plans, we all know that, but now he is the most important part. Everything we do must go towards his success.'

Helen's transient light-heartedness faded away to solemnity.

They walked out into the white corridor, down the hall, and into the outer-room of the cybernetics department. Brockton and Doctor Haines were sunk in the soft contour chairs, talking. They looked up when the three of them entered, Brockton at Helen and the doctor at Robert.

The room was large, a huge window in the far wall framing the view of the city. The indirect lighting cast no shadows on the department apparatus and filing cabinets lining the left wall, nor any highlights on the metal bodies of the robots on racks along the right wall. The only bright and lively colours in the room came from Helen's low-walled cubicle. There on her desk, next to her unfinished portrait of Robert, was the vase of perma-fixed flowers he had sent to her a month ago. VanGeorge looked at the painting on its aluminium easel, seeing more clearly now how impassionately she had limned the face and eyes to the neglect of all other features.

Brockton was flashing his famous smile at Helen as the three of them sat down, Robert next to her on a couch, close but not touching. Brockton's lean, browned face was pleasant, yet it had a trace of worry, VanGeorge felt, and the man's muscular fingers were drumming nervously against his bare knees which thrust themselves out of the starched khaki shorts. Despite there never having been a romance between Brockton and Helen, that handsome

egoist had always treated her like a possessive guardian or a condescending husband. Perhaps the reason was that he simply didn't know how to express his genuine concern and affection.

Dr. Haines had stepped back away from Robert after his soft, intense private words of greeting and had taken a limp leather notebook from the breast pocket of his tunic and was thumbing through it. He found his place and looked up seriously at Robert. 'I haven't seen you in a week,' he said. 'I suppose Helen has warned you not to go.' His small brown goatee jutted out belligerently, but his eyes were warm with affection.

Robert didn't reply immediately, so Helen said, 'Yes. What you propose is inhuman.'

Brockton made a gurgling noise and VanGeorge had an overwhelming impulse to break out in some fierce sardonic laughter. Helen was so incredibly, stupidly naïve—he was doing right to try to protect her. 'How did you find out?' Brockton added with heavy irony in his tone. When both VanGeorge and Dr. Haines looked at him sharply, he said, 'I'm sorry, I shouldn't be here. This is a family affair, sort of, so if you'd like Don and me to leave we will certainly understand.' Don VanGeorge, mildly startled, could only nod his agreement.

'Of course not,' Dr. Haines said, mildly.

'Nonsense, Brock,' Helen said simultaneously. 'You and Doctor Don are part of the family too. I've known all along what Robert's role would be. It's just that now the time has come I don't think it's a good idea.'

'I'm ... sorry. Very sorry,' Brockton said and shifted his glance to Robert. There was a compassionate sincerity to his words which was immensely depressing.

Dr. Haines said, 'The only thing we're here to discuss is the flight, that's all, not Robert.'

'Well, then, Dad, that's the trouble,' Helen said, 'I think

you should recognise you've put Robert in the position after all these years of not being able to say "no". We all know there are doubts about the wisdom of the project. Why do we have to have such secrecy? We've lived with the idea so long we don't realise how fantastic it is.'

'You're right, Helen! Absolutely! This is the last chance to avoid failure!' Brockton was looking directly at Dr. Haines as he spoke. 'This is the last chance for second thoughts. I'm willing and anxious to go—no matter how poor my survival chances seem.'

'I suppose it still seems daring to you, Helen,' her father said, 'even after you've worked with us. But can you really call it fantastic?'

'A trip to the stars?' she replied. 'I should think so!'

'Not just a trip to the stars, my dear,' he said, running his long fingers through thick brown hair, '—an interstellar *ship* with a *pilot*.'

'But . . . It's too early for a manned-ship flight. Every research bears that out. The trip will take a lifetime. The pilot is certain to die.'

Brockton said, 'Oh!' so explosively that they all frowned and looked at him quizzically. He shut his mouth firmly and flushed and looked at the floor. How he had ever kept Robert's secret from her in the last few years was beyond VanGeorge's understanding.

Dr. Haines was sadly displeased with Helen. He tapped his notebook, cleared his throat and said, 'I know you're my daughter, Helen, but you're strictly my secretarial assistant here in cybernetics. All factors are carefully calculated in our plans and you know this. We cannot afford sentiment.' He clenched and unclenched his jaws. 'Robert can always change his mind, I'm sure Brock will be ready, but the schedule calls for Robert to leave by eleven o'clock tonight. As we know, the starship has been in a parking orbit around the moon for a week.'

'I know you don't think sentiment belongs in this place.' Helen's face was white, but her voice was unchanged. 'Someone has to think that way about Robert.'

Brockton ponderously cleared his throat. 'You mustn't!' he said. It was a command.

'You can't order me what not to feel, Brock!'

Brock's reply was almost a whisper. 'And what do you feel, Helen? Is it love?' The silence was harsh and agonising to VanGeorge. He hardly dared to breathe. Brockton leaned across the way and took Helen's shoulders in his big hands. 'Is it love?' he repeated. He shook her slightly, so that her body quivered under the loose, thin folds of her blouse. Then he pushed her away from him and stared at Robert who sat unmoving on the couch. There wasn't a single wrinkle line on Robert's youthful face, only his eyes, round and brilliant, had life.

'You, Helen,' Brockton said. 'You love *that*?'

Robert's eyebrows went slowly up, bending into two perfect arcs and pinching the skin of his forehead into three long lines. He rose from the couch, lean and wiry, gazing up at Brockton who had also risen and was a foot taller.

'Don't lose your temper, Brock.'

'I'm disgusted, Robert. Disgusted and revolted. Why didn't you tell her?' Brockton reached out quickly, grasping Robert's left ear, and seemed to try to tear it off his head.

Robert knocked up Brockton's arm and stepped back. When Helen stood beside Robert and sympathetically made a caressing gesture over Robert's violated ear, Brockton was infuriated and swung his fist at Robert's jaw. Robert dodged and with his own open right hand pushed Brockton's head back so violently that the man crashed against the couch and flipped over it to the floor.

Before Brockton could get up, VanGeorge pulled Robert into the next room, Helen right behind.

'I'm sorry, Doctor Don,' Robert said.

'It wasn't your fault,' the older man replied.

'I have to tell her, Don. She has to know and it has to be me to tell her.'

When VanGeorge didn't reply, Robert turned to her. VanGeorge looked at the row of M-5 robots standing against the far wall.

'Helen, you do not love me.' A weird rattle distorted his voice. She swung her eyes nervously across his face.

'Helen, you must not love me.' His hands were moving back and forth as though he had no control over them.

'Helen, I like you.' His hands continued their aimless rhythm, back and forth, and she seemed hypnotised and dumb.

'Helen, as much as possible, I care for you. But, ah, there's a conflict point, we've got to consider, the homeostasis, the ontogenetic, that is, my training, ah.' The rattle was in his voice again. He stopped moving, awkwardly holding his arms in place as if paralysed.

He began again. 'I have always been truthful. . . .'

Dr. Don VanGeorge began to have some second thoughts. At first he had believed that Helen should be told. He had always believed, right back at the start, years ago when he had met Robert, that Helen should not have been the only one forbidden the knowledge. She, of all of them, should not have been deceived. But now, in the last few seconds, VanGeorge was suddenly unsure; there would only be another twelve hours. Robert could leave. Helen would better bear the tragic role of frustrated lover than of outraged simpleton.

'Helen, you must suspect the truth. . . .' Robert lowered his hands stiffly to his belt and hooked them there. 'Surely you must know.' He paused and turned his head away from her. 'It's nothing new. You've worked here. You know your father. Cybernetics. Professor Haines has progressed far

since the days of Wiener of MIT and Aiken of Harvard. I don't have to explain cybernetics to you, do I?'

She shut her eyes. Behind VanGeorge's back he could feel the presence of the rows of de-activated robots, which to Helen must have suddenly become grotesque blurs of polished metal.

'Just one moment, Robert,' VanGeorge said. 'You're leaving in a matter of hours. Do you think you should go into this?'

'Please, Doctor VanGeorge,' Helen said. 'Let Robert say what he feels he must say.' She squared her shoulders. 'I know this laboratory. I know my father has built many servo-mechanisms. I remember them all as stiff, mechanical curiosities. But that was years ago. Before the rules of 1988.'

'It was their strikingly human characteristics that caused the reaction, Helen,' Robert said. 'They disrupted the city. Laws were passed—no more experimenting with robots in the city limits. Theoretical experiments, yes, but no more free-will automatons were permitted here.' Robert paused and looked at her expectantly.

'Why of course!' Helen said. She was suddenly excited and she grasped Robert's right hand in her own. 'You've been here all along. What a horrible thought I had—what a fright you've given me.'

Robert's eyes were hot and glittering. He said firmly, 'I am your father's secret exception.'

VanGeorge felt muscles all over his body jerking under the flood of emotion which swept like a hot wave through him. He avoided looking directly at the couple because he knew he would betray his embarrassment for them. He noticed that Helen had involuntarily dropped Robert's hand.

'That's why such effort was taken to make me look like—like a human being,' Robert said without bitterness.

There was silence. VanGeorge could imagine that the girl's heart had frozen and shattered within her and that the pieces would be falling like snow into the pit of her stomach. As the substitute father he had become to her, as the chance replacement for her own hardworking and dedicated father, he now felt more sorry for her than he had ever felt.

'Do you understand?'

When VanGeorge looked up, Robert was devoting his entire attention to her. Helen tried to nod. Tears had begun to creep down her reddened cheeks. She tried to speak. Deep, wracking sobs came instead. Then she managed to say in a tiny voice, pretending a sudden objective indifference, 'So that's why you're called Robert. Not much imagination there. You could have been named Phil, after phylogenetics. That would have been cleverer.'

She started to laugh hysterically and stopped it quickly in order to cry out, 'I don't believe you!'

'Nevertheless, I am.' His hands began to move aimlessly again.

'You have a human mind. You have a human brain. You wouldn't lie about that!'

'No,' he said. He shut his eyelids. VanGeorge, in his daze, could only think: does she realise that he rarely blinks? Wasn't that one of the flaws—one of the inconspicuous flaws in his masquerade?

'I do not have a human mind, Helen,' he continued softly. 'Somewhat organic, but not human. But I do have human behaviour. I am very nearly a pure, psychological product of environment.'

'One of my father's mechanical children,' she whispered. She closed her eyes too. 'Once I squandered a week's salary on perfume to please you.'

'Not his child,' Robert said, 'his alter-ego.'

'No!' Helen was crushing VanGeorge's right arm in her

fingers. 'I don't believe it! You're saying this because of the star trip. You can't be'—and she flung out a pointing hand at the row of robots—'one of those!'

Robert smiled a stiff smile. 'They're my grandparents, not my brothers. Do you want proof?' He picked up a stool and in an instant had driven his fist through the thin metal seat. They saw the deep scratches on his hand but the blood did not come.

'I know you're strong, Robert,' she said. 'You've hurt your hand.'

Robert's visage was strangely contorted. 'More proof? Shall I give you a Brockton type of demonstration?' he asked and reached his hand up towards his face.

'No!' Helen screamed and collapsed into VanGeorge's arms.

For a moment the doctor and the astronaut stood there, unmoving, looking at the unconscious girl.

'Do you think you should have told her?' VanGeorge said helplessly.

'Yes,' Robert said. 'She can't love me. It would be terribly wrong.'

'I suppose so,' said VanGeorge. He started to stretch her out on the couch. 'You go tell her father what happened. I'll take care of her.'

Robert turned on his squeaking heels and stalked from the room.

For a long time VanGeorge sat on a chair by Helen's side, letting her sleep, his own head held in his hands, thinking inconsequential, repetitious thoughts.

They both were in the same positions when Dr. Haines came into the room.

'Thank you, Don,' the professor said. 'Don't worry about Helen. She's all right. I know she is. We've only minutes ahead of us and we can't discuss this calamity now. Robert is all right, too, I'm positive. I've continually stressed the

need that he must be clear-headed during the entire five hundred and twenty days of acceleration, that's for nearly two years, each and every twenty-four hours. He'll surmount this crisis. In fact, he may be better for it. Don't worry about Helen. Many human beings have affection for inhuman beings.'

Robert had entered the room suddenly and the men knew that he heard the doctor's final remark.

Dr. Haines said briskly, 'She's all right, Robert. There's no need to be distraught or distracted—remember, the photon-drive is radically different, hazardous, and untested. There can be no mistakes.'

'Don't worry, Doctor,' Robert said. 'Goodbye, Doctor VanGeorge.' They shook hands formally and firmly. 'And thank you—sincerely.' He broke away with a sudden touch of shyness. He looked at Dr. Haines. 'Am I a being, Doctor? Am I living? Where does a living being begin and mere machinery leave off?'

Dr. Haines' eyes were momentarily sad. 'I don't know, Robert. Most people describe it simply as a soul.'

God-given, VanGeorge thought to himself. There's the incomprehensibility.

'Does a dog have a soul?'

'I don't know.' Dr. Haines let his breath out in an audible sigh. 'Perhaps. Perhaps you do, too, Robert. There is no clear-cut truth.'

'Truth is elusive,' Robert said, 'yet people die for it. Perhaps some day mankind will know complete truth.'

'Perhaps, Robert.'

'If you'll permit me, both of you—let me express myself with a quotation. "Howbeit when he, the Spirit of truth, is come, he will guide you into all truth : for he shall not speak of himself; but whatsoever he shall hear, that shall he speak : and he will show you things to come." '

Dr. Haines' lined, tired face was faintly curious. 'That's the Bible, I suppose, Robert?'

Robert nodded. 'St. John, sixteenth chapter, thirteenth verse.' He smiled. 'When I get back in a hundred years I'll quote Shakespeare. I've a lot of reading to do—and I'll have the time. You know, humans spend all that time sleeping when they could be reading.'

Robert shook Dr. Haines' hand quickly and stepped back. 'Goodbye, Doctor,' he said simply.

The older man moved forward and put his hand on Robert's shoulder. 'You must succeed, Robert—you're a dear, dear friend.'

Robert put his hand on top of the other's. Without any emotion he said, 'I will succeed, Doctor—you're my father.'

Robert quickly strode to the couch and bent and kissed Helen on the forehead. 'Tell her what I did, please. You see, the truth is that I do love Helen.'

Then Robert was disappearing out the door.

Helen was struggling to lift herself off the couch, crying out, 'Godspeed, Robert!' But he didn't hear because he was already gone.

'You should have told him, Father,' she said, as VanGeorge helped her to sit erect. 'You should have told him who I really am.'

VanGeorge looked in bewilderment at his chief, sensing the deep mystery behind her words, and saw the man's face melting into agony.

'It's not too late, Father,' she said. 'Let me go with him.'

'Impossible—the ship's not equipped.'

'It could be, easily. There's still time for the contingency plan, to put in Brock's equipment.'

'You forget, my dear, you'd die out of contact with your brain.'

'Not all of me, Father.' Helen's voice sounded heavily ironic. 'Just this me would die. Maybe not even then. May-

be this one of me would live for a long time. And I could help Robert for the crucial first phase. After that, why worry? I'll die and still exist to live again.'

'Don't torture us both, Helen. The idea's impractical and foolhardy. You know it is. It simply can't be done.'

'I know,' Helen said. 'You're right.' She gave a little shrug. 'I'm disconnecting, Father.' Her voice was flat now. 'Maybe for ever.' Then she crumpled into VanGeorge's arms as if dead.

Incredibly, her father ignored her, the professor spinning on his heel and rushing from the room.

VanGeorge, in a daze, snatched the girl's wrist in his fingers and bent his ear to her chest. When he was certain she was alive he made her body comfortable on the couch. As he started to summon help, Dr. Haines' voice issued out of VanGeorge's personal communicator under his left shirt-cuff.

'Don? Helen's all right.' The words were without emotion. 'Come into my private lab.'

During the few minutes it took VanGeorge to get there, his mind was muddled into stupefaction by innumerable unanswered questions. Then he was standing in front of Dr. Haines, staring vapidly into his face. The horror that had recently crawled across the doctor's face had given way to intense anguish.

'For God's sake, Don,' Dr. Haines said, 'give me your advice! I've only a few minutes before Robert's gone—should I admit to him that he's partly human? He's part of me, because he's part of my daughter. His bits of organic matter came from her brain.'

'What?' VanGeorge was incredulous, his skull exploding with the thought: no wonder Robert and Helen felt so deeply towards each other! The relationship was staggering —and grotesque! The thought showed in his face because Dr. Haines said quickly, 'It's a misleading truth, you know,'

and gently pulled him through the red security door. Only twice before, in all the ten years of their professional relationship, had VanGeorge been through that private doorway into the secluded inner room. There, in a console of closed circuit television, a monitor pictured a complex glass and metal case. Inside was a human figure. The unfamiliar object to VanGeorge's eye took on the appearance of an electronic coffin with a corpse.

Then VanGeorge almost cried out at the recognition of the form inside the cubicle. He had to grasp Dr. Haines' arm to keep his balance from the sudden dizziness. The human figure was, unbelievably, a bizarre representation of Helen Haines, half-mummified, lying in a bed of gadgets, veiled by a network of a thousand glittering wire strands. Peaceful, though, somehow like a nearly naked, pink and skinny child in a magic bed.

'Helen?'

'Yes, Helen.' The professor's words hung within VanGeorge's head like the stifling pall of smoke from a burst bomb.

Dr. Haines punched a button and another monitor flickered into colour to show Helen back on the couch just as VanGeorge had left her. 'And there, also, on the couch,' Dr. Haines said. 'That's also Helen.'

'Two? Two Helens?'

'Yes, although actually that young girl's body is Helen's telefactor—a living telefactor—her personal marionette.'

'A telefactor?' VanGeorge said, stunned almost into incoherence. 'An image of your daughter. Another robot?'

'Not a robot. Alive. Grown in the lab from her own cells. Her own blueprint faithfully self-copied. Not just a regenerated organ or two, but an entire organism. Just as she was and would've been.'

'But the other? The—the sleeping Helen . . .?'

'Tucked away safely in a room down in the lower levels.

She's lain there for over fifteen years.' The professor's goatee exaggerated the sudden emotional trembling of his chin and his eyelashes wetly darkened with tears. 'Her useless body has wasted away, but not her brain. She can exist there like that for ever.'

'You didn't—you didn't——' VanGeorge tried to say. 'You—your own daughter—you didn't experiment——?'

'Another secret experiment? Another secret exception? Not deliberately, but in desperation. Twenty years ago Helen should have died. I froze her body alive, although only her head was essential. For another body I preferred flesh and blood, so I cultured another container. I didn't want my daughter to be a cyborg—more machine than human being. At first I thought of taping her mind for re-recording in the baby's brain. But I had to wait for the baby's physical development. Then I thought of a brain transfer. Finally I took the safest way, and the simplest—I linked the old brain with the new by electrodynamics. The mature mind easily dominated the fresh brain. So much so that the refabricated Helen is virtually independent and the original Helen is mentally quiescent. She's forty-two, but her fifteen-year-old body has matured at twice its normal rate.'

'Fifteen?' VanGeorge said, astonished. 'The beautiful young lady I met years ago was only eight or nine?'

'You thought she was a precocious teen-ager?' Dr. Haines permitted himself a sad smile. 'She's a mature young woman with her mind and soul full of life. Her exceptional life must not be wasted.'

'You think Helen would be wasted on Robert?' VanGeorge decided to answer his own question. 'I think she's mature enough to make her own decisions.'

'Yes, but she's entirely human. I don't know what Robert is. She is a very successful, if radical, medical technique for individual preservation. She's even more than that. Robert

is humanoid, not human—the origin of his organic matter is of no importance. The miniscule few thousand cells from Helen was simply easier than synthesis.' The professor paused, tightening the muscles around his mouth. 'But you're right,' he said at last. 'Helen should know all the facts and make the decisions. Somehow, and she too has discovered this, Robert is not less than human, but more than human.'

'Then tell your daughter before it's too late.'

The two men looked at the monitors. In one was the young girl, by now surrounded by anxious medical technicians. In the other was the woman into whom was woven the artificial life-sustainers, the machines serving her and responding to her and responding for her, an apparatus with a real human soul. It was to that woman that the father spoke:

'I will play back a conversation which Dr. Don and I have just had, Helen. Then we will do what you ask.'

While Dr. Haines adjusted the equipment, VanGeorge said, 'Have you considered, Professor, the consequences of all this experimentation? You're altering Mankind's billion-year-old evolutionary pattern. You're forcing us across the threshold of tomorrow. Our world, our galaxy, even the universe, will be irrevocably changed.'

For the first time, Dr. Haines sat down on a stool and gestured his friend towards another.

'Yes, I've thought a great deal about that, Don,' he said. 'Perhaps that's my actual purpose in the great scheme of things. Perhaps that's why Man has evolved in his unique way. To be the father and mother and midwife to the creation, evolution and eventual ascendancy of the thinking, feeling machine.'

From the first monitor there came an emergency warning buzz. Dr. Haines switched on the two-way soundpicture. A technician's ghastly face filled the camera and blurted out,

'My God, Doctor, Helen's heart has stopped. There are all the symptoms of permanent death!'

Suddenly from the second monitor came a spoken message reconstituted from the library of sounds of young Helen's voice. Almost natural, almost human. 'There is only me now, Dad! Only the true identity which is Helen! Tell Robert I will wait for him. Tell him I'll be here, the Helen whom he loves, a hundred years from now!'

VanGeorge looked at the Helen-thing.

Some day, if he were lucky and could live that long, he would help raise another young Helen to greet Robert, in the flesh, on his return home.

DJANGO MAVERICK: 2051

by

GRAHAME LEMAN

New writer to our pages, Grahame Leman states that philosophically he is a profoundly sceptical humanist (wary of scientism and bigness in any form), quite sure that it is an offence to be ideologically drunk in charge of spaceship Earth or any module thereof. His story herewith needs no further introduction.

DJANGO MAVERICK: 2051

MURRAY JENKINS, Chairman and President of the Board of Tellus Publishing, sat ceremoniously down in his own seat in the executive viewing room, and the other members of the board then allowed themselves to sit down in order of seniority. Jenkins was comforted, as he usually was, by the acrid smell of fear in the darkened air. But on this occasion, he found, he was not comforted enough: slipping off his silver wig of office and parking it on his knee, he felt for the implanted socket above his right ear and plugged in the connector of his feeling aid, skilled fingers on the familiar wheels of the case in his breast pocket cutting his Drive and boosting his Aplomb.

On his left, Ran Wade decorously removed his own, brown Vice-Presidential wig: with a comforting sense of superiority, Jenkins noticed the implanted lump under his skin of the standard Medicare feeling control receiver: all persons (if you could call them that) of four-star or lower rating were fitted with these from birth; they were under the control of broadcast transmissions from the Government and of the overriding short-range transmitters carried by all five-star men and women (the real people, you might say); and there were only three settings—NEUTRAL (open to symbolic communication), PLUS (ecstatic joy), and MINUS (indescribable *Angst*). He also noticed that the upper part of young Wade's head was shadowed with fuzz.

'Wade,' he said sharply: 'You've not shaved this morning. Ain't respectful.'

'Yes, sir. Up all night, and working to the last minute to get this presentation set up for you. You taught me yourself, sir, profitability trumps even propriety in emergencies.' "F you weren't the only trouble-shooter here who ever shot any trouble, I'd not believe any emergency could be *that* hot. Must be the first time in the history of publishing, somebody tells the chief exec of the leading house he's gotta believe he's gotta hire a certified crazy and grade-labelled bent. How you goin' sell me that, boy?'

Wade waved at the screen in front of them, which immediately began to show, first a fine-grain scanning raster, then the title (set in Playbill) 'DJANGO MAVERICK: 2023.'

'You understand, sir,' Wade whispered, 'we have no live recordings of Maverick's past: this is a reconstruction, played by actors; but as near true as any reconstruction of the past *can* be; we can base policy on it.'

With a brisk, crisp snap of snare drum, the screen showed a school learning room, early twenty-first-century décor, seen from the back, high on the right: a hundred children are hunched over their individualised teaching machines, earphones on; the group teaching screen at the far end of the room (screen deep) is blank. One child's head (screen left, high corner) turns, and the editor pounces in to a choker close-up of part of a child's grubby, tear-stained face, then freezes. Voice over freeze: 'It all began when a child began to *think*.' Cuts home to the learning room (as before): the teaching screen lights up; a woman's face appears on the teaching screen, says, '731 Maverick, *at once* to the Head Programmer's room.'

In a large office, his back to the camera, a small boy is standing in front of a desk; behind the desk, a seated man, fifty-ish, silver hair, and opium pipe; standing at his shoulder, a woman in glasses; behind them a whole wall of computer Ins and Outs, very antiquated (push button input and

monochrome view out), typical of a lower quartile urban school in the early twenty-first century.

'Look, Maverick,' the man says, 'you're here to be trained to do it the way it's done. The big teacher doesn't want the *answers* to the problems, it wants to see you arrive at the answers the right way, the way everybody else does. If you do things different, you know, you won't get work when you have to leave here, because you won't be able to do the work there is along with the people there are.'

The boy answers: 'But it takes so long to figure that way, with only two different marks for the numbers. Look' (he says, holding up his hands), 'I have ten marks for numbers, one for each finger: I call them Al, Bill, Charlie, Dave, Ernie, Fred, George, Harry, Ike, and Nobody; I write them A, B, C, D, E, F, G, H, I, and O for an empty hole. It doesn't take so much space to write as the big teacher's way, and I can do the sums quicker (even in my head) than the big teacher can.'

The woman smiles: 'Yes, Maverick. And you do get the answers right: what I mean, we *know* you get the answers right, because big teacher sets problems with answers he knows. But when you go out to work, it's different: people don't know the answers to sums about real things until *after* they have been worked; so if somebody wants to be sure that you have worked a sum right, he can only tell by checking through the *way* you did it; and if you did it a funny way, he wouldn't be able to *know* you were right, even when you were. See?'

The boy's back stiffens: 'No. Why act dumb, when you're smart? Why do things the hard way, when there's an easy way?'

The man, gruffly now: 'You *aren't* smart, Maverick: the tests say you're not smart; if you were smart, the tests would have shown it, and you wouldn't be here—you'd be in one of the creative conformity schools the big corpora-

tions run for the flyers, the people they want to own when they're grown.'

The boy goes forward away from the camera on to the desk-top, flailing with small fists at the pink face, the silver hair, snatching the opium pipe and throwing it in the woman's face. An alarm bell begins to ring, shaking the whole world. A policeman in period flak-jacket and riot helmet slips swiftly in from screen right: the boy is soon enclosed in the police net, injected with the usual sedative, and carried off screen left (like a load of Christmas presents) on the policeman's bent back.

The woman drops her hand on the man's shoulder: 'You shouldn't have done that, Hero; shouldn't provoke a one-star boy to hit a three-star man: for that, they *have* to put him in a change tank.'

'Where else can he go, Della? He isn't plastic: probably the one who did his plasticity rating test had been crossed in love the day before, or something, and the kid slipped into a regular school when he should have been in a change tank all along. My job is to make the normal conformal, not to do hospital work with crazy kids. Is it, now?'

'S'pose so. Come to think, a change tank may be best for him after all. He'd soon have to leave here, and then he'd *never* get work; not honest work, only in the criminal gangs. And then, in the change tanks they don't bother what you think or what you feel, so long as you keep your nose and your cell clean: they're supposed to reform people, or re-educate them, or cure them, or something, but they haven't got the staff; the change tanks aren't so different from the old prisons as we like to think and are supposed to say. Whereas on the *out*side you have to think right and feel right *or else*.'

'Right, Della: close the file. Dinner tonight?'

'Mmmmm!'

The screen faded to a black blank. Murray Jenkins had

pointedly replaced his silver wig of office; the other executives, noticing this now, hastily put back their own brown, blond, black, and red wigs of office, each according to his station.

A new title appeared on the screen (in Grotesque sans eight): 'DJANGO MAVERICK: 2031.' A scowling young man is hustled past and down a corridor, by a couple of heavy change-tank therapists in the usual fibre-glass armour. A third follows, carrying some things that look very like, but not *quite* like, a mop and pail. They all disappear through a door at the far end (screen deep) of the corridor. Now the young man, his two therapists, and the third other man are standing with their backs half to camera in an office. Facing them sternly, from his chair behind a desk, is a gross, silver-wig man with a big, black sink-brush moustache, wearing a short white coat; behind him, a heavily barred window and a picture of B. F. Skinner on the wall.

'731 Maverick, Governor,' says one of the heavy therapists: 'Up to you for Deviant Behaviour, sir!'

'What seems to be his trouble?' says the Governor, with a ritual steepling of his fingers before the sink-brush moustache.

The third therapist points. The mop and pail suddenly loom in close-up, and it is possible to see that the pail has been mounted on an improvised wheeled chassis (like a child's go-cart), while the mop has been adapted (with a piece of string netting and some packing wire) so that you can squeeze it without bending down.

The young man says: 'But, sir, this way I can do my stint of cleaning twice as fast with half the fatigue; don't have to bend down to squeeze the mop, or to shift the bucket. If we all did it this way, there would be twice as much time for Group Therapy, and we would all get better quicker.'

The Governor (frowning): 'You don't seem to grasp the fact, 731, that you're here to learn how to do things the way things are done. Outside, floors are cleaned by automatic swabmats; inside, floors are cleaned with issue mops and issue pails, in the issue way. Anyway, there is an insuperable shortage of qualified group therapists. Prescription: one hour of thump therapy, to plasticise the mind, followed by ten days of meditation therapy in the private room, with adjuvant ascetic diet to facilitate the therapeutic meditations. That will be all, gentlemen.'

Chaos, as the young man leaps forward on to the desk top to attack the Governor. For a moment, before he is subdued by the hulking therapists in their fibre-glass armour, he gets his fingers into the Governor's sink-brush moustache, and the Governor's eyes pop as he pulls at it. Soon, he is laced into a safety suit and carried away. Fade to black.

Murray Jenkins forced a cough: 'Bit fantastic, isn't it, Wade? Hard to believe there was all that open, crude violence, even in those days. Makes me doubt the rest, boy.'

'There really *was*, sir. Any student of the period will confirm that. Before there were implants, violence had to be done to the sensors, from *out*side, rather than by direct contact with the appropriate part of the brain: you had to use a lot of violence to produce even a small effect, and you had to use it *visibly*; naturally, it looks barbarous to us. Nowadays, of course, we can use violence after the model of love: from inside, using a very little power to produce even the greatest effect; it doesn't show.'

The smell of fear in the viewing room had become ranker: it was all right for Wade, a creative man, to say this sort of thing; but, all the same, to compare violence with love was to make the sort of *serious* joke that's better not made; it wasn't eufunctional, somebody who told *that*

kind of joke (or even laughed at *that* kind of joke) could easily be rated dysfunctional, stripped of his stars, and sent to a change tank. Of course, it was just that you were *sick*, the change tanks were where you got the very best medical treatment to change you back into a well man; but everybody knew it was best to stay out of the change tanks if you could.

Now the screen was showing a third title (Perpetua bold): 'DJANGO MAVERICK: 2033.' Accompanied by striding bassoon music, a change tank therapist in his hulking fibreglass armour shoulders through the crowd in a hallucinogen bar, up to a sinister man who is openly smoking a bootleg carcinogen and drinking God knows what from a big, silver pocket flask. Over faded bassoon notes, the change tank therapist hisses:

'I tell you, Tonio, he's crooked creative. A wrong C. Just what you tell me to keep an eye open for. Sure! We're always having to rough him up and dump him to stew in solitary, for DB: you know, doing it different. N'I mean *diff*-erent, not the old way with nice new trimmings; *real* different, so it bugs you. He's just what you tell me you need. You want to spring him?'

A large packet of money changes hands. Dissolve to an office: there is a Magritte on the back wall, beside an engraving of Carl Friederich Gauss; a man with a Bermuda tan and a tall forehead is sitting at an antique desk; on the desk are a high-velocity Oerlikon 0·25 sub-machine gun, a ten-inch slide rule, a hand-punch for falsifying IBM cards, and other things characteristic of criminals of that decade (as a disembodied voice-over-picture points out). The sinister man from the hallucinogen bar comes in screen right, helps himself to a large carcinogen (Jamaica) from a cedarwood box on the desk.

'It's a good lead, Capo,' he says, puffing luxuriously:

'This contact of mine in the County change tank was a real head-doctor before he got busted to therapist for viewing heterodox technical tapes (s'why he needs the extra money I slip him; used to a higher standard of living): if *he* says this 731 Maverick is a five-star crooked C, then that's what Maverick *is*. F'I were you I'd spring him fast, bring him into the family.'

The man behind the desk makes a gracious gesture of assent. Fade to black.

Murray Jenkins turned to Wade: 'Never knew that, boy: they had this trouble back in the twenty-thirties, did they?; *bootleg* creativity, creative work sold *outside* channels, at *cut* prices.'

As he hit the operative words in each shorthand description of unethical activity, the massed executives behind him winced in unison. Bootleggers, channel dodgers, price-cutters—*these* were the people who made things difficult for management, by giving customers alternative sources of supply (cheaper and faster too, because these unethicals didn't look after their staffs properly, didn't load the cost of that into their charges), by giving stockholders alternative sources of management skills and consulting aid. A manager was supposed to *know* about such things, of course (the way a head-doctor was supposed to know about DB), so that he could take proper precautions and proper remedial action; but it always felt queer to be discussing such things in public, especially when people both above you and also below you in star rating were present; made you feel naked.

With a ripple of high clarinet music, modulating into the lower register (with walking bass and marching bass drum behind) the screen showed a fourth title (in hand lettering, dry brush on rough cartridge): 'DJANGO MAVERICK: 2034.' The man behind the desk in front of the Magritte offers the

young man from the change tank a big carcinogen, takes one himself, and they light up.

'Look, Maverick ... uh ... look, Jan: your probation is over now. You're in. But that means you're not a kennel dog any longer: got to be a hunting dog, or starve. You dream up a better way of doing something, find somebody to bootleg it to, you cut a straight half of the profits. The family takes the other half, for keeping you alive and on the outside; gives us a *big* interest in looking after you. You don't dream up anything, or you dream up anything you don't leg; well, then, you get nothing, we get nothing, and we don't care what happens to you: we let the change tanks care.'

Cut to big head of TV newscaster, screen on screen, speaking urgently into a microphone carrying the AN monogram plate of Americas News. He is saying: '... just heard, that Jan Maverick, age 21 years, was charged by the Management Consultants Association police, Special Investigation Division, with skill-legging, deviant behaviour, and price-cutting. According to the MCA police, Maverick had been trading under cover with clients of data processing corporations belonging to the MCA: it is skill-legging for a non-member of the MCA to offer data processing services in any of the advanced industrial countries; his deviant behaviour (DB) consisted in performing *hand*-tabulation and *mental* calculation operations, instead of using standard methods that can be checked by a third party carrying out an efficiency audit; his tenders for the work undercut those of MCA members by an average of divisor 1010, threatening fair-deal employment policies maintained by MCA members for the benefit of the staff. Judge Marcantonio Tenebroso, after a two-minute recess (to make a telephone call) threw the case out of court; on the grounds that the MCA police had failed to satisfy the requirement, that corporate police bringing charges of white collar crime before

a federal court must show (i) that the alleged criminal behaviours are not in the *public* interest, or (ii) that the said criminal behaviours are subversive of advanced industrial society. In an *obiter dicta* (legal joke irrelevant to the case being tried), Judge Tenebroso suggested that cut-price skill-legging, using new money-saving techniques, was what had made the Americas great, and what (God willing) would keep the Americas great. As he left the courtroom, Jan Maverick was pelted with flowers by grateful stockholders of the great corporations, most of them past retiring age and living on their investments. Sources close to the MCA say that Judge Tenebroso has a long-standing association with the Family to which Django Maverick belongs: this Family, of course, finances and controls the Fitzgerald machine in 124 states of the Americas, and Judge Tenebroso was a Fitzgerald appointment in 2029. Americas News.'

Fade to black, with dying fall of triumphal trumpets.

Murray Jenkins put another quarter-turn of boost on his presidential aplomb and gave Ran Wade two seconds of his third most chilling paternalistic smile.

'Wade,' he grumbled, 'this Maverick character has made himself real unpopular with the MCA: they don't like people cutting them and getting away with it. Either we'd be hiring ourselves an incipient corpse and paying out pension to his widow for all the years he ought to've been *making* money for us, or else we'd be buying ourselves years of Grade A harassment from the MCA enforcers—do *you* want the MCA goosing up a stockholders' posse and offering to efficiency-audit *us* on their behalf for nothing?; (won't even mention what they mightn't get along to, if they found that smooth plays weren't scoring for them). This Maverick has got to have *some*thing *wild*, to make him worth hiring.'

'T'isn't so much what he can do *for* us, sir: it's more

what he could do *to* a publishing business like Tellus, if we don't hire him in and get control of his activities. You'll see in the next reel of tape: this is a dramatic reconstruction, time telescoped in, from information we got through a microbug in the office of the head of Maverick's family (hidden in a bigger bug they know about and turn off when they talk secrets rather than stalls).'

Wade waved to the projectionist, and (with a crescendo of snarling brass, mounting kettle-drum thumps) the screen flared into the title (set in horror movie Black Letter) 'DJANGO MAVERICK: 2051.' Once again, the screen shows the office with the Magritte on the wall, the man with the Bermuda tan and tall brow (facing us), and the sinister accoutrements on his desk. A scarred man of about forty comes in screen right, sits into a straight cut to an over-shoulder close-up of Bermuda tan, who says:

'Right, Maverick: where's this world-shaker of yours?'

In the reverse over-shoulder, Maverick's scarred face says: 'It's a *thing*, all right, Capo: with this thing I've dreamed through, we can cut Washington and all 172 States out of the education caper, *and* cut every publishing business out as well.'

'So *show* me, Jan!'

Maverick reaches down (off screen), comes up with a grab bag, and pulls out a box-like object measuring about twenty centimetres by fifteen by five thick:

'How would you like, Capo, to be able to leg *this*?' Rapping it with his knuckles: 'You know the standard Tellus T.341 individual teaching machine and T.34M master module? Used in every learning room in every damn one of the 172 states of the Americas. Only one way you can buy Tellus: in the standard package of a hundred *Is* plus one *M* pre-programmed with the twenty HEW minimum basic courses requirement; package costs just under one million Ams (just enough under, to escape Amtaxlaw section

3.414.2), or around 500 Ams per course-available-per-student (per CAPS, in the ed-trade jargon)—and I reckon they're not charging much more than twice what they really have to. Now, Capo: we can sell *this* baby at just one little Am for one, in single carload lots; and *each* one is equivalent to one HEW course in a T.34M plus one T.34I. Work it out for yourself: twenty of these babies will give a student everything he gets from Tellus now, for only twenty Ams; Tellus' cost per CAPS, 500 Ams, *our* cost per CAPS *one*, tiny Am. We have other advantages too, on top of a price gulf big enough to swallow Tellus and every other publisher in the Americas: for instance, this thing can be dropped without breaking; it doesn't need to be connected to a master module, and it doesn't need any power inside or plugged in from outside, so it's completely portable and can be used anywhere.'

'Yeh, yeh. How's it work? Pneumatics, you'll tell me!'

'Nothing like that. Listen, you know how a computer will do when it has something very hard to tell you, like a new mathematical formula or something?: puts it up on the screen in words and numbers, and lets you *read* it, real slow. Well, now: suppose you took a photograph of that, you could carry it around with you and read it anywhere, couldn't you? Next step: think how much you could carry round with you, if you had a packet of a hundred or two or even *three* hundred photographs like that.'

'One thing wrong with that. If there's a lot more of this hard stuff to be shown you than the computer can put on the screen all at once, it'll show it you batch by batch. You've seen me go over the Household accounts sometimes: I push this button here on my desk once, and each time I do that the computer shows me the next batch of a hundred or so transactions after the batch on the screen when I pushed; and then it freezes it there till I'm ready to

go on and push this button again; you understand? Now, the *order* of these things is important: I mean, each batch of transactions has its proper place in past time, and they got to come in turn in the same order, or they don't mean nothing at all. You, you're wanting to carry around hundreds of photos of these batches, or of things like them, like a pack of cards. You'll just get them shuffled up, and you won't be able to make mule nor whole horse out of them.'

'No! No! No such difficulty. Look!' He opens the box, takes out a stack of a hundred or so thin sheets of photoprint paper; lays the stack on the desk, lifts the top sheet to the height of his head. Bermuda tan jumps back in surprise, as the pile of sheets rises up like a snake from a snake charmer's basket: the sheets have been taped together concertina fashion, zig-zagging, so they make a continuous strip that can be pulled out long or folded zig-zag back into a neat, flat stack.

'Neat. Hey, if you could find a way of sort of hinging the sheets together all at one edge, then you could use both sides of each sheet, could get twice as much stuff in each stack.'

'There's probably some snag to that. I'll have the technical boys go into it, but don't be too disappointed if it turns out to be just one of those nice ideas that can't be made to work well enough at the price. The main thing is, do we go ahead?: this is too big a thing for my pocket money to finance; it will have to come out of the family's household money.'

'Plenty of that. Sure, why not? Just come and be sure to get my nod each time you notch up ten million net outgoing, won't you?'

The screen went black for a moment. Then, iris out, with crescendo of brass, to the title (hand brushed, dry red oil on coarse canvas) 'DJANGO MAVERICK TO DATE: FINIS.'

Murray Jenkins stretched, turned to Wade: 'The families have a nice, old-fashioned rigour to their budgetary control, Ran. Those low margins of theirs make for good financial discipline, bracing atmosphere in the building. Sometimes, I think ... well, that's not just the point, is it: where is this Maverick now?'

Wade waved at the screen. The screen slid silently sideways, and a scarred man of about forty stepped quietly, very quietly through the opening left behind, stood looking at the audience of Tellus management teamers in their emblematic wigs. He was the scarred man they had seen in the last screen scene in Bermuda tan's office, with the Magritte on the wall.

Jenkins eased another quarter turn of aplomb on, stood up (making his team gasp in chorus), and said: 'Interesting to know you so well, Maverick. Won't shake hands; don't suppose you want to, much. Will you deal?: I mean, either big you, or you personally?'

Maverick shook his head gently: 'Not us. Not me.'

Jenkins shrugged; 'Wade will give you a drink for the road. You'll excuse me. Have office chores. You know.'

In his private office (secretary across the road, getting a new reservoir fitted to an antique ink fountain pen he never used), Jenkins punched for the straight outside line, bypassing the Tellus PBX and the bunny who worked it. After a while he got his connection and spoke:

'Hello, Captain.... Fine, thanks. You and yours? ... Good. Good. You think that private school is doing your daughter any good? ... Mmmm. Well, it must be worth it, even if it means scraping: a HEW school couldn't manage her you know, not with their having no staff. So its private or the change tank, I guess. How's the boy? ... IBM want *how* much to take him in as a premium apprentice? They're still cutting it thicker than the rest of us then, but if

he isn't rated for anything else ... What? ... Well they'll let you pay by instalments, if you pay the interest for them; the law says they got to do that.... Who really needs a boat? Who really needs a car of his own? Just hardware, Captain—the liveware must come first.... Yeah, I know: you're not like Joe Schmook: you have this high-class neurosis, needs hardware to keep it quiet; if it's not kept quiet, you get these fits of public spirit, like don't we all? ... Of course I was only kidding! ... Yes, of course it'll all be all right.... No, nothing this week. Well, just a trifle: there'll be a man called Django Maverick leaving our front entrance as soon as we let him. You'll know him, because Ran Wade will show him out. Well, I have reason to believe that he isn't paid up with his driving licence, or his dog licence, or something: you could ask him about it. He's tough: if he resists arrest, and some nervy officer should happen to shoot him, I wouldn't be surprised. Would *you*? ... Yeah, sure. Only not Wednesday: we're duty entertaining, just some boring bright people from the agency. Look in about eight Thursday: there'll be a few real *friends* in, beer and things out of cans in the rumpus room, like that.... So long, Captain.'

For a quarter of an hour, Jenkins stared silently out of the window. Mirrored in the window of the block opposite, he could see the front entrance of the Tellus block he was in. At the end of that time there were some shouts outside, and a couple of shots. He sat down, called Wade on the internal system, told him to go home and rest up from his night's work.

Perhaps he should have sent Wade to see the company quack, before sending him home. He must have been a bit confused: twenty minutes after he left, a Tellus delivery truck ran him over in the middle of the road, right by the McLuhan Memorial on Feedback Drive. The Tellus driver said he couldn't do a damn thing to save him, he was

goofing. Nobody else saw the accident. Nobody in Tellus ever talked about it much, or about anything at all that happened that day: that *Angst* really is indescribable; and none of them wanted even a nudge of *that.*

THE END

A SELECTION OF FINE READING AVAILABLE IN CORGI BOOKS

Novels

☐ 552 08619 3	**FAUSTO'S KEYHOLE**	*Jean Arnaldi* 25p
☐ 552 08351 8	**TELL ME HOW LONG THE TRAIN'S BEEN GONE**	*James Baldwin* 35p
☐ 552 07938 3	**THE NAKED LUNCH**	*William Burroughs* 37½p
☐ 552 08617 7	**THE TICKET THAT EXPLODED**	*William Burroughs* 35p
☐ 552 08617 7	**THE BIG WIND**	*Beatrice Coogan* 50p
☐ 552 08662 6	**GOD'S LITTLE ACRE**	*Erskine Caldwell* 25p
☐ 552 08602 9	**EPISODE IN PALMETTO**	*Erskine Caldwell* 20p
☐ 552 08601 0	**COLOUR BLIND**	*Catherine Cookson* 30p
☐ 552 08561 8	**THE UNBAITED TRAP**	*Catherine Cookson* 25p
☐ 552 08183 3	**BOYS AND GIRLS TOGETHER**	*William Goldman* 37½p
☐ 552 08125 6	**CATCH-22**	*Joseph Heller* 35p
☐ 552 08585 5	**THE PHILANDERER**	*Stanley Kauffmann* 30p
☐ 552 08618 5	**SHADOW OF THE MOON**	*M. M. Kaye* 50p
☐ 552 08507 3	**THE HERITAGE**	*Frances Parkinson Keyes* 30p
☐ 552 08524 3	**THE KITES OF WAR**	*Derek Lambert* 25p
☐ 552 08616 9	**THE END OF THE RUG**	*Richard Llewellyn* 35p
☐ 552 08466 2	**HERE WAS A MAN**	*Norah Lofts* 30p
☐ 552 08442 5	**THE AU PAIR BOY**	*Andrew McCall* 30p
☐ 552 08002 0	**MY SISTER, MY BRIDE**	*Edwina Mark* 25p
☐ 552 08467 0	**ALMOST AN AFFAIR**	*Nan Maynard* 30p
☐ 552 08502 2	**CARAVANS**	*James A. Michener* 35p
☐ 552 08124 9	**LOLITA**	*Vladimir Nabokov* 30p
☐ 552 08525 1	**THE MARIGOLD FIELD**	*Diane Pearson* 30p
☐ 552 08491 3	**PRETTY MAIDS ALL IN A ROW**	*Francis Pollini* 35p
☐ 552 08582 0	**RAMAGE AND THE FREEBOOTERS**	*Dudley Pope* 35p
☐ 552 07954 5	**RUN FOR THE TREES**	*James Rand* 35p
☐ 552 08597 9	**PORTNOY'S COMPLAINT**	*Philip Roth* 40p
☐ 552 08392 5	**SOMETHING OF VALUE**	*Robert Ruark* 40p
☐ 552 08372 0	**LAST EXIT TO BROOKLYN**	*Hubert Selby Jr* 50p
☐ 552 07807 7	**VALLEY OF THE DOLLS**	*Jacqueline Susann* 40p
☐ 552 08523 5	**THE LOVE MACHINE**	*Jacqueline Susann* 40p
☐ 552 08013 6	**THE EXHIBITIONIST**	*Henry Sutton* 37½p
☐ 552 08217 1	**THE CARETAKERS**	*Dariel Telfer* 35p
☐ 552 08581 2	**DIONYSUS**	*Roderick Thorp* 35p
☐ 552 08091 8	**TOPAZ**	*Leon Uris* 40p
☐ 552 08383 4	**EXODUS**	*Leon Uris* 40p
☐ 552 08590 1	**VIRGIN WITCH**	*Klaus Vogel* 25p
☐ 552 08073 X	**THE PRACTICE**	*Stanley Winchester* 40p
☐ 552 08481 6	**FOREVER AMBER Vol. 1**	*Kathleen Winsor* 35p
☐ 552 08482 4	**FOREVER AMBER Vol. 2**	*Kathleen Winsor* 35p

A SELECTION OF FINE READING AVAILABLE IN CORGI BOOKS

War

☐ 552 08620 7	THE RECOLLECTIONS OF RIFLEMAN BOWLBY	*Alex Bowlby* 25p
☐ 552 08551 0	ONE MAN'S WARS	*Gilbert Hackforth-Jones* 25p
☐ 552 08603 7	LIQUIDATE PARIS	*Sven Hassel* 30p
☐ 552 08528 6	MARCH BATTALION	*Sven Hassel* 30p
☐ 552 08587 1	SUBSMASH!	*J. E. MacDonnell* 25p
☐ 552 98558 9	FOURTEEN EIGHTEEN (illustrated)	*John Masters* 105p
☐ 552 08621 5	MEDICAL BLOCK: BUCHENWALD	*Walter Poller* 35p
☐ 552 08536 7	THE SCOURGE OF THE SWASTIKA	*Lord Russell* 30p
☐ 552 08537 5	THE KNIGHTS OF BUSHIDO	*Lord Russell* 30p
☐ 552 08593 6	THE LONGEST DAY	*Cornelius Ryan* 30p
☐ 552 08527 9	THE LONG DROP	*Alan White* 25p

Romance

☐ 552 08569 3	ST. JULIAN'S DAY	*Bess Norton* 20p
☐ 552 08609 6	DEDICATION JONES	*Kate Norway* 20p
☐ 552 08625 8	FORTUNE'S LEAD	*Barbara Perkins* 22½p

Science Fiction

☐ 552 08626 6	INTANGIBLES INC.	*Brian W. Aldiss* 25p
☐ 552 08516 2	NEW WRITINGS IN SF 17	*John Carnell* 25p
☐ 552 08453 0	DRAGONFLIGHT	*Anne McCaffrey* 25p
☐ 552 08401 8	A CANTICLE FOR LEIBOWITZ	*Walter M. Miller Jr* 30p
☐ 552 08610 X	THE GOBLIN RESERVATION	*Clifford Simak* 20p
☐ 552 08533 2	EARTH ABIDES	*George R. Stewart* 30p

General

☐ 552 98434 5	GOODBYE BABY AND AMEN	*David Bailey and Peter Evans* 125p
☐ 552 07566 3	SEXUAL LIFE IN ENGLAND	*Dr. Ivan Bloch* 47½p
☐ 552 08403 4	LIFE IN THE WORLD UNSEEN	*Anthony Borgia* 25p
☐ 552 98572 4	NEE DE LA VAGUE (illustrated)	*Lucien Clergue* 105p
☐ 552 07593 0	UNMARRIED LOVE	*Dr. Eustace Chesser* 25p
☐ 552 07950 2	SEXUAL BEHAVIOUR	*Dr. Eustace Chesser* 25p
☐ 552 08402 6	SEX AND THE MARRIED WOMAN	*Dr. Eustace Chesser* 35p
☐ 552 07400 4	MY LIFE AND LOVES	*Frank Harris* 65p
☐ 552 98121 4	FIVE GIRLS (illustrated)	*Sam Haskins* 105p
☐ 552 97745 4	COWBOY KATE (illustrated)	*Sam Haskins* 105p
☐ 552 08362 3	A DOCTOR SPEAKS ON SEXUAL EXPRESSION IN MARRIAGE (illustrated)	*Donald W. Hastings, M.D.* 50p
☐ 552 08628 2	A WORLD OF MY OWN	*Robin Knox-Johnston* 37½p
☐ 552 98247 4	THE HISTORY OF THE NUDE IN PHOTOGRAPHY (illustrated)	*Peter Lacey and Anthony La Rotonda* 125p

A SELECTION OF FINE READING AVAILABLE IN CORGI BOOKS

General (*contd.*)

☐ 552 98345 4	**THE ARTIST AND THE NUDE (illustrated)**		105p
☐ 552 08069 1	**THE OTHER VICTORIANS**	*Steven Marcus*	50p
☐ 552 08010 1	**THE NAKED APE**	*Desmond Morris*	30p
☐ 552 08613 4	**GUITAR**	*Dan Morgan*	30p
☐ 552 08611 8	**FEEDING THE FLAME**	*T. Lobsang Rampa*	30p
☐ 552 98178 8	**THE YELLOW STAR (illustrated)**	*Gerhard Schoenberner*	105p
☐ 552 08629 0	**BRUCE TEGNER'S COMPLETE BOOK OF AIKIDO AND HOLDS AND LOCKS (illustrated)**	*Bruce Tegner*	40p
☐ 552 08630 4	**BRUCE TEGNER'S COMPLETE BOOK OF KARATE (illustrated)**	*Bruce Tegner*	40p
☐ 582 98479 5	**MADEMOISELLE 1 + 1 (illustrated)**	*Marcel Veronese and Jean-Claude Peretz*	105p

Western

☐ 552 08532 4	**BLOOD BROTHER**	*Elliott Arnold*	40p
☐ 552 08567 7	**SUDDEN—DEAD OR ALIVE**	*Frederick H. Christian*	20p
☐ 552 08589 8	**UNDER THE STARS AND BARS No. 63**	*J. T. Edson*	20p
☐ 552 08624 X	**A HORSE CALLED MOGOLLON**	*J. T. Edson*	25p
☐ 552 07840 9	**THE REBEL SPY**	*J. T. Edson*	22½p
☐ 552 07842 5	**ARIZONA RANGER**	*J. T. Edson*	22½p
☐ 552 07992 8	**THE DEVIL GUN**	*J. T. Edson*	22½p
☐ 552 08475 1	**NO SURVIVORS**	*Will Henry*	25p
☐ 552 07561 2	**KILRONE**	*Louis L'Amour*	20p
☐ 552 08007 1	**CHANCY**	*Louis L'Amour*	20p
☐ 552 08158 2	**THE BROKEN GUN**	*Louis L'Amour*	20p

Crime

☐ 552 08605 3	**BELOW SUSPICION**	*John Dickson Carr*	25p
☐ 552 08606 1	**VERSUS THE BARON**	*John Creasey*	20p
☐ 552 08588 X	**A COMPLETE STATE OF DEATH**	*John Gardner*	25p
☐ 552 08622 3	**THE DOUBTFUL DISCIPLE**	*William Haggard*	20p
☐ 552 08472 7	**THE INNOCENT BYSTANDERS**	*James Munro*	25p
☐ 552 08520 0	**KISS ME, DEADLY**	*Mickey Spillane*	20p
☐ 552 08425 5	**THE SHADOW GAME**	*Michael Underwood*	20p

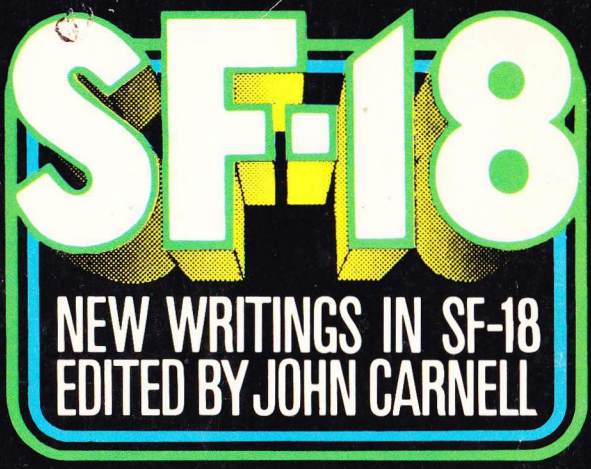
All these books are available at your book shop or newsagent; or can be ordered direct from the publisher. Just tick the titles you want and fill in the form below.

CORGI BOOKS, Cash Sales Department, P.O. Box 11, Falmouth, Cornwall.
Please send cheque or postal order. No currency, and allow 4p per book to cover the cost of postage and packing in U.K., 5p per copy overseas.

NAME .....

ADDRESS .....

(FEB. '71) .....



featuring stories by Lee Harding, Robert Wells, Donald Malcolm, James White, William Spencer, David Kyle and Grahame Leman.

NEW WRITINGS IN SF

brings to lovers of science fiction strange, exciting stories — stories written especially for the series by international authors.

NEW WRITINGS IN SF

is now one of the most popular and well-established series in science fiction and presents a stimulating and energetic approach to modern SF.

U.K.	25p. (5s.)
AUSTRALIA	80c
NEW ZEALAND	80c
SOUTH AFRICA	60c
CANADA	95c