

Islands

an anthology of stories

by

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A Song Before Sunset

This story was first published in an anthology "Beyond Tomorrow", edited by Lee Harding and published by Wren Books in 1976.

It took him three weeks to find the sledgehammer. He was hunting rats among the broken concrete and rusted metal of an ancient supermarket. The sun was beginning to descend over the jagged horizons of the city, casting shadows like giant gravestones onto the nearer buildings. An edge of blackness had begun to creep across the rubble that was all that remained of the store.

He picked his way carefully from one piece of concrete to another, skirting the twisted metal, looking for a hole or a cover that might make a suitable nest for a brood of rats, here and there using his stick to turn over a loose chunk in the vain hope of finding a can of food undiscovered after years of looting. At his waist hung three large rats, their heads squashed and bloody from his stick. Rats were still fat enough and slow enough these days to be caught by surprise with a blow on the head, which was fortunate, for his eye and his skill with the slingshot he carried were not as they had once been. He rested a while, sniffing at the cold wind. There would be a frost tonight, and his bones knew fear of the cold. He was getting old.

He was sixty-five, and the years had starved him. The flesh of his youth had loosened and sagged, leaving his frame thinly draped and his eyes starting from his bony head like some curious troll.

He was sixty-five, and his hair, grey many years ago, now raised a white halo about his leather-coloured face. That he had survived so long was a wonder to him, for his earlier years had not prepared him for this present world. But somehow he had learned to fight and kill and run and all else that had been necessary in the long years since the city had died.

The days now, however, were not so foul and desperate as they had once been. Now it was seldom that he feared he would starve to death. But in the bad days, like many others, he had eaten human flesh.

His name was Parnell and he had gone on living. The sun was sinking fast, and he turned about to go back before the dark could overtake him. It was as he turned that he caught the dull shine of metal in the corner of his eye. He peered more closely, put out his hand and heaved a sledgehammer up from the rubble. He swung its mass experimentally, weighed it in his hands, and felt its movement. After a moment he was forced to put it down again, as his arms began to tremble with unaccustomed strain. But no matter: given enough time, he knew this was the tool to realise the hope he had been hugging to himself for three weeks. He tied the hammer awkwardly to his belt and began to hurry home, fleeing the shadow of the city.

It was almost dark when he reached his home, a weatherstained stone house hedged around with the tangled jungle of an overgrown garden. Inside, he

carefully lit each of the smoky candles in the living room, calling up a cancerous light that spread relentlessly into the corners. His door was locked and barred, and at last he sat in peace before the woodwormed piano in the main room. He sighed a little as his fingers tapped at the yellowed and splitting keys, and felt an accustomed sorrow as the fractured notes ascended. This piano had perhaps been a good learner's instrument in its day, but time had not been kind to it. Even if he had not feared attracting the attention of the dwellers in the dark outside, the effort of playing was more agony than pleasure.

Music had once been his life. Now his greatest aim was only to quiet the rumbling of his belly. Then he remembered, his eyes drifted to the hammer he had found in the rubble that day, and his hope came alive again, as it had weeks ago.

But there was no time to daydream, no time for hoping. There was time before he slept only to clean and skin the rats he had caught. Tomorrow he was to go trading with the Tumbledown Woman.

The Tumbledown Woman and her mate lived in the midst of a hundred decrepit trams in an old depot. Why they chose to live there was a question none who traded with her had ever managed to solve. Here she stayed, and here she traded. Her store counter was a solitary tram left on the rails a few metres outside the depot, its paint peeling away but still bearing pathetic advertisements of a lost age. While the outside of the tram offered far-away holidays and better deodorants, the Tumbledown Woman inside traded garbage as the luxuries of a world which had died. Inside, arrayed

along the wooden seats or hung from the ceiling were tin cans with makeshift hand-grips, greasy home-made candles, racks of suspect vegetables grown no one knew where, rows of dead rats, cats, rabbits and the occasional dog, plastic spoons, bottles, coats of ratskin and all sorts of items salvaged from the debris of oft-looted shops.

The Tumbledown Woman was old, and she was black, and she was ugly, and she cackled when she saw Parnell approaching slowly in the chill morning. She had survived better than many men through the crisis, by being more ruthless and more cruel than they had ever managed to be to her in the years before. She rubbed her hands together with a dry, dry sound, and greeted Parnell with a faded leer.

"Two rats, Tumbledown Woman, fresh killed yesterday," he opened without hesitation.

"I give you something good for them, Mr Piano Player," she sneered.

"Then that will be the first time ever. What?"

"A genuine diamond ring, twenty-four carat gold, see!" And she held the flashing gem to the sun.

Parnell didn't bother to smile at her taunt. "Give me food, and be done with your mocking."

She sneered again, and offered him a cabbage and two carrots. Nodding, he handed her the skinned corpses, lodged the food in his bag, and turned to go. But he was carrying the sledgehammer at his side, and she stopped him with a yell. "Hey, piano player man, that hammer! I give you good fur coat for it! Genuine rabbit!"

He turned and saw that she was not mocking him this time. "When I've finished with it, maybe. Then we'll see."

His reply seemed to make her pleased, for she grinned and yelled again: "Hey, piano man, you hear the news about Ol' Man Edmonds? Them Vandalmen come an' kill him, burn down that book place Ol' Man Edmonds live in!"

Parnell gasped in shock. "The Library? They burnt the Library down?"

"That's right!"

"My God!" He stood, silent and bewildered for a long minute as the Tumbledown Woman grinned at him. Then, unable to speak further in his anger, he clamped his hands together in bitter frustration and walked off.

The sledgehammer was an awkward thing to carry. Slipped into his belt with the metal head at his waist, the wooden handle beat at his legs as he walked. If he carried it in his arms, his muscles protested after no more than a few minutes, and he was forced to rest. He was getting old, and he knew it. The slide to death was beginning to steepen and he was not, he thought, very far from its end.

In slow, weary stages he walked the distance into the heart of the corpse that was the city: long ago its pulse had stopped. He walked past the rusty hulks of cars and along the dust-filled tram-tracks, through streets of shattered buildings standing in rows like jagged reefs. Long ago the lungs of the city had expired

their last breath; the tall chimneys were fallen, casting scattered bricks across the road before him.

He came at last to the centre and faced again the strongly barred and sealed doors of the old City Hall, half buried in the rubble of its long-crumbled entranceway. Even if he had been able to break open the bars of the door, he would have needed to clear away the rubble to allow the doors to open. Such was beyond him.

But at the side of the building, the skeleton of a truck lay crazily against the wall, mounted on the pavement and nuzzled face to face with a tree that now made a leafy wilderness of the cab.

Parnell climbed onto the truck and carefully ascended until he perched with little comfort on a branch of the tree, close to a barred window. Three weeks ago he had cleaned away the grime on the glass to see the dusty corridors inside. On the far wall of the corridor was a direction sign, faded and yellowed, but still bearing the words: CONCERT HALL.

Once again, looking at that dim sign, he was filled to overflowing with memories of concerts he had given. His hands followed a memory of their own on the keys, the music spiralled and, after, the almost invisible audience in the darkened hall applauded again and again...

His memories vanished as he swung the sledgehammer from his shoulder, jarring it into the bars of the window. Dust showered and cement crumbled. The task looked easier than he had at first thought, which was fortunate, for the one stroke had weakened him terribly. He swung again, and the bars moved and

bent. Somehow, he found the strength for another swing, and the bars buckled and came loose and smashed through the glass into the corridor beyond.

Triumph came to him in a cloud of weakness, leaving him gasping and his arms weak and trembling. He sat for a long moment on the branch, gaining strength and hope to venture within.

At last he swung his legs over the edge and dropped onto the corridor floor. Glass crackled. He reached into his bag and brought out a small candle and some precious matches. The box of usable matches had cost him ten ratskins at the Tumbledown Woman's tram two weeks ago. He lit the candle and yellow light flooded into the dusty corridor.

He walked along it, making footprints in the virgin dust. A memory floated back to him of telecasts of moon explorers, placing footprint after footprint in age-old lunar dust, and he smiled a grim smile.

Eventually he came to a set of double doors, barred and padlocked. Here he was forced to rest again before he could smash the lock with his hammer, and step into the space-like blackness beyond.

After his eyes had adjusted to the light of the candle, dimmed by the open space, he saw row upon row of once plush seats. Somewhere a rat scurried, and above he could hear the soft rustle and squeaks of what might be a brood of bats on the high ceiling.

The aisle stretched before him, sloping slightly downwards. Parnell walked forward slowly, kicking up dust. In the dark immensity of the hall, his candle was just a spark, illuminating only a tight circle around him

and filtering through puffs of dust stirred by his passage.

On the stage, metal gleamed back images of the candleflame from scattered corners. Around him were the music stands and music sheets of a full orchestra, filmed with years of dust. Here was a half-opened instrument case, and in it the still-shining brass of a french horn, abandoned by some long-gone performer in forgotten haste. And shrouded in white, topped by a tarnished candelabra, stood the grand piano.

Parnell's heart began a heavier, more rapid beat as he brushed dust from the sheet covering the piano. With an anxious hand he lit the candelabra with his own meagre candle, and lifted it high as the light swelled across the stage. He could see other instruments now, long lost by their players: here a violin, there an oboe, cast aside by a time that had made their possession unimportant.

Placing the light on the floor, he carefully eased the sheet from the piano. Yellow light danced on the black surface of polished wood and sparkled in the brass.

For a long, long time his aged hands could do no more than caress the instrument with a growing affection. Finally, he sat on the piano stool, realizing perhaps for the first time how tired he was. The key, he saw with relief, was still in the lock. No doubt he could have forced it, but it would have broken his heart to have damaged that perfect form.

Turning the key in the lock, he lifted the cover and ran his hand softly over the white and black of the piano keys. He sat back, and with a self-consciously wry

gesture, flipped his ragged coat away from his seat and turned to face the hall.

A full house tonight, Mr Parnell. All of London queues to hear you. The radio stations are paying fortunes to broadcast your concert. The audience is quiet, expectant. Can you hear them breathe, out there? Not a cough, not a sneeze, not a mutter as they wait, hushed, to hear the first notes drop from your fingertips. The music trembles in your hands, waiting to begin - now!

Discords shattered the empty hall, and the bats, disturbed, flew in a twittering crowd above the deserted, rotting seats. Parnell let out his breath in a painful sigh.

The instrument would have to be painstakingly retuned, note by note. His goal had yet to be reached. But now, at last, he could reach out and touch it. Now, one by one, he began to realize the difficulties that remained. He felt his hunger and saw the candles burning fast. He could probably find pitch-pipes in the hall, but he would need some kind of tool to tighten the strings of the piano. And he would have to support himself somehow while he spent his time in here and was unable to hunt or forage. He would have to go back to the Tumbledown Woman, and see what she would offer him in trade for the sledgehammer. It was no fur coat he would be getting, he knew.

Outside again, he opened his bag and took out the food he had brought with him. He sat on the truck eating pieces of roasted rat and raw cabbage, pondering whether there was some way he could net and kill some of the brood of bats within the hall. No doubt they would make curious eating, but perhaps their leathery

wings might have a use... ? But all these schemes were impractical, and he dismissed them.

In the distance, over the broken buildings, a thin trail of black smoke was rising leisurely towards the sky. The day had become bright and cloudless, and the smoke was a smear against the blue. Puzzled, Parnell wondered what was burning. The trail was too contained to be a forest fire. Unless some building had spontaneously ignited, after all these years, it had to be the work of men. Unable to arrive at any more satisfactory a conclusion, he turned away, thrusting the question from his mind.

After bundling away the remnants of the food, he loosely replaced the bars of the window to make his entry less obvious to any passing wanderer. Heaving up the sledgehammer, he began the long walk away from his heart's desire.

The Tumbledown Woman had turned sour in the late afternoon, like a fat black toad basking in the last rays of the sun. She sat on the running-board of the tram; greeted Parnell with little enthusiasm. Her withered husband now sat atop the tram and glared menacingly at the horizon, an ancient shotgun beneath his arm, ignoring his wife and Parnell equally.

Parnell sat and bickered with the woman for nearly an hour.

She would still offer him the fur coat, but he wanted an adjustable spanner, candles, matches and food in exchange for the sledgehammer, and these were expensive items. In the end, Parnell gave in and accepted her final offer, which was everything he wanted except the food.

The Tumbledown Woman hung the sledgehammer in a prominent position within the tram and gave him the items he wanted. She turned and looked at him with a bitter eye. "You crazy, piano player man, you know that?"

Parnell, leaning wearily in the doorway of the tram, cradling his candles, was moved to agree with her. "I suppose you're right."

"Sure I'm right!" she answered, nodding her head vigorously. "You a crazy coot."

"Must be crazy to come and trade with you," he said, but the woman just glared at him. Then he remembered: "There was a lot of smoke in the south this morning. Do you know what it was?"

The Tumbledown Woman grinned and winked at him. "Sure I know. Didn't I tell you this morning about them Vandalmen? Them Vandalmen coming all over this town now. Last week burn down Ol' Man Edmonds and his books. Now it's that picture place. Sure crazy, them Vandalmen." And she potted around the tram, arranging and rearranging her goods.

Parnell's heart sank a little more. "The Art Gallery?" "Yeah, that's what I hear. Limpin' Jack, he been south this morning, he told me. Them Vandalmen don't like them books or them pictures, no way."

Parnell's anger warmed within him, only to turn into bitter frustration for the lack of an object. Most of the things he treasured had been destroyed during the crisis. Now those that were left were going the same way, in senseless destruction.

"What do they do it for?" he protested, sitting down in an empty seat to stop himself shaking. "What point is there in what they do?"

"Who cares?" said the woman. "Can't eat them books, can't keep warm in them pictures. Them Vandalmen crazy to burn them, sure, but who cares?"

"All right," said Parnell, "all right." The answers he felt within him would mean nothing to the Tumbledown Woman. All he could do was smother his loss and sorrow, hide it away. He clenched his jaws and wearily picked up his trades, placed them in his bag and stepped out of the tram. The Tumbledown Woman watched him go with a tired disgust. Her husband sat above, glaring, glaring, at the darkening horizon, his gun beneath his arm.

Parnell spent the morning of the next day hunting rats again in the rows of time-shattered houses that still stood in uniform lines to the west of the city. After a few hours of vain search he was lucky and found a rabbit warren riddling the soft earth in an overgrown and enclosed back yard. He caught two surprised rabbits before the others ran for safety. He spent the rest of the morning cleaning and roasting the rabbits and salting their skins. In the afternoon he was again within the dark hall, beginning the long task of tuning each string of the piano to a perfect pitch. Had he been a professional tuner, he would have been able to proceed with greater speed, but he was forced to go at a frustrating creep, making trial-and-error decisions as he listened to each string, hearing it in relation to the others he had tuned, listening to the pitchpipes, then tightening the string again with his rusty spanner.

He measured time by the rate at which the smoky candles burned, and left again before darkness fell.

Days passed in this way, until he could hardly trust his hearing and had to leave off for hours at a time before he could resume.

Every time he emerged from the hall to cat or to let his eyes and cars repair, there was smoke somewhere on the horizon. There came a day when he was finished; when he had tested the piano with scales and simple exercises and was sure the tuning was perfect. He knew then that he was afraid to begin, afraid to sit down and play a real piece of music on the piano. His hands still remembered his favourite pieces but there was a hollow fear in his heart that he would fumble and distort the music in some way. He had kept his hands strong, and his fingers limber by fighting the aged monster of a piano in his house for all these years, but he could not tell whether or not he still retained his skill. It had been a long time.

Parnell made his way outside the hall and sat, despondent and trembling, on the rusty, overgrown truck. It was early afternoon and, for the first time in days, there was no smoke to be seen in the sky. He ate the last of the rabbit and realized he would have to go hunting the following day. He laughed at himself for an old fool, gulped water from his bottle, lit his candle and hurried back inside the hall, trailed by clouds of dust.

On the stage he had cleared the music stands to one side, leaving the grand piano alone and uncluttered. Now he dusted the polished surface one more time, buffed the brass lettering, raised the lid, lit the candelabra, and sat before the keyboard. The bats

twittered tumultuous applause. He bowed his head slightly towards the moth-eaten velvet of the empty seats, and began to play.

He began with a Beethoven Piano Sonata, Opus 109. It flowed; it swelled; it poured from the strings of that magnificent piano as his hands moved and fell, remembering what his brain was unsure of. And he knew, listening, that he had not lost his skill, that somehow it had been kept somewhere safe within him, sleeping through the years of torment. He wove a web of music, cast motion and light and harmony into the darkness, wrapped himself within its sound, and played on. And as he played, he wept.

The piece ended; he began another. And another. Beethoven, Mozart and Chopin were resurrected. The music expanded through the hours, a torrent of joy, of sorrow, and of yearning. He was blind and insensate and deaf to all but his music, insulated from the outside world by the castle of sound he was building around himself.

At last Parnell stopped, his hands throbbing and aching, and raised his eyes above the level of the piano.

Standing before him was a Vandal. A sneer was on his face, and in his arms he cradled the sledgehammer Parnell had traded to the Tumbledown Woman. There was blood on its head.

The Vandal stood and regarded him contemptuously, all the time stroking, stroking, the shaft of the hammer he carried. He was dressed in roughly cured leather and rusted metal. Around his neck he wore a dozen metal necklaces and chains that dangled on his bare and hairy chestcrosses and swastikas, peace

symbols and fishes -clinking gently against each other. He was dirty, his hair was greasy and awry, and on his forehead was burned a V-shaped scar. He smelt.

Parnell was unable to speak. Fear had made stone of him and his heart flopped around inside him like a grounded fish.

The Vandal uttered a hoarse giggle, enjoying the shock on Parnell's face. "Hey, old man, you play real pretty! Tell me now, Music Man, how well do you sing?"

Parnell's voice was a rustle in his throat: "I can't."

The Vandal shook his head in mock sorrow. "That's too bad, Mister Music Man. But I tell you, you're gonna sing real good when I'm finished with you. Real good and loud." He shifted the sledgehammer to bring out a long knife. It cast fiery gleams about the stage as its edge caught the candlelight.

Parnell felt as though he was about to be sick but, insanely, his old anger grew in him even in the face of his fear. "Why?" he asked, his voice trembling, "why do you want to kill me? What harm am I doing you?"

The eyes of the Vandal narrowed in concentration and fierce humour. "Why? Why not?" And the knife flashed yellow at Parnell's eyes.

"All that you do... destroying all the beautiful things, the books, the pictures..." Parnell was becoming excited in spite of his fear: "Those things are all we have left of our heritage, our culture; of civilization, of Man's greatness, don't you see? You're no more than barbarians, killing and burning..." He stopped as the Vandal waved the knife towards him, his face losing its mirth.

"Listen, pretty music man, you're pretty with your music and pretty with your words, but you talk a lot of shit. You know what your pretty culture gave us? Gave us dirt and fighting and eating each other, man. You're nice and old, pretty man; you were old when the murdering and the hunger started. Me and mine, we were just kids then. You know how it was for us? We had to run and hide so as not to be food for grown-ups; we had to eat dirt and scum to live, man. That's what your pretty heritage was for us, pretty man, so don't bullshit me about how great Man was, cause he ain't."

The Vandal was leaning over Parnell, breathing his foul breath hard into the old man's face. Parnell grew silent as the Vandal drew back and glared. "And you sitting here in the dark playing that nice music-all you wish is that it was back the way it was! Well, me and mine are making sure that it ain't never back that way again. Now you tell me, man, what good did that music, that culture, ever do, hey?"

Parnell's thoughts were tumbling. At last he said simply: "It gave people pleasure, that's all."

The Vandal regained his sneer. "Okay, Mister Music Man, killing you is gonna give me lots of pleasure. But first, man, it's gonna give me real kicks to smash up this pretty music thing in front of you just so you can enjoy it too. How about that?" And, turning, the Vandal hefted the sledgehammer and raised it high above the strings of the grand piano.

Something snapped within Parnell.

He leapt up and grasped at the Vandal's arms. Surprised, he let the hammer drop. Parnell clawed at his face. The Vandal swung out a hairy fist, catching Parnell

a jarring blow on the jaw and almost striking him to the ground, but Parnell's hands were about the Vandal's throat. Parnell's hands were the only part of him that was not weak and trembling - hands made iron-firm by decades of exercise on the keyboard-and his thumbs were digging into the Vandal's windpipe. The youth began to choke, and tried vainly to tear Parnell's hands away, but the gnarled fingers were locked in a murderous grip; they tightened with hysterical energy. For a seemingly endless moment the two hung together in a bizarre embrace. Then the Vandal crumpled to the stage, with Parnell on top of him, throttling the life from him. The Vandal was dead.

Parnell let out a choking cry and retched violently over the edge of the stage. He crouched on his knees for some time, transformed by reaction and horror into a mindless animal. Eventually he turned around and stared with strange emotion at the body of the Vandal. Outside the hall, very faintly, he could hear the yells and shouts of the rest of the pack of new barbarians as they burned and looted. Inside, there was only the quiet of death and the soft twittering of the bats.

He crawled towards the piano where the sledgehammer lay. He stood, using the hammer as a prop for his trembling legs, then took it into his arms.

With one anguished swing, he brought the sledgehammer crashing down into the piano strings.

The shock jarred his whole body. The strings snapped with violent twangs and wood splintered, filling the air with jagged sound. The candelabra, toppling, plunged to the floor and went out, spilling darkness throughout the hall.

The anguished sound faded into long silence.

Demonlayer

This story, written in 1977, has not been previously published. Though it failed to sell, I confess to being fond of it. It represents my one and only attempt to write fantasy.

My name is Byrol, son of Bantor, and singlehandedly have I slain the demon Gorgoroth, which had laid waste to the place called Gehenna and terrorised and murdered travellers in that region for more than a thousand years.

I am the hero of heroes, and when I return to my town of birth, all honours are due me. But I cannot return. I am trapped and bound by my own valour. Hear me, then, and pity me.

My tale begins in my youth, when, with my fellows, I would play at arms. fighting great battles with swords of wood and helms of cloth. We laid seige to many citadels, my comrades and I, though they were in truth no greater than a middenheap. But in this way, at least, we learned the glory and joy of valour, and many of us vowed to be warriors when we grew to manhood. I boasted to my friends, vowing to be the greatest swordsman of all time, and in truth I believe that I have been faithful to this childish hope.

And often, when I was a child, I used to listen to tales told by the town elder, and it was from this aged that I first heard tell of the terror of Gorgoroth, the

demon who tore men apart with bare hands and ate their hearts raw. There is a road which leads through our town, leading in the east to the sea and to the ports. Westwards it winds into the mountains, to pass through the place called Gehenna and then on down to a city where many of the guilds have their home. For this reason there is often traffic on this long road, and often one lonely merchant has to make the perilous journey unaccompanied by any of his fellows. Many of these single travellers enter the pass called Gehenna and are never seen again. Even when travelling among many, men are oft snatched away from the van of the company before their fellows can help them. On these rarer occasions, men tell of seeing the demon itself: a great hairy beast shaped almost like a man, but twice the size, carrying off its luckless victim to its cave high in the hills.

This tale struck terror and fascination into our young hearts, but I, wishing to appear valiant, boasted that one day I would slay the demon and bring home his head for all to see. Half only of this boast have I fulfilled.

As the years passed, I became a man, and went off to the King's service. there to learn the skills of warriors and then to fight in the wars against the southern hordes. Many enemies I killed then, and many of the King's guard acclaimed me as the greatest warrior they had seen. After seven years, my service was done, and I made my way homeward to bring tidings to my family and friends. But when I reached my home, I recalled my childhood boast, and enquired whether or no the demon still ravaged in the mountains. The town elder, now more wrinkled and aged than ever, told me of it:

"Aye, the demon still lives, as it has these many years. It is immortal. Demons and dragons never die, nor can they yet be slain. The tales of dragonslayers are all empty wind, lad, do not heed them. "

"Nay, ancient," I said, "this can not be true: for no foe can stand against the touch of cold hard iron," and I showed him the great sword Sanglamore, carved with many runes, which hung at my side. "And I have vowed to slay this demon, and I shall."

The aged one shook his head. "Others, many others have tried this thing. The legends tell of their setting out, but none ever return when they go against Gorgoroth. I remember the last who left this town to do this thing: Edouard Twoknives, it was, a lionheart of a man. A score of years ago he left, and no mortal has seen him since. Do not go, lad, there is only death, and no glory in Gehenna."

I mocked the ancient then. and called him an old fool, and kicked at him so that he fell and stumbled into the dust of the street. This I should not have done.

With pride and courage in my heart I began my quest in the bright morning, with my sword at my side and my helm of gleaming brass tied to my saddle, as I rode forth on the long journey towards the mountains. I was dressed in the finest of black livery, and my horse was a pure white stallion. There were crowds of women crying and children cheering, and great banners flying and the sound of trumpets. I was magnificent.

The next day I reached the foothills of the mountains. It was very clear, that day: everything I saw, every sound that I heard was sharp and fine. I paused my horse for a moment, looking up at the hills, and I

loosened my sword in its sheath. I had taken that sword from a wizard of the Southrons, in return for my promise of his life. He had told me how he forged it, with great magic in the dark depths of the night, and he swore that it would slay any foe that it touched. To test that boast, I slew that wizard with his sword, and left. Wizards are not to be trusted.

Above the hills. an eagle flew, and the wind blew cold around me.

I urged my horse forward, and we passed over the small stone bridge that spans one of the streams that seem to encircle the mountains: a great river splits in the north into a myriad of small waters which pass on either side of the mountains. to rejoin in the south. As my horse and I went over the bridge, I felt a strange thrill, as of anticipation in my heart.

I had no plan of how I should seek out the demon Gorgoroth: if it did not show itself as I passed along the narrow road through the mountains, I would have to dismount and seek it in the high hills and rocky cliffs. I had food and water with me: I would seek it down though it ran from me for a score of days.

Yet as the fates would have it, I did not have to seek out Gorgoroth. the demon found me.

My horse was making slow progress where the road climbed steeply through a narrow pass: rocks overhung the road on either side. There came a sudden cry, as of a beast in pain, and a brown fury fell on the neck of my horse. My steed reared with the hellish thing now at its throat, and I was thrown to the ground, and near stunned.

When I looked up, the demon was tearing great gobbets of flesh from the neck of my horse: the animal was dead but still jerking. I was on my feet in a moment. and made to draw my sword. The demon, seeing my movement. leapt at me, and before I had time to move, plunged at me with one of its paws. I felt a cold, tearing pain in my left shoulder, and I dropped to the ground, my sword still in its sheath. I was back on my feet in an instant, but by then the monster was running up the hills, leaping from rock to rock like a mountain goat.

I can not describe what the demon resembled. if indeed it was like any other thing in the world this side of the grave. It was covered in brown fur, and had sharp, sharp claws, that is all that I can say. I could see no face.

I looked about me: the damage to my mission was very great. My faithful horse slaughtered and myself wounded, and as it seemed some of my provisions stolen. But I still carried my rune-sword, and I still had my courage. I would track the demon to his very lair, if need be. But first I must bind up my shoulder: this I did with strips of material torn from my livery. I then took some food and water, all the while keeping alert for the return of the demon, and then rested for a while. Then I set off up the slope after Gorgoroth.

The wound in my shoulder was painful, but it had stopped bleeding, and I did not fear that it would harm my ability. I had suffered greater wounds than this during the wars. I climbed the slope grimly and slowly. Rocks were all about: any one of them could have concealed the demon. I was alert and prepared this time.

But the demon was cunning, and hid from me. I could find no trace of its lair. I wandered the hills for

hours. seeking, but caught no glimpse of it. The night drew on, and the shadows became long. Then I lodged myself in a narrow cleft between two rocks, my back to the stone, my sword in hand. I was confident that were I approached, I would wake easily in time to hew the demon in two. I slept, but dreams troubled me.

In the cold morning, I began to search again, and this time luck was on my side. Before the sun had yet risen over the mountain top, with the grey sky still heralding its light, I came on a shallow pool of water in a depression high in the slopes of the mountain. There were rough footprints about the murky water, and I knew then that this must be where the monster came to quench its thirst. I smiled gently to myself, knowing now that I must triumph, and hid behind a rock overlooking the pool to wait.

At last, it came. Shuffling along and making rough bestial sounds, it came down the faint trail to drink. A little way from the pool, it stopped and sniffed at the air, as if it could sense danger. I crouched hard against the cold stone and prayed that it would not catch my scent. But it stopped sniffing and came down to the water, bending and sucking up with loud, crude noises as it drank.

At that moment I leapt, Sanglamore my great rune-blade in hand, giving a battle cry. The demon looked up, started, and in that instant I saw that it had an almost human face, with bright eyes staring from its hellspawned head. It gave an incoherent shout, and tried to raise its claws against me, but my sword was swinging down, and it smote the monster's head from its neck as I fell on it. I was wounded by one of the demon's

claws as it struck at me even in its death agony, and blood was spurting over me, but the demon was slain. It would waylay no more lonely travellers on the mountain road in Gehenna.

I stood up from the body of the demon, triumphant. I was covered in gore, and I was wounded savagely in my leg, but I raised my sword in glory, and placed it back in its sheath after wiping away the blood. All I need do was return to my town with the head of the monster to gain a hero's welcome, my childhood boast satisfied.

I came slowly down the slope, favouring my leg, to where my dead horse lay, his throat torn out by the demon's claws. I did what I could for my faithful steed, hoping that wolves would not find him too soon. I took what gear was left there, and began the slow walk back towards the town.

At last I came to the hills overlooking the stone bridge I had crossed days before. My leg wound was still paining me, yet I managed to stumble and run down the slope to that bridge, such was my joy and triumph.

But as I began to cross the bridge, a thing of mystery happened. As I half-ran, half-hobbled across. I was struck such a blow on my face that I fell down in a swoon. How long I lay insensible there, I can not tell. When I recovered my senses, my nose was bloodied, and my head still gave me pain. I stood and looked about to see what had struck me. There was nothing in sight, only the bridge and the muttering stream beneath.

I walked forward over the bridge cautiously. Suddenly I came to a halt. My outstretched hand had touched an invisible obstacle blocking the way back

across the bridge. I rapped at it with my fist: it was as though someone had placed there before me a wall of the most exquisite crystal, so fine and clear as to evade the sight. A mystery indeed. I determined to knock at it with the pommel of my sword, to see if I could smash the crystal. And then an even stranger thing occurred.

The hilt of my sword passed through the wall as if it were the thinnest air. stopped only when my encircling fist reached the barrier. I knew then that there was great magic at work here. I tried the blade: it too swept through the wall as it would through a cloud; but my hand took a sharp knock when it reached the limit of this barrier, and it was all I could do to retain my grasp of the sword. There was no doubt: here was an artifice of powerful sorcery, created by some treacherous wizard. Perhaps the demon had been the familiar of this wizard, and by slaying it I had incurred his wrath.

I decided to test this thing. I went back over the bridge, and came down by the side of the brook. Wading across the cold, chilling water, I found the barrier lay there also,, centred in the middle of the water. It seemed to pass into the earth itself.

I had no choice. Before I could return and claim the glory due to me I would have to seek out this wizard and slay him as I had slain his demon. I rose out of the water and began the trek back into the mountains. In truth I was very weary, for my wounds pained me and my food was now gone, much of it having been stolen by the demon. But still I pressed on.

I spent a night and a day wandering the mountains in which I was enclosed by this diabolical wall of wizardry, and my weariness and hunger were great

burdens. But I could find no sign of the sorcerer who must be enclosing me thus. What I found was the lair of Gorgoroth. There were many human bones there, gnawed by the demon's teeth. And also there was yet a portion of the provisions that the monster had stolen from me. I filled my belly gladly and my strength began to return. The lair was high on the mountain top, a dark cave with a view of the valley and the pass: travellers approaching would be visible from afar. I decided that this filthy hole was better than the open windswept mountain-side, and slept there that night.

The next morning, much refreshed, I espied a small figure on the trail: a traveller. I realised suddenly that all I need do to obtain assistance was to stop this man and ask him to tell my town to send me food and provisions and the help of a friendly wizard to free me from my crystal trap. I ran down the slopes in haste, limping hardly at all.

The man was a merchant: a skinny little fellow on a small pony, much bejewelled. A foolish man, if he did not fear brigands or the demon. I ran my hardest to catch him where the trail led out of the pass and began to descend towards the plains.

Suddenly, he saw me, and sat up in his saddle with a start. I hailed him as best I could, but I was out of breath in my haste and my voice came out only as a croak. Before I could form fair words, the skinny merchant gave a high shriek and dug his heels into his pony's flanks: the beast jumped and fled past me. I waved vainly as he rode away.

I realised then that I was not the image of nobility and valour that I had been when I rode forth on my

mission: my livery was torn and stained with the demon's blood and my own: my face was similarly spattered and my hair and beard were awry and matted with filth. I was enough to frighten any skittish merchant. There was again no choice left open to me but to do as I had thought before: track down that damnable wizard who had so imprisoned me.

It took me five days to find the wizard's cave. By that time my food had run out again and I was bone-weary and greatly burdened with the weight of my misfortune. Byrol son of Bantor had never fallen so low in all of his battles before.

The cave was half-hidden by a huge boulder that stood in front of it, keeping out the sun. It was very dark within, and it took my eyes much time to adjust to the murk. The wizard was there, seated in a rough chair. He had been sitting there for a very long time, I would vow: only his bones remained, still sat upright. A death's head grin was all that greeted my challenge. Around the cave were scraps of things which long ago might have been herbs and medicines. There were dusty books which fell apart at my touch. and glass bottles filled now with nothing more than ashes. But on the table before the wizard's corpse was pinned a yellowed message. It was difficult to read. and parts were missing. But it went thus:

"Greetings, mighty warrior, to the abode of long-dead Carpathius, and hear of his death-spell. Thou art great in warrior's skills, and have suffered much to reach here. else thou would not have come. Know then my spell; he who slays the demon of Gehenna shall not leave that place... a barrier of most potent force shall keep him

trapped: a force which shall only bind those who are known as heroes. Long ago I learned that heroes were more to be feared than demons or dragons: for the people allow heroes, even praise them, yet heroes slay more innocents than demons ever shall ... thee well, mighty warrior..."

I fumed. I raged. I tossed the dead bones of the wizard from his crumbling chair and threw them one by one down the mountain-side. Yet it was all to no avail. I was trapped in these mountains, and there seemed no way that I should ever again be free.

The days since then have been full of despair. My hunger is never satisfied. I have killed rabbits. since that day, and eaten them raw for lack of a fire. I hide against the cold at night in the demon's lair and watch the stars. Last week I ate what was left of my horse: there seem to be no wolves. The meat was bad: it made me sick.

My hair is getting long, I have no way to trim it. My livery is torn and in rags. I lost my helm of brass some days ago. Each morning I go to the pool where I slew the demon and see the face of a stranger: a wild man with horror in his eyes.

My hunger is intense. I chased a mountain goat this morning, up and down over the rocks, but it got away. My hunger is almost beyond endurance.

About an hour ago I spied a lone merchant coming along the trail. I will wait for him on a rock above the pass.

I hope he's fat.

To Speak of Many Things

This story was published in Galileo magazine in 1977.

The antenna of the radio telescope swung in a great slow arc to track and follow one of the bright stars above.

In the control room that sat on the lip of the vast crater that was the bowl of the telescope, a man began to take measurements. He was a small man, and an old one. His face was wrinkled around, but the wrinkles seemed to follow the laughlines of his expression. He was balding, and what hair he had left was turning grey. He paused for a moment, and bent to look at the data being printed out by one of his instruments. After a moment, he reached over from his seat and switched on an intercom.

"Hello Homerson," he said into it. "Getting some damn funny data here. It's the alpha line from Beta Hydri again, just like last week. Looks like we'll have to let the computer get its teeth into this stuff." He switched the intercom over from SEND to RECEIVE and waited, still looking at the information coming from the machine, and at the continuous stream of paper tape it was punching.

There was a click, and after a moment a voice said "Hello James. Have I expounded my latest theory to you yet? It's my new theory of Cosmic Inflation."

"Oh no!" said the man in the control room. "Not that one!"

"Well," continued the intercom, "I'm sure you're interested. To put it briefly, it's a theory which reconciles the apparent differences between the Big Bang and Steady State theories of the origin of the universe."

The man in the control room smiled, and peered through a sighting device to make sure the antenna was still on target. The paper tape kept on coming. "Yes, Homerson, go on!" he said, largely to the air.

"Well, James, as you know, the now discarded Steady State theory assumed that matter is continuously being created out of the void. Naturally, the critics of the theory claimed that this ran counter to the generally accepted Law of the Conservation of Matter. What they neglected, of course, and what enables me to revitalise the theory, is that the real law is not the Conservation of Matter, but the Conservation of Mass-Energy."

The data from Beta Hydri was decidedly funny. It was possible that after all this time he had really discovered something worthwhile.

The voice from the intercom rambled on. Homerson's problem was his long-windedness. The phrase: "Brevity is the soul of wit" went disregarded by him.

"So my thesis is that mass is conserved, but that matter is not. As each new atom of hydrogen comes popping into existence, in a miraculous fashion, no new

mass is created along with it. Instead that new piece of matter shares the rest of the total mass of the universe. In other words, there is a steadily increasing amount of matter in the universe, but a constant, finite mass. So that all matter, as time goes on, has less and less mass. A kind of Cosmic Inflation."

The man in the control room groaned, got up from his seat and went off into another area of the control centre, still listening to the intercom. There were crude kitchen facilities in the centre, and he got out a plastic packet of baked beans, took a pair of scissors from his pocket, and snipped off the top of the packet. Then he took a spoon from his other pocket and walked back to his instruments, eating the beans cold. He smiled as he passed the refrigerator, which bore a sign reading: "Whatever happens, never let it spoil your dinner". He sometimes thought that slogan had helped keep him alive in recent years.

Homerson's voice over the intercom ran on. "Now, cast your mind back to the first few days of creation, when..." The voice suddenly stopped, and the intercom produced a fine series of screeches and static-filled gurgles.

"Damn!" said the aging astronomer. He put down the packet of beans, and went back to his seat and snapped off the intercom, cutting short its gabble. He made sure the radio-telescope was still tracking Beta Hydri, and that the punched tape with the data on it was still running smoothly, then went into the room next to the airlock. He spent a few minutes putting on a spacesuit, by which time his face was red and his breath gasping, and then entered the lock.

Outside, the landscape was desolate and forbidding. Dust and craters, large and small, with an occasional outcrop of rock, provided the only scenery the base had except for the great radio-telescope itself. The only illumination now was from the stars. The moon's slow dawn was a week away, and the base was at the opposite side of the moon from the clean brightness of Earth. Here there was no atmosphere. Here, there was no frantic background of radio and television transmission. The back of the moon had seemed an ideal place to build an observatory, even though the scientists had been removed from the rest of humanity. Although, thought the old man, perhaps even here they had not been far enough removed.

He walked around the edge of the vast crater. Even starlight was enough light to see your once your eyes had adjusted.

The delicate spiderweb that was the antenna of the radio-telescope hung poised over the huge bowl. But the old man kept his eyes set on the visual telescope, and the single light burning in the living quarters. He had walked this path so often that his feet knew the way, and he hardly needed to think about where he was going.

He reached the lock of the living centre, and, pressed the button to set the operating cycle into operation. This was often an anxious time for him. During the long lunar night the observatory's power was drawn from batteries charged during the day. If there were not enough, if there had been too much leakage, then the door might not open. But now, the signal light blinked green, and he entered. He took off the spacesuit as quickly as he could.

The corridor was dark. The only light came from the open door of his office, down the end. When he got there, he had to squint, as his eyes adjusted from the dark.

The rooms combined the functions of living space and office in one area. Against one wall of the office was a minicomputer, together with typewriter interface. On a table, connected to both the computer and the intercom by a complicated device, was a tape-recorder. Tape from the machine was slowly unwinding from one reel and spooling over the floor. To this he went immediately. He turned off the power, and fiddled with the take-up reel.

"Damn!" he said. "This machine is getting too old to be useful. Just like me." He bent and picked up an armful of unwound tape and placed it on the table. When he had done that, there was complete silence.

James Homerson sighed.

Someday he would tire of this polite fiction of not being alone, and then he would probably have nothing left to do but die. Sometimes he wondered if this talking to himself by remote control did not lie on the near edge of insanity. But then, that would hardly be surprising.

His work for the evening finished, he went to the cupboard that he used as a library, and selected a paperback to read before he went off to sleep. He remembered how his colleagues used to mock his eccentric taste in books: largely pulp science fiction of the most sensational kind. Now that most of the dramatic predictions of the pulps had come true, he had the last laugh. But it was, he knew, the hollowest of laughs.

In his bedroom, he found that he had read the book he had selected a half dozen times before, so he put it to one side and turned out the light.

Outside the window, the dim starlight was just sufficient to outline the twenty rough crosses that stood in white rows.

"Ah, James," he said, "you're starting to take things seriously again. Not like you at all. You need a holiday. The Gold Coast, that's it. The Great Australian Barrier Reef and all that. A nice half a million mile round trip from here. But then again, I'll bet you can't rent a room there now for love nor money." He smiled at the morbid jest, turned over, and went to sleep.

The next day was announced by his alarm clock. Outside it was still dark and would be for another week. It always made Homerson think of getting up before dawn to milk his father's cows. As usual, he breakfasted from his stockpile of food from the store, heated over an electric stove. He spent some time while eating working with a screwdriver on the tape-recorder and winding up all the spilled tape. Then he set the drive in motion, checked to see everything was working, and hooked it back into the intercom.

"Good Morning, James!" he said into the intercom. "I'm off down the Hole today to check out my idea that quasars are interstellar ramjets driven by aliens. I reckon that if I can detect the right kind of neutrino flux, I'll be set up for an article in *Nature*."

Years before, *Nature* had been pleased to run some of Homerson's serious contributions to scientific inquiry. Back then, his more odd-ball theories had been merely to make fun of and amuse his often dry-as-dust colleagues.

But now, the editors of *Nature* were drifting radioactive dust, and Homerson could allow himself the leisure to investigate all of his favourite unlikely ideas.

He packed half a dozen food-packets into his haversack, together with his pocket calculator, and three paperback novels. He often spent days in the Hole: it was best to be prepared.

The Hole was a mile-deep shaft drilled during the early years of lunar exploration to investigate the interior composition of the Moon. It had long outlived that purpose. In later years, the shaft had been used by the astronomers at the Observatory to detect those elusive particles, neutrinos. A mile beneath the surface, all other radiation was effectively screened off, but neutrinos, ghost-like, flew straight through the entire bulk of the Moon without pausing.

The Hole was six miles from the rest of the Observatory. To get there, Homerson had to take the crawler. This was virtually a spaceship on wheels, complete with airlock, and weeks of supplies, designed to keep the crew alive in case of a breakdown far from help. The crawler had saved Homerson's life once. Now he climbed into the driving seat, and headed the vehicle off towards a distant marker.

To his left as he drove, starlight glinted off the acres of solar energy panels, which still kept the Observatory supplied with abundant electricity. All of the machines at the base still ran, all the instruments could still observe. Even Homerson, the observer, was still alive.

He soon reached the final marker along the path, and the huge lift gantry that stood above the shaft.

Getting into the lift meant putting on the spacesuit again, a procedure which always annoyed him, but it was unavoidable: the lift was not pressurised. It was an open, rickety affair, and his stomach always fluttered when he had to use it. But there was work to be done. Hampered by the bulky spacesuit, he stepped into the lift and pressed the down button to start the slow, shuddering descent.

On the way down Homerson hummed a tuneless hum to himself and discovered again that he couldn't scratch his nose while wearing a spacesuit. He spent the rest of the descent pondering some improbable new design feature that would eliminate this difficulty. None of his ideas for this had the slightest hope of working.

The lift stopped. Homerson started hand-cranking the door of the airlock set into the stone wall in front of him. He stepped in, closed the outer door, and started the same procedure on the inner one. It opened on a rough-hewn stone corridor. He reached out and snapped on the electric light. Moisture gleamed along the walls.

At the end of the corridor was a huge cavern, almost filled with the bulk of a massive tank of liquid. Instruments and electronic equipment were attached to the tank, like barnacles on the side of a ship. This tank, a much more sophisticated version of earlier models, detected the incredibly rare collisions of neutrinos with matter, and helped determine their energy and direction of impact.

Homerson sat down at the instrument board, which was hooked into the computer above ground by means of a terminal outlet. He began to program the experiment: Look for these type of neutrinos from this

direction, analyse statistically, then print out results and go on to the next direction. In a week or so, the instruments might come up with enough information to let him decide whether or not he was on the wrong trail entirely. Homerson really had little doubt that he was chasing his own tail. Although he was convinced that somewhere in this vast universe there were other intelligences, he didn't expect to detect their works this easily.

While he waited to see what the results would be, he could sit and read, or play his never-ending game of pontoon with the computer, to which he was now in debt to the sum of several million dollars. It hardly bothered him.

But after Homerson had been down the Hole for four hours or so, he suddenly looked up from the book he was reading, and stared at the telephone that was mounted on the stone wall of the cavern.

He was thinking of the day, years ago now, when he had been here, doing some rather more serious study, when the phone had rung, filling the still air with discordant sound. As soon as it had rung, he had felt that there was something wrong. He had been right.

It had been his old friend and colleague, John Pilgrim.

Each time Homerson came down the Hole, sooner or later he heard that phone ring in his mind, imagined himself picking up the receiver and heard again John Pilgrim's shaken voice:

"Homerson... we've got a problem up here..."

And Pilgrim had gone on to describe that problem to Homerson. The scientists at the Observatory had been listening to a news program about the worsening relations between the United States and the People's Republic. They had been interrupted by the sight of an impossibly bright flash on the nearby horizon, and their instruments suddenly running wild. Only minutes later, the program, which was relayed by circumlunar satellite from Earth, announced the beginning of a nuclear attack on America. Then it ended in a burst of static.

The Chinese must have been planning their attack for days, and sent missiles on their way to the Moon to wipe out the American bases there, timed to hit when their main attack began. The missile aimed at the Observatory had missed. But not by enough. In seeing that flash, even before the radiation counters told their grim story, the scientists had known they were dead men. It had taken them twelve hours to remember Homerson, doing research down the Hole.

Homerson sat deep in thought, remembering. At last, he shook his head, and went to the phone to dial his office number. "Hello, James," he said when the call was answered by the computer. "I can't see any sign of those alien rocketships, and I'm getting the creeps down here. I'm coming up."

"Hello, Homerson," said the phone. "Did I tell you about the time when I was first coming up to the Moon, and there was a stores clerk who wanted to know what purpose was served by the colour television receiver I was bringing?"

"Yes, James," he said, hanging up the phone. "Many times." He sighed, and set off back to the surface.

He had tried to find out what had happened, of course. he had taken the crawler and made the long journey around the edge of the Moon until the Earth came in sight. But his radio antenna brought in nothing but static, and one of his more sophisticated devices had enabled him to measure the surface temperature on the lovely blue and white globe. And when he had the results of that, he had turned the crawler around and headed back to the Observatory.

The lift rose jerkily up the shaft, to come to a halt at the surface. He clambered inside the crawler, and set off to the base. Working in the spacesuit was hot work, and by the time he reached his office, sweat was pouring from him. he sat quietly for a long time as he tried to recover from his exertion. At last, he took a glass of clear water from the recycling system, and went over to the computer. Piled next to it were tangled lengths of punched tape which was his data on the peculiar emissions from Beta Hydri, made over a period of a week. Homerson had been meaning to get the machine to analyse them for some days now. He squatted down and spent some time carefully sorting out the tape, being careful not to tear any of it. He had a set of standard programs on file which he used each time he did this sort of thing. The first program was more or less a long-standing joke. His colleagues had called it the "Little Green Man" program. Its purpose was to discover any patterns in the data.

The tapes sorted out, Homerson called up his program, and let the machine analyse the tapes that he fed it.

The computer chattered busily to itself as it ingested the paper tapes. Homerson went over to a bench and made himself a cup of coffee. He came back to the computer with the cup in his hand just as the typewriter began typing. He bent over the paper as he sipped his coffee.

```
FILE      BT      948      LGM      RUN      #1
STRING          ITERATIONS          DETECTED
STRING(1) ITERATION 48 BITS IN LENGTH
STRING(1) ITERATED 192 TIMES IN THIS RUN
STRING(2)...
```

Homerson over-rode the automatic printout and sat down at the typewriter looking at the apparently simple message printed on the endless paper. His program had been set up to analyse each day's run on the star, and to record any lengths of input, or "strings" which had repeated themselves during the run. If the emission had been random, as he had expected, any repeated strings would be short, or infrequent. This was clearly not so.

PRINT STRING(1), he typed.

The typewriter began work immediately:

```
000100100011010001010110011110001001101010111
100.
```

It took Homerson a moment or two before he could mentally break the string into groups and, in a sudden surge of excitement, see the pattern. The natural numbers, from one to twelve, in binary code.

The irony of his position swamped Homerson. It seemed there was no doubt: here was a simple message from the stars. Somewhere out amidst the great

emptiness of space, twenty-one years and a hundred and twenty five trillion miles away, some unknown, unknowable being was tapping away at a key: one, two, three... And of all mankind, he alone remained to hear that message.

Then he was puzzled. Surely, if all that the signal was doing was to repeat that count, he would have noticed that himself when he was listening to the signal before. Then it had seemed random and complex, not this simple "Here-I-Am message. He turned off the terminal, deep in thought. Outside, the magnificent desolation of the Moon had changed not one iota. He donned his spacesuit again, and set off back to the radio-telescope control room.

Before, when he had been monitoring those strange emissions from the star, he had listened to the radio signal for a few minutes, and then become bored with the noise and turned it off.

The great antenna was again tracking Beta Hydri. Homerson sat in the control room, listening to the signal. This time he listened patiently for three hours.

He timed what he heard. Seventy-three and a half minutes of the seemingly random chatter he had heard before. Twelve and a quarter minutes of a complex, but apparently coded signal. And just over six minutes of the simple counting-to-twelve signal. Then the seventy-three and a half minutes again, and the pattern kept on repeating. Except that the signals in the long and medium stretches seemed not to be repeated exactly each time.

He switched on the intercom. "James!" he began, but stopped suddenly. If it had been John Pilgrim on the

other end of the line, or any of his old, long dead colleagues, he could have astounded them with the news, could have said: "I told you so". could have shared his joy. But there was only the slowly turning reels of the tape-recorder. He turned off the intercom. There was no one there. There was no one anywhere, except himself. And the aliens.

Homerson thought about the timing of the different kinds of signal. It seemed to make sense. There would be little point in broadcasting: "Come In, Out There" all the time until a reply was heard. With the speed of light being such a snail's pace among the stars, it would take years for that to happen. The signal Homerson was now listening to had been travelling for twenty-one years. Better for the aliens to transmit the simple Here-I-Am, a language key and complex information all at the same time. Anyone picking up the simple signal would record all of the transmissions, and come back to the information there when he had learned to understand it.

Very well, Homerson would learn to understand it.

As the days passed, Homerson collected more and more tapes of the alien transmissions, and with the help of the computer, began to analyse them. He was fortunate in one respect: Beta Hydri was sufficiently close to the South Celestial Pole that it did not set from the latitude of the Observatory, and so his observations were not interrupted for two weeks as the Moon turned slowly through its day.

He found that the twelve and a quarter minute message repeated every nine and a half days. The longer, more complicated message had not repeated at all while the tapes were running. Homerson did not

expect it to do so while he lived. There must be an endless amount of information to be broadcast.

He was working himself too hard: since he had begun analysing the alien transmissions, he had been doing with little sleep and less food. Once, walking in his spacesuit between his rooms and the radio-telescope control centre, his heart began pounding erratically, and he had to sit down in the black dust while he held a hand to his chest and prayed that he would not die. Not now, he thought, not now that after all this time there is something to live for. And the pounding had gone away, after frightening him badly. And he went on with his work.

TRACK BETA HYDRI he told the computer.

TRACKING STAR BETA HYDRI it replied, and in the crater, the huge antenna swung under the computer's guidance.

The key to the messages was a nine day long series of lessons. After the computer had analysed them. Homerson recognised them as ingenious. He found that he learned easily. Simple mathematics combined with simple cartoon-like pictures made by rows of ones and zeros provided understanding of basic ideas. Each piece of information he learned, he entered into the computer. He ate and slept next to that machine, and in his sleep, he dreamt of talking face to face with monsters.

Even when he had the code learned, it would take him years to unravel the complex mass of signals from Beta Hydri. If he lived long enough, he could probably program the computer to solve the problem and put the information on tape. Homerson had no idea how long the computer could operate without being serviced, but

it was probably quite a long time. It seemed a futile gesture, this: there was no one to listen to those tapes. But Homerson was trained a scientist, and more particularly, an astronomer: the concept of abstract knowledge for its own sake had been trained into him long ago.

But more importantly, when he had the code learned, he could reply to the stars. The alien message seemed keen on getting replies, no matter how long delayed. There were simple instructions on how to communicate using receiving equipment, something Homerson already knew.

There came a day when he understood each one of the course of lessons, and had gained an understanding of how the simple code translated the complex information. All of the code was programmed into the computer. The great radio telescope was as capable of transmitting as it was of receiving and it was pointed at its target.

Homerson sat before the computer terminal, looking out of the window of his study. The slow lunar dawn was but hours away. Soon, the sun would raise its burning edge above the horizon, and flood the desolate plain with fire.

Memory came back to Homerson like that imagined flood of light. For the first time in many days he recalled the terrible war, and the twenty graves outside. He thought of cities swept by firestorms, of millions of people dying quickly, or like John Pilgrim and his other friends, slowly from the horror of radiation sickness. Of the insanity of Man.

Eventually, Homerson turned off the electric typewriter, and went walking slowly around the silent Observatory. He walked into the mess-room, and looked for a while at the rows of empty tables and chairs, and heard the echoes of laughter and talk. He walked off slowly through the hollow corridors, his hands clasped behind his back.

His feelings were confused. He missed his old companions now more than ever he had during the long lonely years. "I'm convinced this broadcast is being made by an alien computer, and I'm afraid to tell it I'm human in case it gets offended," he would have told John Pilgrim. Or: "There aliens tell me my theory of Cosmic Inflation is correct. You should hear the price of uranium out there!". But it was all in vain. There was no one to spin tales to any more. He no longer had the spirit to call himself up and tell improbable tales to the tape-recorder. Because, after all, there *was* someone to talk to.

He was back at his office. He went in and turned the typewriter back on.

FETCH FILE TRANSLATE, he typed.

FILE TRANSLATE BT 963 1 READY, it replied.

TRANSMIT TEXT BETA HYDRI, he entered.

What do I say to a bunch of aliens? he thought?

He paused again, and looked through the window to the small graveyard, and to the crosses he had erected one by one, more out of a sense of duty than of religion.

He began to type.

I SPEAK FOR THE PEOPLES OF EARTH, he typed. LIFE FOR MANKIND IS IDYLLIC. WE HAVE A

UNIFIED CLASSLESS SOCIETY, AND NO MAN EVER
GOES HUNGRY.

LONG AGO WE SOLVED ALL OF OUR SOCIAL
PROBLEMS. WE HAVE NO MORE WAR.

OUR SCIENCE IS EQUALLY ADVANCED

As he typed, Homerson began to smile.

Deep Freeze

This story was published in the magazine 'Science Fiction Monthly' in 1976.

It was done. With care. yet without compassion, they laid the cold body in the tomb, and stood back. The lid of the coffin, silent and steady, closed on his face.

Jason Mydwell was dead.

Some say that death is like a sleep without end. So then, Mydwell slept, and dreamed the long dark dream of eternity as the years passed unreckoned.

Yet Mydwell's rest was not that of the blessed. and his body did not pass into the dust from which it came. And his sleep was not without end. There came a time when he awoke.

His awakening was slow. Time after time, his mind came almost to consciousness and then drifted back into thoughtless sleep, like a cork bobbing to the surface of water and then dipping back again. But at last, his thoughts became clear.

I've cheated them.

It was his first thought, and he clung to it and used it to keep his mind afloat.

I've cheated them. All the fools, the hangers-on, the backbiters. all those wearying associates: and that hopeless bitch, my wife. Dead. or ancient. And Mydwell is alive.

There was a dull, ruddy light, and he lay for a long time seeing only that. There was a soft strumming noise somewhere near his head. and a cold, sharp smell of chemicals. He was cold. Finally, he raised his hands before his face; they were white, and the veins stood out clearly. He raised them until they met the cold, resistant surface of glass. He pushed, and the coffin lid swung open.

He sat up. The chamber was lit with a dim red light, like the safety light in a photographic darkroom. In the crimson glow, he could see scores of glass-topped coffins stretching away from his own on either side, and in rows before and behind him. The floor was made of metal sheeting, networked with holes. Through the holes, beneath and above him, he could dimly make out other floors like this one. The chamber was stark and bare of ornament, and the bloody light disturbed him. Mydwell found himself frowning.

He swung his legs over the side of the coffin and dropped a few inches to the floor. His muscles protested and quivered. He stood shakily and realised that he would have to take things carefully now. Even Lazarus must have been wobbly on his legs when he was first raised up. It was not a common experience.

Now he noticed the thin coating of dust on everything. The airconditioning system was obviously not working as well as could be expected. The air felt dry, dead. tomb-like. Probably once this level was filled up, no one ever came down to check all was correct, and

that was negligence. Mydwell had paid money and more to the company which called itself Eternity, and he decided that as one of the few customers of that organisation to be in a position to complain about the service, he might well set up a malpractice suit against them, thereby beginning his new career. The thought was amusing, and pleasant, and for the first time since he had awoken, he smiled.

His legs stronger now. he set off down the long aisle past the rows of frozen corpses. Agony and sorrow was etched deep into most of the marble-hard faces of the dead. but Mydwell passed them by. His concern was with life, not death. He had felt no pain, borne no sorrow.

At the end of the corridor was an elevator. He pressed the call-button, and then cursed when no answering light came on. It might be night-time outside, and the machinery turned off. He turned to the narrow stairwell, and began to ascend.

It had taken much of his time and money to put him here.

Years before now, he had used his wealth and his forcefulness to escape from a world which had begun to tire him.

He reached the next floor. More coffins.

It had taken ingenuity as well as money. Bribing the doctors to write the reports saying he had an inoperable, terminal cancer; using his influence to ensure that Eternity did not check those reports; paying his lawyers to set up a fund he could legally draw on when he was resurrected; and most importantly, blackmailing

the technician to set the controls of his Eternity machine to awaken him a mere thirty years after he had entered the chamber.

Again, more coffins stretching way, some of them empty, with their lids standing open.

Now, thirty years later, his wife and friends dead or dying, he would be a free man. And most of all, the world would have changed enough to make life interesting again.

More and more empty coffins: they stood in rows, as though awaiting the dead. He walked slowly up one more flight of stairs, his heart pounding. He had ascended seven floors. At last the sign in the stairwell read: "Ground Floor". He walked away from the stairs. Here too were the glass coffins, most of them open and empty. The red light still prevailed. His white robe was made scarlet by the light.

At the end of the long corridor of coffins he had entered was a hatchway. Part of the information he had extracted from his blackmailed technician was the operation of this hatch. But it seemed he had no need of that information: the hatchway stood open. White daylight spilt into the corridor, making a hatch, colourful contrast against the red-lit chamber. Something was wrong.

He paused, and then walked forward rapidly towards the hatch. Just before he reached it, however, he stopped still. Above the hatch was a time-recording device marking off the years, days and minutes. The seconds moved smoothly on as he watched. But it was the figure recording the year that had halted him.

He had been betrayed.

Not thirty years, but nearly *two hundred* had passed since he entered the chamber. His blackmail victim had taken a long-delayed revenge, and Mydwell had been delivered into a dark night far longer than he had planned. Two hundred years... he stood still, his fists clenched, overcome with shock.

The hatch still stood open, and he hastened to it. Outside that doorway should have been the administrative and reception areas of Eternity. What in fact met his eyes was terribly different. He stepped outside, into the bleak sunlight.

White dazzled his eyes. reflected brightly from tumbled stone and dry, dusty earth. He shaded his face, waiting for his sight to adjust.

The sun shone harshly down on desolation. Something huge and monstrous had sat down upon the land, grinding buildings to dust and smashing the hills flat. Blocks of whitened stone, the remnants of the massive Eternity Centre, lay tumbled roughly about. shattered and split like the bones of some fossil prehistoric monster. The white glare melted into a ruddy ochre in the distance, like the colour of powdered brick. Long dead trees were fallen in lines pointing away from where the city centre had once been. The sky was blue and cloudless, and nothing stirred.

Mydwell stood stunned for a time. He felt as though he was on the shore of some great dry ocean, fearing to plunge into it lest he drown. He clung to the edge of the hatchway and shuddered.

Eternity had built well. The chamber lay massively. rooted deep in the ground, and was still intact, with its stone covering peeled away from it by some cataclysm. Those within it, sleeping through the ages waiting for a cure, would sleep undisturbed until the sun grew dim. Deep under the chamber must be a power generator which kept the lights and the cooling equipment supplied. Time would not touch the frozen dead.

After the shock had subsided, he began to notice other details of the dread landscape. Grass grew yellow and straggling here and there, straining up out of the rubble towards the sun. Stunted shrubs dotted the white, and against the blue dome of the sky he could see the dark dot of a bird moving in great slow circles.

He walked back into the blood-red catacomb in despair. and wandered aimlessly for a time around the topmost level. There were few frozen bodies here: most of the coffins were vacant. He noticed also that the dust here was disturbed and patterned. Animals of some sort had clearly been at least this far within the Centre. Mydwell leaned heavily against one of the coffins for a moment. Confusion filled his thoughts: he had not planned for this. All of the things he had worked for, all the assumptions of value of which he had based his life and the hope on which he had based his dream. had been suddenly swept away. leaving behind only desolation.

The coffin he leaned against had an occupant. Through the cold-misted glass Mydwell could see the oval face of a young girl, deathly pale and drawn, with her eyelids closed. She looked at the same time innocent

and tragic. as the drowned Ophelia might. He turned away.

He came at last to an open room with lockers lining its walls.. He realised that this must be where the immediate personal belongings of the dead must be kept. All the lockers carried names,, and he found his own quickly. His thumbprint on the lock opened it, and he looked within. His clothes, shoes and briefcase were there, of no use to him now. But then, he looked at his bare feet, and reached into the locker and brought out the shoes.

He stood again at the entrance hatch of the chamber. He stepped out, and walked cautiously through the rubble. Somewhere there must be other humans alive. Clearly, there had been a catastrophic nuclear war or something similar, but if grass and crows could survive, then men might well have done the same.

Hours passed, and the declining sun turned the tumbled blocks into a patchwork of light and shadow. Mydwell, having walked for kilometers through the rubble towards the city, returned in defeat to the chamber. sitting half-buried in the dust like a giant metallic cannister. No life, except a few scavenging crows, and the stunted, yellow-leaved shrubs climbing out of the dead land. Only the twisted, rusted metal and shattered stone stretching towards the western horizon. Hunger had begun to claw at his stomach, and there was nothing to eat.

He was about to step within the chamber again when he saw the skeleton, covered to its bony waist in sand. He went over to look at it, and scuffed some of the dust away with his foot. A woman, by the shape of the

pelvis. He stood up from his examination, and glared bitterly at the setting sun. He kicked at the skeleton in anger, and the skull came loose and rolled and rattled down the dusty slope. The last rays of the sleepy sun painted the metal of the chamber in red. and he stepped inside to the darker redness of the emergency lights.

He looked out of the open hatchway and saw the sun passing down behind the great dead plain where the city had once stood, and felt anguish tear at his heart. When the light outside had gone. he shuddered and turned away.

The hatch would not close. A piece of rock had long ago become wedged in the doorway, and would not move. He ignored the door and paced back further within the chamber. He sat down on the floor.

It took him some time to identify the emotion that he felt most strongly at that moment. It was simple loneliness. As a rich man, he had been used to crowds of retainers and visitors, used to large parties in his manor, used to the overcrowded streets, filled to overflowing with the poor and starving. Now it appeared he was totally alone for the first time in his life. The feeling was unbearable.

His sudden realisation that he need not be alone was like a blow. He was surrounded by the thousands of people within the Eternity chamber, frozen in their coffins. Thinking of them as corpses had kept this idea from him before. All he need do was revive one or more of the sleeping bodies and he would have company: someone to talk to, to reason with, to help him survive in this dead world.

Mydwell stood and looked around. There were only a half-dozen or so occupied coffins on this level. He walked over to the nearest one. Again the face of the drowned Ophelia-girl stared vacantly up at him, pathetic and sad. He looked at the controls located at the bottom of the coffin, beneath the name plate. They were simple enough. He pressed a button, turned a timing control, and then stood back to wait.

The time passed slowly as the temperature inside the coffin rose gradually and the cold-misted glass became clear. Tiny needles entered the skin of the girl and forced life-arousing chemicals into her system. Her heart began to pump again and colour came back into her cheeks. Time passed. At last, she stirred and awoke, and looked into Mydwell's eyes. She was confused and empty of memories for some minutes, but at last, she spoke.

"Have they found a cure, then? Am I cured?" Mydwell's heart contracted. He had not thought of this. "No," he said, "No, they haven't found a cure." The girl was distraught and panicstricken for an instant. "Why ..." she began, and then stopped, not understanding.

"Can you stand?" he asked. Somehow, he felt concerned, responsible for the girl, and these were foreign emotions to the Jason Mydwell who had lived two hundred years ago. He felt almost afraid of himself.

The girl sat up cautiously, still frowning in puzzlement and peering through the dim light. He helped her to her feet, and held her as she walked unsteadily forward. He took her to the hatchway and made her look out into the darkness.

"There was a city out there," he said.

"Yes, of course..."

"I awoke some hours ago ... some malfunction of the machinery." he lied. "I came up here and looked outside. There isn't any city out there any longer."

"What? What do you mean?"

"Nuclear warhead, I'd say But it's gone."

"And I'm not going to be cured of my cancer?"

Mydwell hesitated. "No."

"Oh God!" she bent her head and wept. Mydwell could not console her. She was young, perhaps twenty, and very beautiful. Mydwell felt himself aroused, and felt ashamed. Her sobs seemed to go on forever, and she left him and huddled in a corner as she wept. Mydwell sat on the floor again, and kept his thoughts to himself. At last, her tears stopped, and when he looked, she had fallen asleep. After some hours, he too was asleep.

In the morning, he showed her the scene outside the hatchway. She looked out for a time, and then turned away and padded on bare feet within the chamber. Mydwell, feeling helpless, left her and went out again.

His hunger was now almost unbearable. He knew that men could go for many days without food and not die, but he had been used to eating regularly each day. Hunger to Mydwell had been missing out on breakfast. Now his stomach held his attention in a relentless grip. He must find food, or die. He walked around the outside of the chamber this time. heading away from the city centre. Far enough away from the centre of the blast, things must be better.

Half an hours walk away from the chamber. he saw the tribe.

He had come to the top of a rise overlooking a small valley. The broken blocks of stone and brick, evidently tossed many kilometres by the blast, were fewer here, and the valley showed patchy spots of grey-green grass. On the horizon, hills filmed with the blue of distance showed themselves. And in the valley also was a ragged trail of half-naked sun-browned men, walking and chanting at the same time. They wore ragged breeches about their legs, and ornament and body paint on their torsoes. Their hair was black and bushy. Women and children trailed at the rear.

Mydwell stood still, watching. In his mind were surprise and elation, but his stomach had its own thoughts. If there were men alive, there must be food to be had, that was what his guts reminded him.

The savages had not yet seen Mydwell standing stone-still on the rise. They continued their way along a faint trail, approaching him.

At their head was a figure garbed even more strangely to the eyes of the watcher on the hill, crowned with a skull-helmet, and garbed in a hairy coat. A necklace of bones was about his throat. and he led the chanting of the tribe by beating with his hand on a small drum he carried.

To Mydwell, however, the strangest thing, of all was that these savages, unlike those he had seen in his own day, were not dark-skinned African negroes or Australian aboriginals, but. beneath their ten, white and thin-lipped like himself. The effect was curiously disturbing, like something obscene or out of joint. He

decided to watch no longer. He yelled out something incoherent but loud, and waved his arms.

The effect was startling. All at once the savages - shaman, men and women - looked up at Mydwell standing there in his white hospital gown, made loud cries of panic, and turned to flee. Mydwell yelled again, and they ran all the faster. The only individual who did not run was the shaman, who walked backwards at a rapid pace, rattling his necklace and baring his teeth at the vision, his eyes showing their whites. Then he too turned and fled along the dusty track. In a moment, there was no one to be seen.

Mydwell, frustrated and worried, climbed down the slope to where the savages had been. Some of them had dropped the packages they had been carrying, and he crouched to examine one of these. Inside were a number of bone carvings, a sharp flint knife, and some strips of roasted meat. He grabbed at the meat and bit into it gratefully. It tasted odd, but welcome. Soon his stomach stopped complaining and he took all of the meat he could find in the few packages there and carried it back towards the chamber.

The girl was huddled by the door of the chamber, looking out with blank eyes. He gave her some strips of meat, and she ate slowly and in silence. Mydwell feared that the shock of her situation, together with her knowledge of her fatal illness, had turned her mind and let spill her reason. He did not press conversation, hoping she would regain normality soon.

The day passed, and Mydwell explored the nearby area for anything of value. As the sun began to sink

again, she came to him inside the vault, and looked up with reddened eyes.

"What's going to happen?" she asked.

It was hard in the saying, but he said it. "I don't know." Then, as her gaze wandered, "There are savages out there. I stole the meat from them. They have a source of food ... I'd thought ... perhaps we could awaken some or all of the people here in the Centre, and then maybe together we could get something going: civilisation. Anything would be better than what those savages have.

She looked up at him pathetically for a long moment.

"No." she said. "Don't you remember? All of us are dying here. We are dead already, all of us. How can we bring life to anything?" Her voice was becoming louder, hysterical. "And me ... I'm going to die! And it's going to hurt, damn it! Why did you have to wake me up? Why me? Why couldn't you let me stay asleep. and never know?" She was shouting now, and Mydwell had her by the shoulders, trying to calm her.

All of a sudden her voice dropped almost to a whisper. "Put me back, please. I want to go to sleep again. Please..." And she began to weep again.

He could think of nothing to say. He kept silent, and took her back to the coffin, helped her in, and turned the controls on once more. She closed her eyes, and the cold gradually returned and misted the glass lid. Ophelia once again allowed a Christian burial. He leant on the coffin, looking at her child's face, and wept. He had not done so for very many years.

The dawn broke over the landscape like a red, hurrying tide of light. Mydwell stood and watched the shadows of the rubble ebb away. There were clouds on the still dark western horizon, and the chance of rain. He sat and watched, alone. Somehow now he felt incomparably worse alone than he had before he had woken the girl. A heavy weight, like a great chain, seemed to hang about him, and he was forced to drag it along with him in slow, plodding steps.

The scraps of meat he had stolen from the savages were gone. He had no choice. He had to find the savages once again and try to make a friendly contact this time. They must know how to survive in this blasted world. Perhaps further away from the city animals still ran wild. Or the savages must have rediscovered husbandry and agriculture. He had to find out. The alternative of placing himself back in deep freeze he did not see as a possibility, any worse than he would have seen suicide as a way out. It was not in his nature.

At last, then, Mydwell set off again, away from the desert that had been a city, and found the trail where he had seen the savage people the day before. The day was cold, and he shivered in his gown. It would rain before long. And indeed, the first heavy drops came thudding into the dust at his feet. Eventually, the downpour began, and he was soaked, but he kept walking along the trail, towards the only hope that he had left. The sun came out and dried him, and he walked on.

He came on the village suddenly. He thought of it as a village, but really it was no more than a clutter of skin tents and open campfires. Children ran about naked, and women sat sewing rough garments. The men

stood around. talking in an odd tongue. Rather than walk into the village and frighten them all, Mydwell stood quietly at the edge of the crude wooden compound and waited until he was noticed.

There was general consternation then, and the women leapt up and ran around staring at him and wailing. But there was less panic this time, and eventually the nervous shaman approached Mydwell, bowing to the ground. and rattling his bones and speaking, many prayers. Mydwell waited. The wizard close up was equally as odd as at a distance. He was painted garishly. and bones pierced his ears. White scars were all over his body. Mydwell could see him shaking in fear, but being forced forward by his need to uphold his reputation.

Finally, he was close enough to touch. The shaman stared wide-eyed at Mydwell's face. and then prostrated himself full-length at Mydwell's feet. Mydwell, somehow realising what was required, bent down and lifted up the wizard. A relaxed moan came from the watching crowd of primitives. Jason smiled. The shaman grinned, and the crowd ran forward to surround Mydwell, cautiously reaching out and touching his robe, his hands.

An unorganized, wild celebration began, with much beating of sticks and atonal singing and frenzied dancing. Mydwell sat surrounded by it all, in the place of honour, feeling hungry. In a quiet moment, he made sign language at the shaman. seated at his side. Food. The shaman nodded and frowned. He made a sign to one of the women. who went off and returned, minutes later, with a small bowl of wild blackberries. The

shaman made grunting noises, and waved his hands vaguely. Apparently this was all the food available in the village at this time. He must have interrupted a hunting party the day before.

Mydwell was regarded by all of the savages with awe. He could see oft-renewed astonishment in their faces as they watched him. The shaman seemed to be the most astonished and disturbed of all.

After a time, the shaman made signals indicating that they would go hunting for food again, this time with Mydwell along as a bringer of good-luck. Mydwell agreed, although he did not relish the long walk that he would probably be forced to make. His feet were already blistered with his walk out to the village. But if he expected to eat these people's food and live with them he would have to prove himself valuable in some other way than just as an object of supernatural fear.

Before the hunting party left the shaman performed a strange ceremony. He took a long, sharp flint knife, kissed it, and raised it to the sun. The primitives looked on expectantly. Then suddenly, the shaman raised the knife in both hands above his head, and with a shout, plunged it into the earth. The crowd yelled. Mydwell was merely confused.

The ceremony over, the sweating witch doctor grabbed Mydwell's arm and brought him to the head of a ragged procession of men and women. The whole tribe evidently went along on the hunting trips. They were armed only with bone clubs and knives of flint.

They set off, Mydwell ambling along at the side of the short legged shaman, in the direction of the city. In the still cloudy sky, crows circled above them. Mydwell

now was content to be led: his own resolve and control of events had disappeared. As they walked, he realised how tired he was getting. Hope that he could rejoin human company had kept him going on the way to the village. Now, his aim at least partially achieved, his body was letting him know its complaints. And he began to think again of the sad Ophelia-girl who he had put back into her coffin the night before. He realised with a start that he had never even asked her what her name was. He felt a feeling of deep loss, and yet he did not understand why he felt so.

At some point, he must have tripped and fallen, and the shaman ordered some of the stronger savages to hoist Mydwell to their shoulders. In spite of the jolting ride, he found himself drifting off to sleep. He woke for a moment when the tribe came to the ridge beyond the little valley where Mydwell had first seen them, and he saw again the metal collossus buried in the sand that was the Eternity Chamber. And beyond, lit with the grey cloudy sky, the plain that had been a city. A fragment of poetry came into his mind then: Look on my works, ye mighty, and despair... The tribe raised their bone clubs high, and marched on. Mydwell dozed again on the shoulders of the sweating man.

When he again opened his eyes, the tribe was lined up in front of the entrance to the Eternity Chamber. He frowned in puzzlement. The tribe apparently regarded the object as a sort of shrine. That would explain their awe of him: he must be like a ghost to them.

The shaman marched towards the hatchway, and motioned Mydwell to follow. He got down from the shoulders of the men and did so.

It was not until they were inside the chamber, in that dim red light, and the shaman was stood next to the cold coffin where the sad girl lay, that Mydwell began to understand. and a feeling of horror began to steal over him. And when the shaman opened the glass lid and stood poised with his stone knife ready. Mydwell knew.

He leapt forward in horror and disgust to grasp the shaman by the neck and shake him, trying by his action to remove the terrible knowledge he had come to. The shaman. startled, cried out, and the men of the tribe grappled with Mydwell and tore him away from the witch-doctor, who stood coughing and spluttering for some moments before he resumed his position.

Mydwell struggled in the arms of his captors, but they seemed to have lost their awe of him after his attack. The sacrifice went on.

Food? There was plenty of food, there for the taking. Food enough to keep a small tribe alive for many years. All that meat...

The crows outside descended in a black cloud. waiting for the scraps.

A Compassionate People

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and published by Void Publications in 1978.*

In the tank at the rear of the darkened room, there was movement.

Dr. Jacobs turned away from the window where he had been watching the sun set over the desert, and came back to gaze through the gloom at the thing in the tank. Movement of any kind had been rare in the tank of late, and he stood long moments, hoping to catch any tremor, any sign. But now there was nothing, and the creature lay as before on the bottom of the tank. After a while, Jacobs left it again and went back to the window.

Beneath him, copper-plated by the declining sun, the city ran away like a line of trees marking a river, alongside the endless highway out to the horizon. As Jacobs watched, yellow lights sparkled on one by one all over the city, in preparation for the night. Jacobs sighed.

He watched the dying day in darkness, as he had done often enough before, though it would have been less than a moment's work to turn on the electric light and banish the dark. His thoughts were more suited to the gloom this night. There had been evenings before when he had felt despair in this room, but before there had always been at least the barest glimmer of hope. Now he knew, in spite of himself, that there was none.

Tonight he would receive the final order, and his dream would die. He would end his life.

They had been long years, the years of his burden. When Jacobs had begun his task, nearly ten years before, he had been, and felt, a young man. Now he felt older than his years told.

The door chimed. Jacobs' breath stopped, but he went, hands trembling and heart pounding madly, to answer the door. It was Drage, as he had known it would be. Drage strode in.

Drage was a soldier. His rank had long been forgotten by Jacobs, who had no head for these distinctions. At any rate, Drage was a career soldier, an officer. Devoid of his uniform and voice, it would have been obvious in his bearing, and the solid, severe lines of his face. Iron and steel, was Drage. His hair was grey and cut close to his head, combining with the hollowness of his cheeks to make his face like a skull. Drage peered into the gloom, silhouetted by the light in the hallway.

"Damn it, Carl! Don't you ever put on the lights in this place?" Jacobs, embarrassed, snapped on the lights, and then blinked with the sudden glare. Drage stepped fully into the room and closed the door.

In the harsh light, the thing in the tank was obscene. Its outlines were mercifully vague in the murky liquid in which it half floated. The colours were very, very wrong. What might have been limbs, organs and eyes, drifted limply away from the ovoid body, and the tubes expelled darker liquids into the mire. As the light came on, it moved spasmodically, once, and then lay still. Devices at the side of the tank purred and hummed and glugged, pumping fluid and nutrients, and all the

time monitoring, watching over the faint life of the creature. Drage stared at the thing for an instant, looked faintly sick as usual, and then turned away.

Jacobs stood with his back to the door, feeling suddenly exhausted. "Well then," he said, "what is it to be?" Drage looked back at him for a second with something like irritation. Drage's emotions were always fleeting and vague. Jacobs supposed it had something to do with his military training.

"You know as well as I do what the answer is to be," he said. "But for the record - you have to terminate the project."

Jacobs looked sadly past the soldier, out of the window at the twinkling stars. "That's fine language," he said. "What you mean is that I have to kill it." And he nodded towards the tank.

"I shan't debate words with you, Carl. Yes, you have to kill the creature. If there had been any hope of keeping it alive without constant supervision and supplies, or of it being able to communicate, then things might have been different. As it is, there's no difference between doing this and turning off a heart-lung machine that's keeping a human vegetable alive."

Dr. Carl Jacobs leant against the door, trying to marshal words for how he felt. All he could come out with at length was:

"It's still murder."

Drage, the soldier, shrugged.

There are two ways of looking at everything. From one point of view, midnight is a time: an instant recorded by the hands of a clock. From another, midnight is a place: that point on the surface of the spinning globe furthest from the sun, the very centre of the dark side of the planet. At the place called midnight, then, an object entered the atmosphere of the earth. Fast, much too fast. In its speed, it broke and burned as it hit the wall of air, and burning, cast light above the lands then at the place of midnight.

In that year, as before, the eyes of earth were everywhere. Men watched the skies with great telescopes and sweeping radar and the vast dishes of radio devices.

Some watched in order to learn more of the universe and its mystery. Others sat in rooms deep beneath the mountains, waiting for the first sign that the last war was upon mankind. And all of these saw the fire in the sky and measured it, to see if it was that for which they watched.

The falling object was that for which no man watched. It smashed, burning, into the desert, splitting in two as it fell. It was unexpected and unlooked for, but the place of midnight had not been shifted far before the desert was aswarm with men eager to see what had fallen there. And a single word went out, by official message or by rumour; *starship*.

They came for Jacobs when he was asleep and, uninterested in his protests, took him and put him on an aircraft bound for the desert. It was on the aircraft that Jacobs had first met grim-faced Drage. Drage had

offered no explanation, answered no questions on the plane. He had been polite, but very military.

To Carl Jacobs, being woken at three in the morning and abducted by a couple of soldiers was a phenomenon beyond explanation. He was young then, in his late twenties, and his enthusiasm for his subject and his popularity on television were world-renowned. Jacobs had been the biologist who had examined in detail the life forms brought back to earth by the last Titan lander, and had set up a whole new theory of the properties and origins of life. He was, in effect, the world's first practising exobiologist.

Others might have been chosen by the military that night, but Jacobs was famous. His name was the one most immediately connected with his field of study. Think of life outside the earth, and you thought of Doctor Carl Jacobs. So his fate was forged.

The plane landed on the makeshift desert strip with much bumping and rattling. The soldiers let Jacobs up from his seat and led him to the door. As he stepped out of the hatchway of the plane, he stopped and looked out at the scene.

It was still black night, but out across the desert, light blazed. Floodlights stood tall, casting colour about, taking photographs, recording, probing. It was like a movie set. But at the centre of the floodlights was something huge and broken. Metal was twisted and shorn, and fluids leaked into the sand. But even half destroyed, the shape was still somehow wrong and alien to Jacobs' sight. It was partially buried in the desert, but it could be seen that although the damage to the craft was terrible, parts of it were still whole.

Jacobs was astounded and horrified. Drage, behind him, tapped him gently on the shoulder. "Go down, please, Dr. Jacobs." So Jacobs went down the ladder from the aircraft, and wandered in fascination around the colossal wreck. Drage followed him patiently, a few footsteps behind. When Jacobs stopped, just outside of the floodlights, Drage came to his side.

"It hit three or four hours ago, Doctor. On the way down, it dropped off its engines, or so we guess. They crashed about a hundred miles north of here, right in the middle of the sandy desert. We haven't been too close; they are giving out a lot of radiation. Then this part made a last attempt to slow down, using some sort of auxiliary power... it's all guesses at this stage. We are presently trying to back track on its approach path to try and work out where it came from."

Jacobs looked around at Drage, stiff-upright in his uniform, no expression on his hollow face. "But why am I here?" Drage raised his eyebrows a fraction, for a moment. "I would have thought you would have guessed, Dr. Jacobs. We think there's still some of them alive in there." Jacobs stared back at the steaming wreck, and disbelief and horror came to him. But there was also in him a renewed sense of professional dignity. This was his field. He made preparations.

There were other scientists about, sleepy-eyed from being dragged protesting from their beds. Jacobs consulted with one of them briefly and then commandeered a young soldier who had been taking photographs. Jacobs and the soldier walked forward hesitantly towards the wreck.

There was an opening, which might have been a buckled analogue of a hatchway. Jacobs bent and peered within. It was dark, and there was an acrid smell. Ammonia. He stood up and called for gas masks and a torch. Jacobs went first, with the soldier following, the light from the torch showing a narrow cylindrical passageway, sloping gently upwards. It looked wet.

Jacobs was unused to such excitement and exercise. His heart pounded alarmingly, and he was forced to stop at regular intervals to catch his breath. Fifteen feet along the passageway, they came to the first chamber. Fluid trickled from a glasslike porthole nearly the same diameter as the passageway. Jacobs' torch was insufficient to reveal anything more than something dark and vague within. He went on... The young soldier followed, sweating.

A little further along, there was another chamber. The passageway bent at right angles towards the ground a few feet beyond, apparently due to the force of the crash; the metal was split and buckled. Jacobs went more carefully.

The third chamber was burst open. and something vile lay half-spilled out of the porthole, still oozing liquids. The fluid in which it had been encased had burst and poured down the passageway to the ground. The smell came even through the gasmasks. The soldier following Jacobs turned white at the sight of the thing in the chamber, retched, and crawled back rapidly.

Jacobs shone his torch down the passageway. Beyond this, all was destroyed. He backed out, after taking as many samples of the fluid and of the flesh of the creature as possible. He was covered in slime, and

cut by the torn metal, but he was incapable of noticing by that time. A fearful excitement had taken hold of him and kept him moving.

The other scientists helped him analyse his samples. They worked swiftly and ran to him with the results. Piece by piece, he fitted the picture together. Methane, hydrogen, ammonia, compounds of this, and trace elements of that. Temperature? Pressure? Jacobs ordered a hole to be bored within one of the sealed chambers and the pressure taken carefully. The soldier carrying out the job was clumsy. He took the pressure reading, but allowed his bore to leak, and the fluid within jetted out like a fire-hose. The thing within that chamber jerked and then was still. Jacobs was so outraged that he struck the man, but it was an act of impotence.

They took tests of temperature, of micro-organisms present, of water vapour, of energy consumption. They probed and they measured. Jacobs was utterly possessed and driven now. At last, at the end of all their measuring, Jacobs paused for a second. and then went to Drage, a rough piece of paper in his hand.

"There's still one of them alive." Drage looked pleased, just for a moment. "How long can you keep it that way?"

"Well, it can't be kept where it is: all the seals are leaking slowly: I'd guess they've been sprung by the shock of the crash. We'll have to build a special tank for it. It's impossible at this stage to tell how badly it has been injured. I've got the list of environment specifications here." Jacobs waved the tattered paper. "But it will have to be done very quickly."

Drage took the paper to the communications unit and despatched an urgent message. He turned back to Jacobs. "I've suggested that they adapt one of the pressurised environment tanks at the space centre. It should be easy enough to fill it with these gases under pressure. And I've sent for a helicopter."

They cut the chambers loose from the starship. Inside one of them an alien being still lived. In the rest were corpses. Jacobs claimed them for his own.

The time after that passed very rapidly for Jacobs, for they were the years of his triumph. The alien lived. Preserved in a pressure tank, fed chemicals and nutrients and energy by a complex machine, it lay, still showing unmistakable signs of life, to the electronic sensors at least. In the early years, it would often thrash about and make motions with its flagella, but the waiting tape recorders heard no sound that could be deciphered. And there was none who could tell if the motions of the being had sense in them. Having journeyed across the inconceivable distances between the stars, it remained helpless to tell why it had come.

But the initial interest died down rapidly, and the alien was largely forgotten by the average man. Yet Dr. Carl Jacobs could not forget the alien. He lived by it day after day, waiting for the message he knew it must have brought.

The alien lived. The cost of keeping it alive was large and continuing. The military was paying the cost. but even the military could not support hopeless projects. One day, Drage came to Jacobs.

Jacobs had bought his years dearly. His scientific reputation had soared: he had published scores of

papers on the physiology of the alien. But his once coveted public image had vanished. He no longer made television appearances or lecture tours. He wrote, ate, and slept in his room, monitoring every change in the condition of the being in the tank. Sometimes he was surprised himself that the creature managed to live on. He was obsessed, and of all of him, his eyes showed his burden the most: they had become sad and soft and wrinkled around. He wore a permanent frown.

He suffered when Drage visited him. He was no match for Drage's iron. He could only bend.

"The Special Committee is becoming concerned about the cost of the project, Carl," said Drage, pacing back and forth before the window. "It's an expense that can be less and less justified as time goes on. The defence appropriation was cut this year, you know, and that means that the special projects feel the cutbacks first."

"I know," said Jacobs, weary. "But after all, we are talking about the life of an intelligent being. How much is that worth?"

Drage pondered briefly. Jacobs had no doubt that, had he wanted, Drage would have quoted him a figure. "As for that, we have no proof that this thing is sentient at all. For all we know, the starship was a cargo vessel carrying cattle to the slaughter..."

Jacobs looked over his glasses at Drage, the barest smile on his face. Drage shrugged. "All right. I don't believe that myself. But at least that example shows the kind of argument you're up against, Carl. You know nothing at all about this thing other than how to keep it alive. Any kind of thinking about it is man-centred thinking."

"But the potential value, if the alien should eventually be able to communicate..." Jacobs trailed off, his thoughts confused.

In the tank, the creature moved feebly. Jacobs turned away from the conversation and examined the instruments for a moment. He looked back at Drage with a fixed expression. "They wouldn't have come so far for no reason. There had to be something they could tell us." Drage looked unconvinced. He took out a cigarette and lit it, glancing out of the window at the day-lit desert.

Jacobs finished with the instruments. There was so much of his own feeling that he felt incapable of communicating to Drage. There seemed to be some insubstantial barrier blocking off whole areas of ideas between them, and the worst of it was that Jacobs could never tell just where the barrier lay. He changed the subject.

"I heard a rumour recently that they finally managed to pinpoint where the starship came from," he said.

Drage looked startled, and then annoyed. He struck himself lightly on the forehead with the heel of his hand, in self-reproach. "Damn! I meant to tell you about that a week ago. Yes. It took so long because of the uncertainty of the data they had to work from. But some bright type worked out a new computer program, and the answer dropped out. They think the aliens came from Procyon. It's a star about ten light years away in... damn, I've forgotten the constellation..."

"Canis Minor. That's very interesting, given what I've been finding out about the alien's physiology..." His thoughts were back to his burden again, and the

enthusiasm in his voice died. Drage, not noticing, went on. "Evidently this star is not too dissimilar to our own. I'm told the radiation would be rather harder than from our sun, however."

Jacobs nodded. He was watching the inert body in the tank again, his thoughts dark. So far... Drage went on pacing backwards and forwards, his hands behind his back.

"That still leaves the question," he said, "if their star is at all different to ours, and since they clearly cannot survive unaided in our atmosphere..." Drage let his eyes flick momentarily at the obscenity in the tank and then away again, "Then why did they come here?"

Jacobs almost smiled. Even Drage, it seemed, could be caught by his curiosity. "That's a question I've been living with for a long time. The aliens are far more suited to a gas-giant planet like Jupiter than to a terrestrial world. Perhaps they came to colonise Jupiter and then noticed our radio broadcasts. We just don't know."

Drage stopped pacing and paused before he spoke again. "This discussion is pretty futile, Carl. Things are as they are. There is no way at present we can answer your questions. And..." He paused again and then hurried on. "The Special Committee is meeting next Monday. They want you to be there."

Jacobs pulled at his lip, distressed. "All right. I'll be there."

The Chairman of the Special Committee was a balding, bejewelled man with cynicism in every line of his face: Senator Vinson. Jacobs felt like a schoolboy

called to account for some atrocious act before the school principal. His knees trembled.

Drage sat to the right of Vinson, looking very formal. Vinson opened the meeting with the minimum of formality, and began.

"Doctor, we are here to decide whether or not your project should be closed down. As you know, the recent budget has both cut back our finances and our energy allocation for the next five years. Now, Doctor, your own project consumes a great deal of both money and energy, but to date has produced nothing of worth to the government." He raised his hand as Jacobs began to protest. "I grant you that much has been learnt about the biology of this creature, which is not without interest to the scientific community, but what the military was primarily concerned with when it decided to begin the project was simply this: does the crash landing of the aliens give any indication of a military threat to this country from outer space? All of our studies outside of your own project, Dr. Jacobs, have convinced us that the answer to this question is in the negative. The implications of a positive answer were so great, however, that we have allowed your project to continue for this length of time in order to confirm our conclusions. Do you now have any information to lead us to doubt these conclusions?"

Jacobs sat silently for a while, knowing that he was lost before he began. He could justify his project, but not in these terms.

"Mr. Chairman," he began slowly, "I have kept an alien being, an intelligent creature from a world other than ours, alive for many years. This has, as you point

out, taken a large amount of money, and my time. But it is hard for me to stress just how much may be learnt from the alien once it regains consciousness and becomes able to communicate. Much that may be of overwhelming political, scientific and even military importance. Ending the project will mean murdering our first ambassador from another planet; something that may well be considered a hostile act if or when the second alien ship arrives here." His words were merely sounds in his throat, they seemed unconvincing to himself.

There was some low-voiced conversation among the committee, then Drage straightened in his chair and spoke, very formally:

"You speak plausibly, Doctor, but I feel there are a number of points you have not considered. Firstly, should we again be contacted by this race of alien creatures, we can have no shame: we have kept the sole survivor of the crash alive as long as our resources permitted. Our resources are limited: we have done what we could. Secondly, you have often spoken to me privately of compassion, and of murder. You have never practised as a doctor of medicine, Dr. Jacobs. If you had, perhaps you would not regard those terms as emotionally as you do. Euthanasia is now generally seen as the greatest compassion where the victim is suffering without hope of recovery, or will never be able to lead again a normal, happy life with his disability. Shall we extend less compassion to this alien creature? You can have no knowledge of how this creature suffers in being kept alive. For all you know, it is in continual agony. Our ignorance is complete."

Jacobs was stunned. Drage had never spoken so strongly or so eloquently as this in private during their frequent conversations, and in many ways he was now forced to admit the validity of what Drage suggested. But he still felt that the alien had to be kept alive at all costs.

Vinson took up the lead again. "I ask you again, Dr. Jacobs, does anything in your study give us cause to believe that we are in any military danger from these aliens?"

Jacobs shook his head.

"Then I think we are all agreed?" Nods answered. "Then the decision is this: Doctor Jacobs may continue his project only until the end of the current financial year, which ends in one month's time. He is then to prepare a final report. The meeting is adjourned."

Jacobs sat crumpled in his chair as the committee men filed out, until Drage tapped him on the shoulder. "I'm sorry, Carl," said Drage, "I'm sorry that I had to do that to you. You must know that when the aliens first crashed, I was the first to promote support for your project. But it's been ten years, Carl, ten years, and no sign of communication from the creature. Do you honestly believe that eventually it will be able to talk to us, after all this time?"

Jacobs was savage. "Yes! It must... it must."

Three weeks later, many questions were answered.

Procyon went nova.

Its white glare was visible in daylight as a brilliant diamond embedded in the sky. At night, it was bright

enough to cast sharp shadows. Astronomers around the world were joyous, and their observation and measurements of the close explosion were continuous. Others, more sober, reflected how fortunate it was that the star was not of the type to go supernova. The radiation then would doubtless have killed most of the life on earth. As it was, the background radiation level was going up slowly, and some concern was felt for the cancer rate and the possibility of mutations.

Oblivious to this, his mind on one thing only, Carl Jacobs paced about his room, waiting for Drage to arrive. Every so often, he would stop at the window and look up at the fierce point in the sky. He was filled with nervous energy. He ran to the door when the chimes came at last. Drage came in, serious-faced. "I received your note," he said. "What is it?"

Jacobs pointed out the window. "You know about that?" Drage looked at the destroyed star, and nodded. "It's fouling up radio communications a great deal."

But Jacobs was impatient.

"It changes everything, don't you see? Now we know why the aliens came to earth ten years ago. They knew their sun was going to go nova. Knew it that long ago. The ship that crashed was probably a scout, sounding out possible escapes for them..."

Drage nodded slowly. "Yes. That sounds plausible."

Jacobs paced in front of the tank where the alien still lay. "But can't you see... there must be an escape fleet on the way. They would still come, don't you see, even when the scout didn't report back. They would have no choice."

"But why here, and not somewhere else, more like their own world?"

"Probably they had detected our radio broadcasts, and thought that any civilisation they detected had to be on a world like their own, like Jupiter. There would be plenty of room, don't you see, on a world that big?"

Drage considered. "And if this is true, then what do you want me to do?"

"Convince the Committee to let me keep the alien alive until the fleet gets here. If we have killed their only ambassador, they may take revenge on us."

"I don't believe that."

Jacobs came up close to Drage, and looked directly into his eyes. "But you must convince them that that is possible. You will, won't you? You have to, Drage..." Drage looked grim, but picked up the telephone. When the operator came on the line, he asked for Senator Vinson. A long conversation followed. Finally, Drage turned back to Jacobs. "All right, Doctor, you have your stay of execution. Six months. If they are not here by then, they aren't likely to come at all, I think."

Jacobs nodded: "They would have to travel at a good fraction of the speed of light, and leave well before the blast."

"All right, then. You have six months."

Jacobs was victorious. But as the months passed, his victory faded to bitterness as he watched the sky from the window of his room, hoping irrationally to see the alien escape fleet arrive in a shower of sparks. He watched in vain.

Eventually, the committee sat again.

Edward Drage stood trying not to look at the sickening thing in the tank. It reminded him somehow of biology classes in school during his youth, of human organs preserved in a thick yellow fluid. He looked instead at Carl Jacobs, slumped over his desk, trying not to weep. Drage was slightly disgusted by Jacobs' emotionalism, though he understood the man's obsession. Ten years on one project was enough to obsess any man. At last, Jacobs looked up at him.

"So I have to kill the alien," he said thickly.

"Yes. For your sake, Carl, I would finish it as soon as possible. Now, immediately, would be best." Jacobs looked suddenly like a man condemned to execution by the electric chair: wild and afraid.

"I... I don't think I can do it..." Jacobs' look was at first pathetic and appealing, then angry and accusing. "Damn it, Drage, it's so easy for you to deliver the orders. You've never had to destroy something that meant everything to you, never seen your dreams go down the drain..." He broke then and wept.

Drage pursed his lips reflectively, and then stared out of the window into the night and the stars. At last, he spoke:

"You're wrong, Carl. I don't think I ever told you, did I, that I was once assigned to the old manned Space Exploration Authority?" Jacobs shook his head. "I was

one of the team that trained for the early landings on the moon. I was very young, then, of course. Well, I didn't get there. I didn't really expect to. I hoped to get to the first moon base, or perhaps the first manned landing on Mars. But before I got anywhere at all, the first few disasters happened with the Space Shuttle - I'm sure you will remember those... And then the cutbacks began, and they decided finally that manned exploration of space was not worth the risk, and the machines took over... By that time I was pretty high up in the system, and when they made that decision, it was myself who headed the committee set up to close down the astronaut training program. But all of this is neither here nor there."

Drage turned to look at Jacobs. Jacobs was staring at him with a new expression. It made Drage feel uncomfortable. "Kill the alien now, Carl. You have no choice."

Like a man tormented, Jacobs went over to the machinery which pumped life into the creature in the tank, his expression blank and hollow-eyed. "It won't take long," he said, as though trying to find justification. "I don't think it will suffer much, even if it is still capable of pain..."

One by one he snapped off the switches. The purring machinery hummed, paused, and then stopped. For the present, the creature in the tank showed no change. But Jacobs turned away from the tank and away from Drage.

Drage left him in peace, unwilling to break into his mourning. But eventually, Jacobs turned back. His eyes red, but no more tears came. "I don't suppose," he said, "that we'll ever find out now just why they came. They

sent no fleet: we'd have seen it by now, even if it were late. There will never be any way to tell."

Drage was looking out of the window again, up at the still over-bright light of Procyon. "I wonder," he said. "You know, over the last few months I've lain awake thinking a lot, Carl. Wondering. I wonder if they knew a lot more about suns than we do. They might have fled their own star years ago, to somewhere else other than here. But they might have seen something funny about our sun, too, and felt that in compassion they had to try to let us know..." Drage smiled vaguely at the stars.

"And the worst of it is, we'll never know until it's too late..."

In the tank, the creature twisted in a spasm, and then stopped moving. Slowly it settled to the bottom of the tank, and was dead.

The Ancient Seed

This story was first published in an anthology called "Transmutations" edited by Rob Gerrand and published by Outback Press in 1979.

The day after her monthly time had gone, she rose in the dark morning and went to bathe in the sacred pool. Winter was barely past: she gasped as she forced herself to enter the bitter cold of the water, and her breath came in clouds of steam. When the ordeal was over, she dried herself with a piece of coarse linen..

Here, where there was none to hear, she sometimes sang soft tuneless songs to herself, her voice striking harmonies from the stone around her. But not this morning. She dressed quickly in her long white shift and went outside to meet the dawn.

It was dark still, and there were still stars. But in the north, her eye was caught by a far distant spark of red and orange. A forest fire? Surely it was still too cold for that. She frowned, and turned away.

She was called Sibyl, as all those before her had been named. Perhaps once she had been given a name of her own, but she no longer remembered what it might have been. This Sibyl had yet to pass her twentieth summer: the old Sibyl had died early.

She sat on the hard tripod between the columns of the temple, facing out over the city, shivering a little and

scowling for a moment at the discomfort and the cold. From time to time she looked towards the north, still puzzled by the distant fire.

The dark of the sky became grey, and the grey became light, until at last the rays of the sun struck the tops of the shattered towers and plated them with ephemeral gold. Still Sibyl sat. The people would just now be rising, and soon, when they found that this was the day of the Oracle, the crowds would gather.

The city elders came on age-wounded feet up the length of the main street, and stood together in grim silence before Sibyl. The people followed. She waited. When the crowd had become restless and began to shuffle its many feet, Sibyl raised a hand, and quiet descended once more. The elders looked among themselves to find who would speak first. A bald-headed ancient limped forward.

"Sibyl," he began, his voice like a trembling reed. "The winter has been hard. Can the Oracle say when the crops should be planted. and if there should be a sacrifice?"

Sibyl nodded, very slightly: "It shall be asked."

The next to stand forward was a tall man, one whom age had not yet stooped. His voice was firm. "Sibyl, there is talk of rebuilding the Tower of Signs. Can the Oracle say if this should be done, and how we must prepare for this task?"

"It shall be asked."

There was some talk between the elders before the third and final question was asked. Waiting, Sibyl sighed very softly. There would be much work to do beneath

the temple before these questions could be answered. There would be little time to sit and watch the sun on the city, or the children playing outside the temple. Little time for anything.

In the north, now that the day was here, she could see no fire. But she fancied there was the faintest threadlike plume that could be smoke. She frowned again.

The Eldest was being brought forward, supported by others younger, stronger than himself. His voice was the rustling whisper of a cricket.

"Sibyl ...we have news ... news of a barbarian with a great horde ... his army. He has conquered ...many lands to the north...." The old one stopped and gathered his breath again. "Now he is sweeping south ...plundering and looting. Should he attack this country ... we would fall before him.... Can the Oracle say ... say ... what should be done?" He closed his eyes and muttered to himself.

Sibyl sat quietly, trying to absorb the meaning of the words she had heard. She glanced to the north, thinking of killings and burnings. Surely the barbarian could not be so close? She roused herself and spoke the empty words: "It shall be asked." The crowd sighed, and began to disperse.

She stood and walked to the doors of the temple. They were bronze, and worked with ancient and cryptic symbols. Inside, she strained against their weight to close them, shutting off the bright sun like an eclipse. The only light streamed down from two narrow slits above the doors, spotlighting the random movement of thousands of motes of dust. Sibyl leant against the

comforting bulk of the doors. The last question had so alarmed her that the first two had almost left her mind, and she was forced to rehearse them to herself so that she would not forget. The crops, of course, and the tower. And this barbarian!

Still brooding, she walked through the empty corridors of the temple, her bare feet ringing echoes from the stone. Warm in her hand, where it had been all morning since she had retrieved it from its hiding place in the pool, was the key to the door of the Oracle.

She came to the door in the shadow of an archway. Once there had been something written on its iron face, but time and rust had hidden it. Sibyl turned the key in the lock, and swung open the door. There was a dark space, with steps leading down. She descended, closing the door and moving in thick darkness, her feet remembering the steps. Her hands met another door, always unlocked. She pushed, and went in.

The blackness was studded with firefly lights, and the silence overlaid with an endless purring like that of a cat. Sibyl waited as her eyes grew used to the dark.

The purring and the flickering lights surrounded her, and took her in. Sibyl was careful to control her breathing, careful not to make a noise. Here in the presence of God, nothing must be done that should not be done. Slowly, she moved forward, hands out, feeling her way in the dark, until she reached a point in the centre of the lights and the noise. There was a chair, and a level bench before a blank area of the wall: the Altar. She sat down, breathing faster now.

She placed her hands on the dimly seen bench. There were separate raised surfaces there, each bearing

one of the symbols of the holy language. Following ritual, she pressed them in turn, and on the wall before her words appeared in letters of green fire:

"Hail Oracle, Instrument of God."

And God spoke.

Spoke with the terrible voice of the Oracle; deep, calm, and without emotion. A voice which did not echo, yet was all around, and came from no point in space. Hearing, Sibyl trembled, as she always trembled, and looked down. The Oracle had spoken but one word:

Ready.

It was usual to ask the Oracle the three questions in the order that the Elders had given, but today, such was Sibyl's distress, against her plans she found herself spelling out the question about the barbarian. The burning green words hung before her like an accusation. And then the Oracle spoke once more.

Insufficient information, it said, and Sibyl gave a silent sigh, knowing that her long hours of work now began. *Require strength of barbarian army. Require distance of barbarian army. Require location of countries occupied.* Then the silence came back into the room as Sibyl thought.

She began tapping out symbols on the panel again. On the wall, her words appeared. "O Oracle, your servant shall ask the names of the countries the barbarian has taken. Your servant does not know if it is known how many men the barbarian has in his army."

There was the briefest of pauses, and then the voice spoke again: *Require map. Require population of countries occupied.*

"It shall be done, O Oracle."

She left the room then, and emerged, blinking, into the world of light. To her darkness-accustomed eyes, everything seemed washed out, unreal. It was always this way. There were times when she thought the only real world was the one down there, with the Oracle in the dark. But she shook off these thoughts, and went to seek someone to carry a message to the Elders. She found a ragged child playing in the dust outside the temple, and gave him a paper. The child's eyes were round and fearful, but he nodded his head of tangled hair, and ran to do as he was bid.

Sibyl sat on the tripod outside the temple, waiting. It was now past noon, and her stomach complained the fast. The first day was always the worst.

She had expected the boy to return with a message from the Elders, but instead, one of the ancient ones themselves came haltingly down the street, and bowed before Sibyl. He carried a scroll under his arm. Looking down on him, Sibyl asked, "Do you have the knowledge that the Oracle has sought?"

The old man looked up. "I have brought what is known. And a later report, Sibyl. There is no doubt that the barbarian is marching on this land. He may be only days distant."

Her heart jumped within her at that, and she looked to the northern horizon. There was no sign there

now, but somewhere there the barbarian rode. But the Oracle God would advise them. It had always been so.

The Elder came slowly up the steps and handed the scroll to Sibyl. She opened it, and he pointed out the marks he had made. It was a rough map of the countries surrounding them. A red line like a scar marked the progress of the barbarian, and small figures estimated the population of the countries he had overtaken. The scar drew steadily downwards toward the City. Sibyl, unable to speak, nodded, and sent the Elder back.

Suddenly she was afraid to descend into the room of the Oracle. She wanted to be here, in the light and the warming sun, so that the brightness of the day could drive away her fear. In the dark, she knew, her fear would emerge like the creatures of the night, and devour her. So she sat still on the steps, watching the sun descend towards evening.

As she sat, a dog came yapping by, followed by a crowd of dusty children chasing it with sticks and ball. And later, the women came by with their washing, talking amongst themselves and looking shyly up at Sibyl, and then away.

No one ever looks at me, thought Sibyl. It's. always that brief glance, and then the averted eyes. So it is to be touched by God.

When the sun hid behind the tallest buildings, Sibyl arose, stiff from sitting, and re-entered the bronze doors, carrying the map. There was duty to be done.

Underneath the temple, the darkness of the Oracle swallowed her, and took her in. Her fingers, as she laid

them on the symbols of the altar, were trembling and hesitant.

The Oracle spoke: *This represents the land surrounding the Centre. Use the stylus to show the path of the barbarian.*

The picture that came up on the wall before Sibyl was far richer than any map. The colours were sparkling blue where the sea lay, and a blending of browns and greens on the land. The mountains were outlined with the white of snow. But there were no boundaries between the nations shown on the picture. Sibyl took the stylus and pointed these out, working from the map that the Elder had brought. As she moved the stylus, yellow lines appeared on the picture. Then she marked in the path of the barbarian in bright red. The Oracle asked for the populations of the countries, and these she gave, adding that these were but guesses.

There was silence in the dark room, and Sibyl knew that the Oracle was thinking. And that was a small blasphemy, for should not God know all without thought? But the space of time was very brief, and then the calm, empty voice spoke again:

If the barbarian has conquered the northern countries, he will conquer this country. There are not enough men. There are not enough weapons. His army has many men. His army has many weapons.

Sibyl sat in silence. Then she tapped out on the Altar: "What shall we do?"

The answer came back instantly: *The Centre shall be closed, and the doors secured. Personnel will stay below ground.*

"But what about the city?" Sibyl asked.

The voice seemed cold, uncaring: *Instructions may be issued to evacuate the population of the city by sea. On no account shall the population of the city be allowed access to the Centre.*

By the Centre, the Oracle meant the temple. She knew that, and that it was the centre of Godhead in this land. It must be protected at all cost. But surely there was something she could do for the people of the city?

She thought. The other questions that the elders had asked now seemed irrelevant, trivial. She had been right after all to ask about the barbarian first. She stood up. She would have to go to warn the people, tell those that could to flee.

The days seemed few before the morning when Sibyl woke and looked to the north and saw again the sign she had been expecting and dreading. Smoke. Now it was black and drifting, and very close. People's homes were burning, women were being raped, and children slaughtered. And this city was next.

She went out that morning, sat on the tripod for the first time in weeks, and waited for the barbarian to come. Behind her, the great bronze doors were locked. She had taken the key, locked the doors from the outside, and tossed the key into the temple through one of the small openings above the doors. Though the Oracle had commanded her to remain within the temple, she could not spare herself the fate of the people of the city.

Now there were no children running in the street in play. Now there were no women giggling on their way to wash. Now there was only the hot sun, and the random breeze. Many of the people had left, but many more had not. Those left were all inside the stone buildings, their doors bolted, cowering before the might of the invader.

And so the barbarian came to the city. She saw the dust first, raised by the weary feet of his great army. And in the dust there was the glinting of brass, and on the wind the sound of metal on metal, and a voice cursing.

They came, and they came, and they were legion. They came past the temple, in ranks, and they looked at Sibyl and jeered and made obscene gestures. But none approached her. That was for another to do.

The barbarian, dressed in royal purples and wearing a helmet of gold, came riding in on a dusty, tired white horse, and stopped before Sibyl. He waited, as the noise and the dust fell to earth.

In the silence then, he took off his helmet and looked straight at Sibyl, sitting on the tripod at the top of the steps of the temple.

He was not young, the barbarian. Grey touched his temples and grizzled his stubble beard. There was a tiredness about him which seemed to rest in his eyes. He looked at Sibyl and at the temple for a long time before speaking. He seemed to gaze very long at the inscription carved above the doors of the temple, words which Sibyl had been unable ever to understand.

When he spoke, a sudden shock ran through Sibyl, for the words were in the holy tongue of the Oracle. "Well," he said, "thank God! Here at last."

But his next words were those of the common people: "You, wench, priestess, whatever you are, open those doors!"

Sibyl said, "I shall not." Her voice surprised her by its calm.

One of the soldiers, pike in hand, ran up the steps towards her, but a word from the barbarian called him back.

"Girl," said the barbarian, "I've travelled further than you can know to get here. I'm not going to be stopped now. Either you open those doors, or we shall break them down."

"Then break them down you must," said Sibyl, "for the doors are locked, and the key is within."

The look on the barbarian's face was sour. He said nothing, but motioned to his ragged army. Within minutes, a group of men were ranged around a huge log of wood, the trunk of a tree. The barbarian strode up the steps to Sibyl. Still he was silent, but he took her with a firm grip and dragged her from the tripod. Though she screamed and tried to bite him, it was to no avail. The barbarian kicked the tripod clattering down the stone steps. Sibyl was suddenly quiet. There was nothing to be done.

The soldiers came up the steps with the battering ram. It was not a good place to wield such an object. They could gain no speed coming up the steps, and they were reduced to swinging the beam back and forth with

all the strength they could muster. The ram hit the bronze doors with a sound like a gong. Again and again. The doors did not yield.

It was then that one of the soldiers lost his temper, and stepped forward to beat his fist against the doors. As his hand touched the metal, there was a searing flash like lightning, and the man dropped and rolled down the stairs. There was a sudden hush among the army. One of the soldiers prodded with his foot at the body of the man. The fallen one did not move. The soldier looked up at the barbarian, his foot still at the body. The barbarian was grim, but he motioned for the battering to continue. "Just don't touch that door," he said. "It's electrified." A shudder went through the men at the sound of the foreign word. Only Sibyl recognised it as a word from the holy tongue, and she did not know its meaning.

The sound of wood against metal rang again and again over the empty city. Sibyl sagged in the arms of her captors. God had struck one of their number down by lightning, but the fate He was reserving for the barbarian chief had yet to be revealed.

At last, under one final lurch of the battering ram, the doors of the temple burst open, letting light into the darkness. The barbarian lifted Sibyl up, and brought her face close to his. She could smell his breath. His eyes were reddened.

"Now, girl," he said. "Now you shall take me to the computer."

"I shall not take you to the Oracle," Sibyl said, but her voice was trembling, and her eyes turned away from his.

He shook her, as a child might shake a doll. Her head rocked painfully back. He forced her eyes to meet his.

"Do you know, girl," he said, in a hard, even voice, "I was alive when this Centre was built? Over a thousand years ago, that was. Yes," he repeated, as Sibyl's eyes showed disbelief, "a millennium ago it was, that I left this earth with the others. All dead now, except me."

Her voice was the barest whisper. "Are you then risen from the dead?"

He laughed.

He picked her up and carried her inside the temple, and kicked the twisted metal doors closed behind him.

"Einstein!" he said, as he carried her. "Einstein, that's who I've got to curse. A thousand years for you, ten for me. And another ten on this ruined planet while I built my army. Ten hard, damned years. To get here."

He set her down roughly by the pool, and stood looking around him with triumph in his eyes.

"You shall not enter the room of the Oracle," she said, making her voice as determined as she could. "Better that you kill me first than that. None but the priestess has entered the presence of the Oracle for these last twenty-five generations."

The barbarian gave a harsh laugh. "Damn your superstitions! But without them, I suppose this Centre would no longer be here. All right," he said. "I don't know how to speak to the Oracle, anyway. I'll let you find out what I want. But I shall be here with my sword

and, if you do not return soon enough, I'll follow you, Oracle or not."

Sibyl looked up at him, and saw him draw his sword. It was dark with blood from the taking of the city. She nodded.

The barbarian gave a grim smile. "Then I'll tell you what I seek, and why I've come so far and killed so many to reach here. . . ." He sat down on a broken stone at the edge of the sacred pool, and spat into the water.

"Yes," said Sibyl, looking into her lap, "your path is lined with blood."

The barbarian swung his arm suddenly and pain smashed into her face, and she was knocked to the floor. The pain was like fire, and she tasted blood. The barbarian was on his feet, and she heard him through the ringing in her ears. "Damn you, you bitch!" he said. He hauled her up from her face, and shook her again. He knelt so his face was level with hers. "Damn you! You don't know what I've gone through! To be out there out among the stars, my God! And then to come back, and find everything gone everything that we'd ever striven for over the centuries, all the power, all the science I came back, and it was all gone, forgotten. You can't know how I felt!"

Sibyl tried to speak, but her mouth was bruised, and at first she could only mumble. Her heart ran mad within her breast. She tried again. "And for this loss, you have slaughtered thousands of men and their wives and children!" Her eyes were bright, and they held his gaze fixed.

He raised his fist as though to strike her again, but stopped. His face was red with rage and passion. He shook her shoulders. "It's my destiny, can't you see that? It had to be, my coming back just now. I have the knowledge to rebuild this world, to bring back the old times!"

Wanting to keep silent, but unable to do so, Sibyl said, "And this new world you will build, will you not remember that it is founded on the dead?" Her voice was bitter, defeated.

"Damn!" he said, and pushed her, so that she fell back to lie on the stone. He leant over her, trapping her with his arms. He seemed to be trying to control himself. "Damn you!" he said and, with a quick, savage motion, he tore at the front of her shift, so that it ripped from her. She felt his rough hands on her, and saw the growing lust in his eyes. She knew, even as he fumbled at her, that she was not strong enough to resist him. Then there was pain, and she cried out. After a moment, so did he.

After it was over, she lay unmoving for what seemed a long time, trying to sort out the feelings that battled within her. No more tears came, for she seemed to have exhausted their source. Her mind ran over and over what had happened to her, and again she felt herself touched and violated. She shook her head with the pain and shame, and sat herself up. She still seemed to feel the barbarian within her, and she brushed her hand against her face, trying to wipe away the non-existent tears.

The barbarian sat on the other side of the pool, facing away from her. He was cleaning and polishing his

sword with a bloodied rag. She must have made a noise, for he turned and looked towards her. His eyes would not meet hers. There was a long silence. "I didn't...." he said at last, and then stopped and began again. "You must ask the computer what I need to know," he said harshly, too loud. He waved his bright sword to emphasise his words. Sibyl, knowing he held her utterly in his power, nodded dumbly.

He sprang up, and began pacing back and forth across the stone. "You have to understand why I have to do this ... to rebuild things," he said, avoiding her gaze. "It's as though ... I feel as if I were a seed which has been kept stored somewhere, hidden away for a thousand years, and only brought out again into the light once everything has become a desert. Once planted, that seed can make the desert a forest again ...do you see? That is my purpose in life; that's what I've waited and worked for." He stroked his thinning hair back with an agitated hand. "I'm telling you this because I want you to understand...." He looked towards her and saw no acceptance. He started to pace again, his eyes on the stone walls.

"I was lucky.... No, damn it, I was meant to find it! I found a cache of written records telling me about this Centre, and of another place south, over the mountains. There are weapons there, and much of the old knowledge in store." He turned to her again, imploring her with his hands to understand. Sibyl looked at him, and felt only hate. She hardly heard his words.

"If I hadn't come now, this Centre here, and the store of knowledge ... it might have crumbled away. But now...." He stared fiercely at her, daring her to object, but

then his eyes slid away from hers, and a brief frown crossed his brow. "I might need to use force at first, some of the weapons, to bring things back under my command. There are some powerful nations over the sea. But I shall do it."

His dreams have driven him mad, thought Sibyl. There have been many others in our history with that madness.

The barbarian sat down beside Sibyl again. She shrank away from him, and he put out a hand towards her as if to stop her, but dropped it back to his side. His face was weary. He went on, forcing his words out. "This store," he said, "it was once an army base, I think. It may be very hard to get in. There may be safeguards, even traps. But your computer will be able to tell me what to do to get in. Do you understand?"

Sibyl, wearier than he, nodded. She found herself unable to trust herself to speak. She swallowed, thought again of his rough hands on her skin, of him thrusting within her, and trembled. At last she said, "You wish me to ask the Oracle how you may enter this store."

"That's it," he said.

"It shall be asked," she said, and rose.

She took off her torn shift, ignoring his gaze, for that mattered nothing now, and waded into the sacred pool. She felt about, and found the key, and stepped out dripping. She draped the shift over her still wet body, and went to the door that led to the Oracle. "You must stay here," she said, and descended into the dark. And the dark welcomed her.

In the soft dark, in the womb filled with firefly lights and the purring of an absent cat, she spoke silently to the Oracle. And the Oracle answered.

Each morning she rose and looked to the south, over the mountains, to where the barbarian and his army had marched. The barbarian had left carrying the scroll that the Oracle had made, bearing the plans of the store. She had pointed out to him the path he must take within the store, and the things he must do. It had been very easy. Now she waited.

She had become aware of another thing in the many days that had passed since the barbarian had entered the temple, and the Oracle had confirmed her guess. So now she waited, for a greater fulfilment of destiny than the barbarian had imagined.

She had risen early this morning, filled with a premonition. The mountains were high, and the pass was difficult. It would have taken long for the barbarian to reach the store.

She went outside to sit on the tripod, looking into the south. The mountains were blue with distance, but their peaks were gilded by the rising sun. There was a softness and a quiet in the morning, and somewhere a bird was singing.

Then it began. Another, whiter sun rose in the south, behind the mountains, swelling and growing until it became like a snow-covered tree. And it seemed to Sibyl that there were lightnings flickering about the tree. It grew and grew until it touched the clouds, and then the sound arrived. A vast crash, like heaven falling, like

the sky shattering. So loud that Sibyl had to cover her ears and hold them tight against the pain of the noise. And then the earth shook, and the buildings rattled, and some stones fell.

God had spoken.

The people, running about the streets in a panic, gradually came to the steps of the temple beneath where Sibyl sat. The crowd grew, until all of the people were there, looking up, waiting for Sibyl to explain, to hear the will of God.

She turned at last, and spoke to them.

"God has taken vengeance on the barbarian. He will conquer no more."

A mutter, and then a gabble came from the crowd, and eyes were turned to the sign in the south, where the sky still glowed.

Sibyl rose. "There will be no more days of the Oracle this year. But the Oracle has spoken. Soon a new prophet will be born to you, greater than any before, and he will lead this people to greatness and might."

And she turned and went into the temple, to await the flowering of the ancient seed.

Crippled Spinner

This story was written at a writer's workshop led by Ursula Le Guin in Melbourne in 1975, and published in the workshop anthology, "The Altered I" in 1976.

The exercise set was to write a story based on an adjective and noun picked at random.

The machine wove a web of silver against the stars, binding Cassiopeia, Orion, and blazing Sirius in a delicate trap.

Ariane looked on the work of the Spinner, her mechanical spider, and smiled. She sat in a tight bubble, insulated against the void, warm and safe. She felt good, creative, making something beautiful and at the same time practical. A womanly task, she thought. She smiled again, this time at the image of herself at an ancient spinning wheel, creating thread. Thread from which sails would be woven.

When this part of the web was done, Marc would move in and fill in the strands with micro-thin weave. Blocking out the view of the stars, she thought, and made a sad face.

"How goes it?" said Marc, from many miles away. The radio wave took a full minute to reach her from where Marc was. "The third quadrant's almost done," she said, and adjusted controls to tighten the work of the Spinner as she waited for his reply. It was a strange feeling, being here in the bubble in the midst of space. If

she did not turn, to see the bulk of her ship behind her, she could imagine herself floating alone, without support in the endless womb of space. The machine went on weaving.

Sometimes Ariane felt like driving the Spinner to her own whim, creating fantastic abstract designs against the velvet backdrop of stars. But that would be without a practical use: a wrong thing. Still, it was rice to dream.

"That's great!" Marc's voice, back again. "I've started filling in the sail on the second quadrant. We'll have to be careful from now on: the light pressure's already starting to push the sail we've got. The faster we finish the better. John says the pod has left Earth already. Should be here in just a few days."

She made no reply: stretched out conversations generally destroyed the trivia of speech.

Alone in space. Floating in the delicious void, swimming like a new-born fish in a dark and open sea. And in front of her was a net of silver, waiting to grasp her and haul her above an unseen, unknowable surface.

Ariane reached to touch the soft plastic bubble before her face, to reassure herself of its reality. Sometimes her mind seemed to go journeying on its own, beyond her control.

The web now trapped the Pleiades: they sparkled, brilliant sisters, jewels amidst the bright hair of the web.

Behind her ship was the blazing sun, blowing outwards, gusting forth a wind between the stars. A wind they planned to sail.

The shining spider wove on. Ariane, idly dreaming, neglected her instruments in the control device she held. Out in space, in one small square of the web, a streaming comet lay, its ghostly tresses tossed back by the eternal wind from the sun.

There was a red light on the control.

It was a long time before she noticed it, before she could bring her mind back from the stars. A red light. It was though her mind could not focus. Meteor warning - that was it. Meteors. She moved quickly, then, and switched on her ship defensive shield. Immediately, the stars were filtered through a rosy shimmer: they danced like red sparks.

But before she could take any further action, two more red lights came on. The Spinner had been hit. The damage -she could not tell as yet. She bit her lip, feeling frustration. The meteor warning light stayed on, and she waited long tense minutes for the shower to pass. At last, the warning light went out, a red eye closing, and she snapped off the ruddy shield. Again the stars stood out clear and white. She searched for the Spinner with her eyes.

It was coming towards her.

She could see loose mechanisms spilling out like entrails from its smashed interior. And behind it raced the wire, the silver wire. She was paralysed. The Spinner rushed up at her, loomed huge and menacing, and then was past. Ariane sat very still, wide-eyed, seeing the wire stream past like an endless ticker-tape. She knew, intellectually, that the Spinner had missed her by hundreds of feet. but knowing was not feeling, and she shook with fear. And the web!

The web was unwinding.

Strand by strand, it came apart. Ariane was immobilised by horror, watching the unravelling miles of wire.

She turned her ship, at last, to follow the crippled Spinner. There was the babble of Marc's voice in her ears, but she could not listen.

The Spinner was crazy. It was like a spider crazed by an hallucinogen, a manic weaver. It moved and spun as it should, but erratically; it made knots and patterns like a schizophrenic. And pulled strands across the rest of the completed sail. She could see the Spinner and its tangled web black now against the white sail, flexing it and pulling it along.

"Destruct, Ariane!" came Marc's voice. But she did not hear. Her mind had been snared by the harmony and magic in the random silver lines, by something hypnotic in the amazing network of gleaming wire.

Loops of the web spun around her ship: a thick rope wrapped around her bubble, and she saw the fine structure of it as if for the first time; the micro-strands that made the cord, the cords braided to make the rope. She had never seen the wire so close before.

Then the bubble jerked suddenly, and she was thrown against the plastic surface. Again, and the ship swung, so that she could see the huge mass of the sail, and the wire that bound her to it. She could see, far off, the tugs which held the sail in place while it was being constructed: they too seemed looped with the endless thread. Like Christmas ribbon, she thought detachedly: how beautiful it seems!

The tugs had released the sail, that was it. And the Spinner, the crippled, crazy Spinner, had at last died, ran out of wire.

The sail billowed slowly, very slowly, above her, like that of a great sailing ship. And she swung below, a tiny ship beneath a vast sail.

The tugs were fouled in the wire, she could see them clearly, unable to move amidst the knots of the mad web.

There was only the gentlest of accelerations on Ariane, the softest of reminders as the sail filled with the wind from the sun and started out with her as cargo on its long voyage between the stars.

Islands

This story was written at a writer's workshop led by Ursula Le Guin in Melbourne in 1975, and published in the workshop anthology, "The Altered I" in 1976.

The exercise set was simply "write a love story".

They came together high above the ecliptic, twin moving stars in an empty universe.

As soon as Mikhail saw the other asteroid - a tiny flickering point amongst the constellations - he went in through the airlock and turned on the communicator, hoping to pick up the sound of another human voice. It had been a long time.

So when her voice came crackling out of the speaker, and the first static-filled image swam onto the screen, his feelings were of great joy.

They were still light-minutes distant, of course, and would be so for some time yet, but Mikhail began speaking as soon as he picked up the other's signal.

"Hello," he said, "I'm Mikhail Brinski. My asteroid's Elaine. Who's there?" Then he sat back and waited. Feelings that had been dormant within him through a long winter had stirred at the first sound of a human voice.

"Jany's here. My rock's the Isolde. Who's out there? Are you a miner? That's what I am, after tin'.

Mikhail pushed himself away from the console, and stared at the distorted image on the screen. His own words, he knew, had not reached her yet. "*Janys?*" he said, for his own ears, not for hers. Janys?

Was it possible? Out here? An old, old pain throbbed again within him: Janys? That Janys?

Her voice came again, startled, urgent: "Mikhail Brinski? From Vostok? Do I know you from Vostok? Vostok and London?"

"Yes," he said, again to himself. "Yes, from Vostok." He almost turned off the screen and speaker. *That* Janys. It was. And of everything, it was the anger he remembered, the hurt from those days.

Vostok and London. It had been London where she'd left him. London where they had met, Vostok where they had loved. And London again. London in the quiet green park, and her walking away along an endless sun-striped lane of trees. London.

At last, he said out loud to the wavering face on the screen: "Yes, Janys, it's the Mikhail you knew." He forced a smile to his face. "How long is it now? And what are you doing chasing rocks up here? Weren't there enough on Earth for you?" He could not keep the sadness out of his voice. Perhaps it wouldn't show. Perhaps she might ignore it. She had been good at that sort of thing, had Janys.

To keep his mind still, he looked at the instrument readings and forced his mind to absorb what they said. The faltering pinprick of light indicating the other asteroid still trembled in the centre of the viewscreen.

Mikhail hung in the centre of a floating chaos. Since moving out into the Belt, he had become a sloppy hermit. His untidiness on Earth had always been a failing; out here it was worse. Broken pencils, papers, microfilms, cannisters of food and all the other kinds of kipple that made up Mikhail's monastic life wandered like a miniature asteroid swarm of their own around his room. Now Mikhail himself drifted there, feeling very lost, very much alone, watching the woman on the screen.

The image was slowly improving: the two planetoids were getting closer in their orbits. The time lag would get shorter, too.

"Hello, Mikhail," came her voice. There was an expression on her face that he found hard to interpret. Was it pity? "It's been six years, I think. I've been working hard. What am I doing up here? What are you doing? I thought you were going to go back to Moscow to work on your maths? Well, you know, I got sick of trying to sniff out new ores on Earth. There weren't any!"

"Do you remember..." he said before he could stop himself. For a brief instant, he wished he could chase after his words and fetch them back. Do you remember... how it was?

It had been in London's dirty winter. The pure snow that had fallen days before had become the filthy slush that now lay in the streets. They'd met at the Technic, shared a few classes, though their majors were different, and he had started walking her home to her flat in one of the dingy, endless terraces that still existed

then. And that day, walking with soaked boots through the slush, she'd suddenly stopped and looked up at him.

"I like you, you mathematical mastermind," she'd said, "I do. Come up to my room." And he, startled into new emotions, had gone up.

"Yes," said Janys, from the clearing screen, "Yes, I remember, Mikhail. It is a long time, but I do. Yes." She smiled and looked away from the camera for a moment, away from his eyes. "How do you find it up here? Gets lonely, a bit. But the view's the best for miles. When I first went mining, I became a regular tourist. You know, kept taking photos of all the stars, pictures of my very own asteroid at a distance, and all that. Then I realised I was crazy: if I stayed where I was I wouldn't need to remind myself with pictures, would I?"

He smiled a polite smile for her. "No", he said, "no, you wouldn't." The time delay was down to about twenty seconds, now. It would get less. "As for why I'm here ... Well, I'm still working on my maths. It needs a lot of quiet, a lot of thought. I'm being a bit of a hermit, living in a kind of ivory tower to end all ivory towers." The picture of her face was clearer: he could see new lines. But he could still not see through her face to see what she thought.

He wished for an instant he could go outside and just watch the asteroid that she had called Isolde getting closer, to use his eyes directly, to remove the barriers, somehow. In the viewscreen at least, the rock was now a tiny slowly turning pebble.

They had gone fossicking up in the hills in the spring, she looking for samples of rock, and he just for the peace, to think. She'd captured a photo of him sitting just like the statue of Rodin, chin in hand, and shown it to all their friends. At the top of a crag, he'd pulled up a flower and solemnly proffered it to her. She'd made him replant it, scolding him all the way.

It was strange. They had first talked of spacing one day on the moors amongst all the harsh glory of the Earth. Somehow the thought of space had seemed more glamorous then, more romantic. The scenes that the Brontes had described seemed of another age, past, forgotten. So, sitting on the heather, they had talked of the planets, the new expeditions out past Mars. He had been the more interested, and she had teased him about his fascination: "Two plus two is four wherever you are, isn't it? Or will we have to learn our sums again on Jupiter?"

"Maths is the same," he'd said, "but people aren't".

Isolde and Elaine, rocky sisters, were at opposition. The time delay on the radio was as short as it would be: five seconds.

"I'm doing some work on the Kroeger functions," he said, seeking any trace of old affection in her face on the screen. "In another six months, I should have a paper for the Journal. I'm getting quite well known . . ."

"Well known to all your stuffy professors, Mikhail, but I'll bet there's hardly a Belter know's you're out here. But I'm glad for you. Did I tell you I'm thinking of leaving the System?"

"The solar system?"

"I've applied to go out on the Transstar: they'll need good geologists." Her smile now was more honest, more open.

Mikhail stirred amongst his floating rubbish, realising for the first time she could see his littered surroundings. What he could see of the cabin she was in was very neat, everything clipped into place. He felt drained: his hands had at last stopped trembling; they seemed to have absorbed a kind of numbness.

"How have you been, Janys," he said.

"Pretty well," she said. "Jason went out to Callisto, did you know? I was . . well, pretty lonely after that, but, well, it's gone."

"Being on your own in space is rather strange," he said, "but somehow it seems, I don't know, more acceptable out here..." He looked around him for a second, looking at the slowly shifting debris, looked back with a small, embarrassed laugh: "Sorry for the mess."

"You always said that! You never got neater, though. Your mother trained you very badly." There seemed a softness in her eyes, a look, perhaps, of understanding.

He smiled at her gentle scolding, and shrugged.

Summer had been in Vostok: Mikhail's home town. With the new

government, everything was changing very rapidly. Everything had seemed bustling, busy, uncertain. They had lived together there for the season.

She would drag him along to the market each week to buy their vegetables and meat, against his protests. He had tagged behind her like a tall, shy puppy, threading his way through the crowds, trying to keep up. Then she would load him up with parcels, one on top of the other until he nearly dropped them, and he would smile at her over the top of his burdens.

Perhaps it was in Vostok, though that here had come harsher notes into their mutual symphony. It could have been their closer proximity. It could have been the city. She had talked of going to Australia in search of the rarer minerals. He had wanted to go to Moscow to meet some of the mathematicians there. There had been arguments, and tears, in Vostok.

The delay was increasing again: the worldlets were drawing apart. He seemed to look as often at the diminishing asteroid as he did at Janys' face.

Mikhail tugged at his chin with his hand, drifted away a little from the screen. "It's good to see you, Janys."

There was a pause as the radio waves traversed the space between them. A little longer, perhaps. She made a small frown, scolding him a little again, and said: "It's been nice to see you, too, Mikhail. It's fun to remember old times." A brief burst of static obscured her face, and when he could see her again, the frown was gone, "You remember that time in Vostok," she said, "the day we bought that doll? You know the kind that fit inside one

another, right down to the smallest little doll? I've still got that, here in my rock."She went off the screen for a moment, returned with the doll. The picture was getting worse: Janys seemed to have a soft ghost beside her. The speaker was beginning to crackle.

"I've still got the photo you took of me as the Thinker,"he said."Somewhere in here. . ."

He watched her silent, attentive face for the long, long seconds to pass before she responded with a smile: fresh, even teeth.

In the end they decided to go back to London. The trees in Hyde Park had turned to gold. They went walking there, very often. But there seemed to be something that had distanced them: they touched, and it was as if they touched only a pane of glass that stood between them

He talked more of his work to her, she more of hers to him. She needed to travel, to dig, to pick up rocks, to test sites. His need was to be still, quiet, thinking within himself.

And at last, in late autumn, he had sat still on the park bench, watching her walk away, knowing she would not turn back.

Static patterned the screen: he could hardly glimpse her face any more. It was hard to pick up what she said. He spent long minutes waiting for her replies.

"It was good,"she said,"good to talk."

"Yes," he said, "very good..." The minutes passed. The picture was all static now, as the asteroids moved on in their inevitable orbits. But at last, half obscured by hiss and noise, her voice came back: "Farewell, my love .

He nodded, smiled softly. "Farewell."

Down

The following is somewhat unusual in that it isn't really a story. Rather, it is the libretto for a music drama in three parts composed by Leigh Edmonds, performed in Brisbane in the late 1970's. Without the music, it loses some of its impact, but you can think of it as a poem, if you like.

The words here are to be spoken, or sung, by a female soprano.

I

Think on this:
Gravity itself is becoming weaker.
Slowly, oh very slowly.
But think: in time
even the galaxies must drift apart,
stars fade away, and worlds end.
Of what account then, is the death of a man?

I am the Ship's Library.
Electronic machines go mad
in deep space.
There is a need, then,
for a human to remember.
I have a name, not often used.
They call me Miranda.

Our ship is deep in space,
ten hours from one of the
strangest of things
this strange universe knows.
A black hole.

Only a million years or so ago
(the merest whisper of time)
a star died.
No man has seen, close,
the death of a star.
To see would be to die.
Imagine that star's death
if you can.
Robbed of its last erg of energy
the star can only explode,
shattering its worlds.
Red-hot. white-hot.
Ultraviolet-hot matter
blasts away.
And then begins to fall back.
The collapse begins.

Nothing can stop the body
of the star falling
into itself.
Atoms, the world's structure
are crushed beneath that falling weight.
Only a packed mass of neutrons remains.
But not for long.
That great weight is too massive
even for the nuclear force to hold.
It falls.
And falls.
It falls through
the radius of Swartzchild.
Light, faster than any other thing,
is not fast enough to escape.
All that remains is the falling.
A sphere from which nothing

can escape, or ever will.
A sphere of eternal falling.

My name is Miranda.
I am the Library.
In me is all knowledge needed
by the ship.
And books.
There are many books
in me. I could recite any
one of them for you
if you wished.
They rarely wish
for Shakespeare,
for Byron or Keats
or Baudelaire or Rimbaud
or Auden or Eliot.
Only science interests them.
They do not see the poetry
there is in life. And it
blinds them. for they seek
what is not there, and
there is none to tell them.
They come to see the
black hole
to learn the secrets of nature,
to bind them. And that is
a good thing.
Yet they have knowledge,
but no wisdom,
sight, but not vision.
It is our tragedy.

We are falling towards the hole,
measuring as we come.
I am the library.
They let me see.
It looks - the words are hard
to describe something
undescribed. We are still far.
The stars around are stirred,
reddened, twisted together.
Light is made to follow crazy paths
by the presence of the thing.
Itself we cannot see.
A world could fall into the mouth
of this gaping thing,
and it would but flash briefly,
and be gone.

We humans think of worlds, of
stars, mighty as they are, as
living great lifetimes.
But from the eye of the universe,
stars live lives like moths,
fluttering about the guttering
candle-flame of the galaxy.

My name is Miranda
I am the Library.
The readings from the instruments
are read to me,
and I remember.
I always remember.
Sometimes it is a very hard thing
to have eyes that see too well.

II

In space,
time flows at a different rate.
Only our heartbeats mark
the passing of time.
Only this.
In space,
suns do not set,
moons do not rise.
We have fallen down
towards the black hole
for a very long time,
yet the time is short.
We are two hours
from closest approach.

My name is Miranda.
I am the Library.
If they were to know of such things,
if they were to ask
for what is within me,
they would see the black hole
for what it is.
But they do not ask.

Near a black hole,
time and space themselves
are twisted,
warped around.
Such is the force of gravity.

At the bottom of a well
the world is very different.

There is a surface
about a black hole,
called the event horizon.

Within that surface,
nothing;
no mass,
no energy,
no information
can escape to re-enter
the universe we know.

But the mind of Man
is forced to ask:
if a mass enters that horizon
where does it go?

There are no answers,
only guesses,
only faith.

There are some who say
that beyond the black hole,
if one could survive
the enormous tidal forces,
there lies another universe,
where the rules are different.

And beyond that universe, another.

Who can say?

There is no return
from beyond the event horizon.

We are now so close
that amidst the
whirlpooling stars

there is a black dot,
the barest pinprick.
I am the Library,
I stand and watch.

There is matter falling
into the hole.
Not much, for this system
has been swept clean.
But there is gas
in interstellar space.
It must fall into
the all-devouring mouth
of the black hole.
And in falling,
it radiates energy.
This we measure, and this
lights up space around the hole
with a hellish blue glare.
The hole, in swallowing matter,
throws off X-rays.

My name is Miranda,
I am the Library.
The technicians have
asked me to give the hole
a name.
For the first time on this trip,
I smile.
They know they lack
what is needed
to name such a thing.
For the naming of things
is not entered into lightly.

So I take the smile
from my face,
and I say to them:
name this thing
'Kali'.
And this they do.

There is much excitement.
At first I cannot
discover what they have found.
Then they tell me,
for I am the Library.
Kali, the black hole
is spinning.
It is very rapid.
Only by observing
how the tenuous gas falling
into the hole is whirled around
can they detect it.
And there is another thing.
There is much more gas
near to the hole
than they expected.
They do not know why.
They measure,
they observe,
and they speculate.
But always, always,
they forget the most basic rule
of observation.
The observer is not separate
from what he observes.

As we fall
towards the hole,
the excited gas
becomes denser.
The screen is lit by
a blue fog as the ship
strikes the gas.
But through the fog,
the dark dot that is
the hole is growing.
There is a halo of stars
around the hole,
rainbow-smeared by
its terrible gravity.
Already, there are
tidal forces on the ship.
Soon the engines will fire
to take us away.
Meanwhile, the ship
moves and groans beneath us,
and there is the sound,
barely heard,
of gas stroking the hull.
The friction of the gas
means that the engines
will need to fire longer.
Already we are closer
to Kali than was planned.

My name is Miranda,
I am the Library.
There are times when I feel
there is no other here
who feels an emotion

at the sight of this thing.
They stand at a place
where the universe itself
is twisted out of order.
They observe a thing
which, in time, could swallow galaxies,
and yet they feel nothing
except cat-curiosity.
There is no awe in them.

The time is come for
the engines to fire.
We are at our closest approach.
In the fog-clouded screen,
a black circle sits
in a nest of curdled stars.
We are strapped down.
The engines -

O!

O!

III

Now we are come
to the end of all our measuring.
Now we are come
to the end of our hope.
Now we are come
to our death.

There was a fault, they say,
in the engine.

Only precise engineering,
only delicate control
could keep the hellish
force of the engine
in our grasp.

Something went wrong.
The precision, the control
failed.

We are falling towards
Kali, the black mother-death,
Kali, the black hole.
There is no way we can escape.
Yet even now, we might miss
the hole itself,
and turn narrowly around it.
But that is where the
shortest death would lie,
for then the tidal forces
would smash us and our ship
beyond recognition.
Instead, with the small degree
of control we have left,
we are headed straight for
the event horizon,
the surface of the black hole.
In this way, the tidal forces
are less,
and we may survive
to pass through that horizon
which is truly a point
of no return.

But if the theories are
true, if the faith is sound,
there may be, perhaps,
a place beyond.

My name is Miranda.
I am the Library,
but I am no mere recording machine
and I am afraid.

In the screen,
the black disk grows larger.
There are no more measurements,
no more observation.
Now the technicians
know the black hole
for what it is.

Yet even now,
we watch.
The black hole
seems no longer perfectly black.
There is a sparkling,
a scintillation,
as we approach.
They say to me that this
is a sign of the weakening of gravity.

With the passing of time,
light which was trapped
aeons ago
is released, little by little.
This is what we see.
But I do not listen

with my self.
There are strange forces
tugging at my body
and I am going to die.

I can place no faith
in the theory that
the black hole is a gateway.
This is my universe,
this is my life.
There can be no other.

The black disk
grows rapidly now.
We are very near.
The ship is breaking up
around us.
All eyes are on the screen.
I can do nothing.
I can do nothing.
All my life,
all my knowledge
all my memories
are about to end.

There is nothing in the screen
but blackness.
We are terribly near.
It comes, it comes!

I see

The Twist of Fate

This story was first published in an anthology called "Urban Fantasies" edited by David King and Russell Blackford and published by Ebony Books in 1985.

There were human bones spilling loosely from the inside of the crater, falling with the black earth in which they had been embedded to partially obscure the still-hot layer of glass that covered the bottom.

Stephen Pham Tang, standing gingerly at the crumbling edge of this utterly impossible crater, looked down at the bones appalled. Surely there had not been so many killed by the blast? But then he remembered. Before the research institute had been built here, this had been the Melbourne General Cemetery. The catastrophic and still mysterious explosion here had killed hundreds, and thousands more were yet to die. But what he now saw were merely the relics of the long-dead.

It was hot, too hot. It was one of those blazing summer days that, as you awaken from an exhausting sleep, even at dawn greets you with the threat of its heat to come. Far too hot to be cooped up in an ill-fitting and all-enclosing radiation suit. Stephen felt as though his dripping sweat was pooling in his boots. He kept wishing vainly that he could wipe his eyes, to get rid of the blinding perspiration.

He couldn't even work out why he was here. He looked around again. The other scientists were hard at work, their bright yellow suits somehow wildly incongruous amidst this devastation. But then, the whole scene was incongruous: this landscape of shattered buildings standing like the columns of some ancient ruin in a circle around a two-hundred-metre wide crater at the centre.

There was work to be done, of course, important work. Even as he thought it, he started looking about for useful samples to pick up. But surely Samphan could have given this work to more junior workers? This was the work of laboratory assistants, not middle-aged physicists like himself.

Grumbling to himself, he bent down and picked up a piece of glass, shattered from some window. There should be particle tracks within the material which would give them some clues. He put it inside one of the plastic bags they had given him. Even that was stupid, he thought. The bulldozers whose roar now filled his ears were already removing tonnes of irradiated glass and brick from the ruins. Surely that material could be studied just as profitably as anything he could pick up. But then he gave up his internal complainings. Probably Samphan wanted to bring the researchers face to face with the reality of last week's incredible event, to shock them into a feeling of the urgency of their task, the question that they must answer, and quickly: what on earth had happened here?

For Stephen Tang, it had begun with wakening in terror, finding himself screaming with panic: "My God! What was that?" His scream had followed by the barest

instant the thundering crash that had awoken him, rattling the windows.

Everyone in the cramped house where he lived had surged out of their rooms into the street, as had their neighbours, many as stark naked as they had slept in the hot night. He himself had felt the same panicky need to get out of his claustrophobic room, perhaps subconsciously fearing an earthquake, or more likely, the long-dreaded return of the missiles. They were, after all, now at war again. And, as if to fuel his fears and agonising childhood memories, as he stood in the crowded street there had risen a distant glowing cloud like some mockery of the sun from behind the night-eclipsed hills.

His fears had been justified, at least in part. What had that night awoken most of the millions who packed the city had indeed been a nuclear explosion, though a small one. But, though many older people had been reduced to incoherent terror by the dread that the Chaos had returned, there seemed no way that the Argentines could have delivered such a weapon without detection. And the true war was far to the frozen south. No, after the first hours of general panic, it had become clear that something, no one yet could imagine what, had gone wrong here, at the Solomon Research Institute, just to the north of the city of Melbourne.

Stephen Tang saw one of the yellow-clad men waving. There was a wide red cross marked across the front of the suit, making the wearer appear somehow clown-like, certainly not the impression that he would have desired. It was Thanh Samphan, the head of the

scientific team appointed by the Emergency Commission.

Like saffron sheep, the team followed Samphan over the rubble and through an arch of twisted iron girders. Out of the innermost circle of Hell. Tang thought idly, into the next most dreadful. Here the buildings were still upstanding, though burnt to skeletons and with every window gone. Beyond them was a newly thrown-up fence of cyclone wire, with a dense layer of humanity packed up against it, looking in at the scene of disaster with various degrees of wonder, Stephen hurried forward to walk next to Samphan. "Those people," he said, "aren't they still too close? The radiation..."

Samphan nodded in irritation. "Yes. yes," he said impatiently. "But what would you have me do? There are warning signs up in nine different languages and the militia continually try to move them on. But we can't block off the road, it's too busy. Do you want me to seal off half of Carlton? Evacuate a quarter of a million people? So we should, but where would we put them all? There's no room. They will have to take their risks like the rest of us. Besides," he said, perhaps made more callous by the scorching heat of the day, "the one thing we have no shortage of in Australia is people." With that, he marched ahead to the gate, where five or six militia were keeping the crowd back from the vehicle that the Commission had allocated to them.

As they passed through the gate, the crowd seemed to surge towards them, hundreds of people, faces eager or fearful, calling out, asking questions. Stephen found the crowd oppressive, even for the moment disgusting,

as they pressed against him, most wearing only sweaty T-shirts and shorts. He wanted to call out: "Don't touch me! I'm radioactive! Go away!" But before he could give way to the impulse he was being shepherded into the car, yellow suit and all.

If the day outside had been hot enough, inside the car it was all but stifling. He found himself very thankful that they did not have far to go. Despite the heat, it would have been an easy walk, had it not been for the radiation suits and the jam-packed crowds lining the streets.

He was wedged into the back seat of the vehicle between two others, John Chau Nguyen and big Bill Macarthur, whose head brushed the roof. Macarthur turned to him and gave him a wink, "Bit of a change, eh, Steve? Never this much fun at ARL, is it?" Stephen shook his head with a faint smile.

The car pulled slowly away from the kerb. Its alcohol-fuelled engine was greatly underpowered, but there was no need of speed or power in driving through Melbourne's traffic-choked streets. They were forced to move at the same pace, as the hundreds of cyclists, and moped drivers, in a noisy, dense and sluggish stream. Their journey was less than a kilometre, but it took nearly a quarter of an hour as the car fought its way around Cemetery Road and down Swanston Street, past the towering, barbed-wire-topped walls of the University of Melbourne, to the gates. There were militia there, too, more of them, and there was an annoying delay while the gates were unbarred and swung open, allowing the car to move into Tin Alley while the militia held back the crowd. Stephen Tang felt as though he

was about to expire from heat exhaustion as the gates crashed shut behind them.

The University itself looked like a war zone. Every window had been shattered by the nearby blast, and rough sheeting had been tacked up everywhere. Piles of glass and bricks still lay around the campus where they had been swept.

There was a makeshift decontamination area set up in the old Beaupaire Centre, and they moved into the showers still wearing their suits. A grimfaced militiaman ran a radiation detector over them before they were allowed to remove the suits. Then and only then could they wash the sweat from themselves.

A lecture theatre and other rooms had been set aside for them at the top of the aging Redmond Barry Building, and Stephen and the others sat like students at the desks as Thanh Samphan addressed them. He was quite a tall man, though not as tall as a Caucasian like Macarthur, and surprisingly dark-skinned. Stephen wondered if he had some American Negro blood in him. Samphan wore tiny spectacles which made him look somehow like a grandmother. He had pinned a large map of the Carlton area up on the board behind him.

"In many ways we were lucky," he said. "The explosion, whatever caused it, occurred on a night when there was little wind." Stephen Tang remembered the night well. It had been hot and sticky, with not a breath of a breeze to relieve it. "Because of this," Samphan went on. "the fallout from the explosion fell almost directly back down. The radiation reports indicate this as the area of potentially lethal fallout." And he went to the map and carefully drew a red loop on it, extending

around the now-destroyed Solomon Research Institute and over to the east as far as Nicholson Street, about 800 metres from the centre of the explosion.

"It would be good if it were possible to evacuate all of this area," he said, looking directly at Stephen. "But there are enormous practical difficulties with this. However, many of the people living closest to the blast have abandoned their homes anyway because of blast damage. What we have done is to use the militia to seal off this area here..." he marked a smaller area in blue along the lines of the closer streets, "to try to prevent squatters moving in at least for the next two weeks. But we must expect cases of radiation sickness to run into thousands."

He turned to the scientists, "Nevertheless, this is not our concern, but that of the authorities. Our concern is only to determine what caused the blast and to do everything possible to prevent a recurrence."

He turned back to the board, a marker in his hand. "Now, I think it is feasible to rank some of the more likely possibilities in order of probability." He marked up:

Low-yield nuclear weapon assembled and detonated by saboteurs.

Runaway reaction in the experimental Tokamak.

Unknown experiment going wrong.

He looked at the others over the top of his glasses. "Any disagreements?"

Chaidir Basarah, one of Stephen's colleagues from ARL, nodded vigorously. "I can't believe either number

one or number two," he said. "Which leaves us nowhere at all. Look, building a nuclear weapon isn't something to be done in your backyard, or even in a forgotten basement lab at Solomon. Someone would notice you. And even if the Argies wanted to blow up Melbourne, why such a little firecracker? And if it was sabotage, I can think of many more useful places to blow up than Solomon."

Samphan shrugged. "Perhaps it was intended to be a multi-megaton device, but it didn't work properly. Or perhaps it was intended as a warning, to show us what could be done: "Get out of Antarctica, or else!,"

Bill Macarthur spoke up. "Not very likely. Besides, weld have had an ultimatum by now. And I think the Argentines feel the same way about nuclear weapons as we do. They suffered just as badly after the Chaos as we did. I just don't think they would do it. But look, we're not here to debate politics, but physics and technology. I agree with Chaidir. It would be impossible to build such a thing undetected, particularly if you intended it to be a big one."

Samphan nodded slowly, without it signalling agreement. "Then possibility number two?"

Stephen Tang shook his head. "I don't believe it. Why should a fusion reactor blow up like that? Surely that's impossible?"

"We have always thought so," Samphan said with a touch of sharpness, "but it seems we could be wrong. So much information was lost about fusion during the Chaos. And, Stephen, the surveys of the precise centre of the explosion place it very near to the basement where the Tokamak was operating. Perhaps the neutron flux

went so high that it induced a chain-reaction in some other material nearby."

Bill Macarthur sat up suddenly. "Now hang on," he said. "I reckon maybe we could combine numbers one and two. What if someone were to introduce a subcritical mass of U235 into the inside of the Tokamak?"

There was a sudden buzz of discussion, and ideas, probable or improbable, began to be thrown around. After an hour or so, Samphan called a halt. "Gentlemen," he said, "we have to begin some serious science, not just bandy about speculation. We can begin studying materials taken from the blast site to rule out various possibilities we have so far discussed. I propose to break up this team into sub-groups studying various possibilities. Myself and Ji Zhen will look at the feasibility of a smuggled-in weapon, which I personally still feel the most likely possibility. William Macarthur, John Chau Nguyen and Chaidir Basarah will study the fusion reactor... a terrible loss, that. We need that energy. But I am going astray. Stephen Pham Tang will look at the other research which had been going on at Solomon, to investigate any other possibilities, no matter how remote."

Stephen felt a sudden pang of anger. It was typical of Samphan to stick him at the bottom of the list and to give him the least useful job. He had no idea why Samphan disliked him. But there was always this suppressed hostility between them. Stephen gritted his teeth and nodded.

Thanh Samphan shook his head sadly. "At present, I agree, nothing seems very likely. But the Commission has been given every resource possible, The terrible loss

of life and destruction of irreplaceable research information must never happen again. I propose that we each map out a plan of attack, and meet here again tomorrow, at 10. If you need information from other people, the militia is at your disposal should you meet any resistance. You have the highest authority to enter premises and demand papers and other information." He looked over his glasses at them again. "You are privileged, gentlemen. No other scientists have ever had such power, I think. All right. Let us get moving."

John Nguyen was a senior lecturer in physics at the University, a small, painfully thin man in his late forties who always seemed ill, perhaps because of childhood exposure to the radiation from the Chaos. He walked out of the theatre with Stephen. "I have a pretty fair idea of some of the work that went on at the Institute," he said. "So I can give you a start. But a lot of the research was kept tightly under wraps because of valuable commercial or military applications. The money and the State's support is why the University ran the Institute, of course. Trouble was, a lot of secretive bods managed to work there doing pure science they claimed had commercial applications but which was just their own pet hobby."

Stephen nodded. "The biggest problem as I see it is that the blast itself has managed to destroy all of the evidence about what caused it. I take it that because of security reasons, there wouldn't be copies of research information kept here in the University itself?"

Nguyen shook his head. "Not unless there were papers published. The library would hold those. But look, let's go over to Admin and have a look at what the

people working at Solomon claimed they were about. It'll be as vague as hell, but it'll be a start."

The campus grounds were full of students as the two worked their way across to the administration building. There was little recreation space left now. Every square metre of space was desperately needed. Stephen had rarely been back here since his own studies were completed over fifteen years ago, and he was startled at the number of new buildings that had been squeezed in, or older buildings razed to make way for skyscraper-like structures. A lot of the need was for residential space, of course. Almost all the students chose to live within the safety of the high walls. The few who lived outside had to put up with twice-daily pass checks at the gates.

In the administration centre they quickly found the records they wanted on the computer system. The list, though, was dauntingly long. "I should be able to rule some of the work out simply on common-sense grounds," Stephen said. "None of the genetic engineering work is likely to have led to a nuclear explosion, for example."

Nguyen smiled. "Not unless there are genes for nuclear fission. All right. I'll leave you to it. I'd better catch up with Bill and Chaidir."

Stephen began cutting down the list. It took him an hour to reduce it to a list of six projects which, however unlikely, might conceivably have had something to do with the explosion.

Stephen took a hard copy from the machine and looked gloomily at it. He couldn't help feeling he was pissing at the stars. Surely, no matter how improbably,

it had to have been something going wrong with the Tokamak fusion reactor. These other things ... He shook his head, wondering still why Samphan had wanted him on the team in the first place. His studies at ARL were relevant, of course, but there were other, younger men now, keenly at work on things Stephen Tang barely understood. Perhaps that was it, he thought. Perhaps it was simply that I could be spared, that my work was not so important that it couldn't be left for several weeks. He sighed, and stood up. Despite his pessimism, he would do the work he had been given.

Listed on the sheet together with the name of the researcher, his topic of study, and any published papers, were the names of assistants who had been working under his control. Most of these people would be dead, he supposed, killed in the blast. But then, the blast had happened late at night. It was likely that at least some of these assistants had been sent home earlier. He sat back down at the screen and started to methodically work through the personnel records, hoping that the data had been brought up to date on the deaths the previous week. Fortunately, it seemed that they had. If nothing else, he thought cynically, the administration would want to stop the salaries of those killed as soon as possible.

At the end of another half hour, he had made a number of ticks and crosses on his list. Somewhat to his surprise and dismay, most of them were crosses, indicating that the people were dead. It seemed that working late at night was common at Solomon.

He sat back and looked at his list. He ran a marker through the entries where there had been no published

papers and were no researchers or assistants left alive. He could see no way of making any progress at all on those, and the description of work was so unhelpful that, if the blast had eventuated from that research, no one would ever be able to prove it. That left him with only three possibilities.

Dr Choe Dong Ju had been working on "Nuclear transitions as a source of lasing phenomena at gamma-ray frequencies." Two assistants were still alive.

He noted the number of their room in the residential colleges.

Dr Michael Cruickshank had been studying something he called "Local induced deformations in the space-time matrix". That didn't sound very hopeful. One assistant alive. He noted that she lived outside the University.

Finally, Dr Qing Xu was still alive herself. She had been working on "Nuclear reaction rate pathways in supernovae and applications to fusion research." That could be promising. Could she have induced a small-scale supernova? After a second, he shook his head. It sounded preposterous. Still, he would see her first.

He looked at his watch. It was in the middle of the peak hour, and millions of people would be out on the footpaths and the roads surging home.

And it was still fiercely hot. It would be intolerable trying to get all the way out to his room at Rosanna now. Better to wait until a little later. He looked up Qing Xu's telephone number, and rang her. Would she see him now?

She would.

Later that evening, he left the foyer of the new Trinity College. Although the sun was setting, the heat was still intolerable, and he could feel himself starting to sweat the moment he left the shaded college. Qing's room had been airconditioned, an incredible luxury. It appeared she was quite wealthy.

But after three hours talking, he had convinced himself that her work had not been the cause of the explosion. Her studies of reaction rates had been done with the aid of the Institute's linear accelerator, buried in a kilometres-long tunnel beneath the Institute and now destroyed by the blast. But the accelerator had been no match for the huge devices built overseas before the Chaos, and it involved very simple, well-understood technology. Qing's work had involved careful computer studies of nuclear reactions, but on a tiny scale, and in small inert pieces of material. The supposed fusion applications had just been bait to obtain funding. Besides, her work had not been scheduled to go on the accelerator that night, which was the reason she had survived. He crossed her work off his list.

He had left his moped in the parking tower near the southern gates of the University. He climbed in, lay back, closed down the flimsy transparent hood - rather like closing a coffin lid on himself, he always thought - and grasped the control stick between his legs. This was the one luxury he had permitted himself after the breakup of his marriage. Dr Qing Xu had her airconditioning, he had his moped. Tonight, he thought

that he would let the engine do most of the work. He felt bone-weary. Besides, he could probably get the cost of the alcohol refunded by the Commission as a necessary travel expense.

He drove down to the gate, showed his special pass, and was permitted to pass out into the torrent of humanity that still surged along the streets. Hundreds of bicycles, many of them in the energy-saving recumbent design, dozens of mopeds like his own, the occasional automobile. And thousands upon thousands of people plodding along on foot along the widened footpaths.

He fought his way through the choked streets, seemingly little less densely trafficked than at the peak hour. He still found it amazing that so many people still had to travel. Most people, after all, elected to live close to their workplace, if they had one. It was not as if there was any public transport left. Once, there had been electric-powered trams and trains in this city. But that was before the Chaos-induced energy shortage had gripped Australia like a maniac bent on strangulation.

Thinking these dismal thoughts, he at last reached the freeway. As he steered the moped around the slightly slower-moving cyclists, Stephen looked up grimly at the disgusting slums jammed onto the sides of the freeway and over where the parks had been, makeshift shanties packing every jot of space with hopeless humanity. That was where you ended up if there was no work for you, shitting into a tin can with a piece of plastic over your head to keep off the weather.

At last, he reached the rooming house where he lived, only a couple of kilometres from the Australian Radiation Labs. What had once been a garden was now

packed with roughly-built extension rooms. He climbed out of the moped and wheeled it inside and through the narrow corridor to his room. With the hood collapsed, it fitted fairly well under the bed. He drank some of his water ration, and then, exhausted, dropped on to the bed and fell quickly asleep.

At the meeting the next day at the University, there was a lot more discussion. Some of the preliminary results had come in on the materials they had collected, and Bill Macarthur had begun a detailed mathematical treatment on the effect of introducing fissionable materials into the Tokamak. It sounded quite plausible. More and more Stephen felt that his own task was make-work, unimportant, a dead-end. The explosion must have something to do with the fusion reactor. But still, not all the leads had been followed up.

After the meeting broke up about lunchtime, Stephen again consulted his list. Dr Choe Dong Ju's two surviving assistants lived on the campus. He would visit them next.

It turned out that the two assistants, both male, were on detachment from the militia. They lived in the same room in Newman Tower, and sat like mass-produced dolls together on the edge of one of the beds as Stephen sat on the other, asking them questions. Their hair was identically cropped short, they were of about the same height and colouring, and each was as reticent as the other. The only thing that distinguished between

the two was that one was a Caucasian. Stephen almost felt that, if it had been possible, David Carnegie would have had his round eyes and longer nose altered by surgery to look more like his room-mate, Charles Hoang. The two had survived the blast simply because they had been rostered off together that night. They seemed to show little emotion or sense of loss that their professor and other colleagues had died in the mysterious blast.

For the first time, Stephen had to use the threat of his emergency powers in order to make the two talk at all. But after a while, he fully understood their reticence. Dr Choe's work had been on the feasibility of creating a graser, a weapon which would be appallingly lethal if it were possible. Given an appropriate power source, you could use one to carve your initials on the Moon. Stephen's skin pricked with anger and disgust. Does this madness never end? he thought.

"How far away from success do you think Dr Choe was?" he asked the two, fearing the answer.

"A long way," said David.

"Years, maybe decades," said Charles.

"A weapon like this, you'd need a nuclear explosion to power it, isn't that right?"

"Possibly," said David.

"Probably," said Charles.

Stephen sighed. "Then you must tell me whether Dr Choe had access to such power sources. That might be the reason the Institute, and all his work, was destroyed, isn't that obvious?"

David Carnegie shook his head. "Out of the question. Anyway, the old man wasn't anywhere near actually building a graser. All he was doing was pottering about, mainly with theory, trying to work out if the thing was feasible."

"Besides," said Charles, "you don't think the State would just hand him a nuclear weapon to use in his basement, just like that, do you?"

"Even if the State admitted that Australia has developed such weapons, which it doesn't," said David.

"After all," said Charles, with the first hint of a cynical smile, "we don't want the Chaos back again, do we?"

After an hour of this, and a close examination of some working papers that the youths had kept, Stephen finally decided that he was getting nowhere. If the two militarists were telling the truth - and how could he determine that? then Dr Choe's work was still very much as the theoretical stage. Stephen gave up, and left the two still sitting as they were, militarily upright and tight-lipped.

Outside the tower, he again looked at his list and pondered. It was yet another damnably hot day, and the humidity was high. Probably by that night a cool change would sweep in, heralded by a sharp-edged thunderstorm and crackling lightning. He hoped so. He looked at his watch. He would have to drive out to Collingwood if he was to see Elli Wirruna, the sole surviving assistant of Dr Michael Cruickshank. But the address he had was not far from the beginning of the freeway, almost on his way home. And the sooner he got this farce over with, the better.

He pulled the moped up outside four crumbling towers in Hoddle Street, and looked up in disgust. It was obvious immediately that these ancient buildings were merely vertical slums, twenty storeys high. He looked again at the address. No mistake. And the room number was on the nineteenth storey. Evidently Elli Wirruna, despite having a job, was in poor circumstances. Perhaps she was still repaying a grant that had allowed her to attend University. She certainly could not have had wealthy parents like most students, or she would be living on the campus.

What had once been a recreation area at the foot of the towers was now filled with a rambling dole-market, where the poor traded scraps of vegetables, hand-made goods and other junk. The smell almost made him gag. But he forced his way through the crowds of hopeless, dirty people, ignoring the jeers of the myriads of yelling children who ran naked in the narrow aisles between the tents and stalls, to eventually reach the foyer of the building he wanted.

The lifts were out of order. In fact, it looked as though they had not worked for years. The door to the stairwell was propped open, and the stairs were worn away in shallow curves by constant use. For a moment, Stephen was tempted to give up here and now. The thought of climbing nineteen flights of stairs on a hot day like this could not have been less appealing. Still, he had a job to do. Once he had seen this Wirruna woman, he had done what he had been asked to do. Samphan

could either involve him with the more interesting work on the fusion explosion, or let him go back to ARL in peace. He began to climb.

Gasping desperately for breath and soaked in sweat, he managed to reach the nineteenth storey at last. He had had to fight his way past dozens of people coming up and down the stairs, though there had been many less people the further up he climbed. Time and again he had been forced to stop and regain his breath. His legs were trembling and weak. Why would anyone chose to live all the way up here with no lifts? Housing was desperately scarce, of course, as the shanty-dwellers attested. But he would almost rather live along the freeways than be forced to climb up those stairs every day. Evidently he must expect Elli Wirruna to be athletic.

Piles of rubble were stacked on the crumbling concrete balcony outside the doors. Some of the doors had been broken open, and revealed narrow, deserted, rubbish-filled rooms. Stephen found it very hard to reconcile the idea of someone who worked at the research institute living here except because of the direst necessity.

He found Wirruna's door at last, and knocked. For a long time there was no answer, and he was just turning away in exasperation when the door came open, secured from opening further by a thick chain, and someone looked out.

Stephen Tang stepped back, startled by a face that did not at first seem human. It was pitch black, for a start, with a flattened nose. That was unusual enough, but the woman whose face it was looked as though she were desperately ill. Her eyes were bloodshot and her

lips dry and cracked. From behind her came the sour stench of vomit.

But these unfavourable impressions were modified somewhat after Stephen had a moment to overcome his surprise. The woman was quite young, and neatly and cleanly dressed in a green blouse and pants. "Who are you?" she asked in a weak but well-educated voice. "What do you want up here?"

Stephen explained, and showed his authority. He hoped he wouldn't have to go back down to fetch the militia. But the young black woman just nodded, and attempted a smile. "You don't think Cruickshank's work blew up the Institute, do you? Not bloody likely. Still, you'd better come in." And she unhooked the chain.

Inside, the room was small and cheaply furnished, almost filled by a bed that had its head to the windows opposite the door. But it was clean and obviously well-kept. There were attractive posters stuck up on the walls, mostly engravings by Maurits Escher. "Sit down," said Elli Wirruna, bringing out a wooden chair from the tiny kitchen. She herself stood shaking with her back to the wall, hands clasped before her. Above her head was an Escher engraving of ants crawling over the surface of a wooden-framed Mobius strip.

"I'm sorry for the stink," she said after a moment. "I've been crook the last week, keep on having to throw up. Could be shock, I suppose. Dr Cruickshank and I were quite close." She stopped for a moment, and her hand made a spastic gesture towards her face as if to wipe away familiar tears. Seeing his glance, she suddenly snapped. "Not like you're thinking, I wouldn't have slept with him. Too old, for a start. But I respected

him, respected his brain. respected what he was doing, even if he wasn't practical about it."

"How did you come to survive the explosion?" Stephen asked.

"Blind luck. I'd gone across the footbridge to the University to fetch him a book. He lived in Ormond, did you know that? I was halfway across the bridge when I was knocked down by the blast, knocked unconscious. They told me afterwards I was lucky the bridge didn't collapse underneath me. They had to tear it down the next day."

Stephen gave an inward curse at himself. He should have checked whether there were any relevant papers in the personal rooms of those killed by the blast. Taking such materials out of the security of the Institute would have been against the rules, of course, but it would have to be followed up nonetheless. More time-consuming and probably useless work.

He looked down at his list. "This work of Dr Cruickshank's. What can you tell me about it?"

She shook her head sadly. "It was the most important, most incredibly important and original work for decades. And now most of it's gone. Cruickshank was another Einstein, do you know that? I mean, really. Most of the other scientists are just catching up with what was lost during the Chaos and the years afterward. We're barely getting beyond what was known forty years ago. But Cruickshank's work, mostly in his head, theoretical work... it was as though the Chaos didn't exist for him. He just ignored it, and kept on thinking. He was way beyond anything they thought they understood about general relativity before the Chaos. I

know that hundreds died in the blast, but there was only one of them who was important. Michael Cruickshank."

Stephen listened to this song of praise with some impatience. "Yes, yes, but I need some details. Do you have any papers, published or unpublished, about what he was doing?"

She gave him a sly look. "I might have, I might not. Oh, don't threaten me again with the militia. I don't give a damn. What's important is that Cruickshank's work be carried on by someone who understands it, who knows the potential it had. And I don't think it would be helped by letting the details out too soon. Next thing we'd know, the State would have grabbed it up and given it to some half-wit whose uncle is on the Council, and we'd never hear any more. Or they'd appoint a bloody committee to look into it. No bloody fear."

"Look here," said Stephen sharply. "I'm not interested in who continues Dr Cruickshank's work. You can keep it to yourself to work on for all I care. But I must know whether his work could possibly have led to that blast, the blast that killed him, and has killed hundreds of others. Thousands, when you look at those who will die from the after-effects. You must tell me, or I will have no hesitation about calling in the militia. And I can also arrange it that you are never able to work in science ever again."

That was the threat which unnerved her. She sat down on the bed, looking very ill again. "All right. Michael was working on the theory of space-time, and had developed a practical means to create small-scale deformations in the space-time matrix."

"So his project description says. But what does that mean?" It was hot in the room. There was no airconditioning here, of course. And Stephen was becoming impatient to get this over with and set off home. He was also worried about the safety of his moped, parked near the market below.

She hesitated, and then stood up. "Hang on a sec," she muttered through a clenched mouth, and staggered over to a door. Beyond it was the toilet. She started to dry-retch, and, wishing he could stop his ears, he looked away, up at the Escher print. How curiously simple and yet weird a Mobius strip is, he forced himself to think, unable to bear the sounds of misery. Take a thin strip of paper, give one end a half-twist, and join the ends. Don't listen! And then you have an object with only one edge and only one side.

The noises stopped. In a few minutes, Elli returned. "Nothing there," she said weakly. "Sorry." Then she sat in silence for a while, obviously working out what to say. Despite himself, Stephen was becoming curious.

"Cruickshank had developed a complex theory, going well beyond the Einstein-Hawking formulation of general relativity that was the accepted wisdom before the Chaos. In simple terms, he was fascinated by the curvature of space, and the various four-dimensional topologies that the universe might have. Cruickshank believed that the topology of space might be very complex indeed. And he wasn't just a theoretician. He was a brilliant experimentalist, too. What held done was to work out a way to experimentally create deformed regions of space-time which could be examined in the laboratory, by seeing how they bent light, that sort of

thing. Very small scale: the first regions he worked on had microscopic dimensions. But I encouraged him to work on larger-size regions, so that different types of experiment could be carried out, sending solid particles into the region and so on. That's about it, unless you're interested in the mathematics."

Stephen was a little disappointed. "And how were these regions created? Did they involve the use of nuclear energy?"

She almost laughed at the naivety of the question. "No. It involved the use of the electromagnetic force converted via Cruickshank's equations into gravitic curvature. The energy involved depended on the dimensions of the deformed region, but was really surprisingly modest. Gravity is, of course, the weakest of the known forces."

He pondered, tapping his notepad with his marker. "And were these regions stable?"

"In a sense, no. Left alone, the deformation would reduce out and the space in the region would become normal. Again, the time taken for the deformation to flatten out depended on the dimensions of the region. But I..." She stopped.

"Yes?" he prompted. "But you...?"

Somewhat reluctantly, she said: "I was responsible for showing that, in the larger regions, the deformation could be maintained indefinitely by the insertion of a framework of rigid material. But, look, when we're talking about these regions of space being unstable, we're not talking about nuclear explosions. There was

nothing dramatic about it. The deformation just gradually faded out, that's all. No bangs,"

He sat still for a while with a slightly puzzled expression. Elli Wirruna was also silent, but then she burst out: "Look, I've told you more than I wanted to. You're right, I want to keep on working on Cruickshank's work myself. And there's no way that the explosion could have come from our lab. It was probably the bloody Tokamak, damned expensive toy that it was. Can't you keep Cruickshank out of it, leave his work to me?"

Her hands were open, making grasping motions. Slightly repelled, Stephen Tang stood up. "All right," he said. "I'll do what I can. But I'll need copies of whatever papers you have, mathematics and all. I promise that I'll keep them secure."

"Okay," she said slowly. "But, look, do you mind waiting outside while I find them? This place is a mess, I don't know where I've left them. And there's hardly room for two people in here while I rummage about. Please?"

Frowning slightly in puzzlement, he could find no reason to refuse. He stepped outside onto the balcony while Elli closed the door. He heard it lock, and his frowns became deeper. But instead of worrying about it, he looked out over the edge of the balcony. It was a long way down to the squalid children-filled yard below, and the concrete wall was clearly deteriorating with age. He wondered how long it would be before the balcony itself fell into the yard. That was an unpleasant thought.

Just when he thought that he would have to fetch the militia up to break open Elli Wirruna's door, it

opened, and her black face looked out again. "Sorry. Here they are." And she passed out a couple of sheets of paper, covered in equations which meant nothing to him.

But now he felt that she owed him something. "I wonder whether you would answer a personal question?" he said.

She gave him a suspicious look. "Depends."

"Why do you live up here?"

White teeth flashed again. "Because nobody else wants to. Good enough?" As it obviously wasn't enough, she went on: "It's cheap. And I don't like visitors. Don't like crowds in general. Maybe I just like the view, all right? Is there any crime in that?"

He could see her hostility increasing, so he shook his head and went off, carrying the papers, and thinking hard. There was something in what she had told him that gripped him deeply. The science itself was fascinating, that could be it. And certainly there seemed to be no connection with the bomb blast. He gave it up, and started down the endless stairs.

The next few days were spent in communal discussions in the old psychology lecture room. Samphan had now come down on the side of Bill Macarthur and was supporting the consensus view that the Tokamak could have been sabotaged. The right kind of fissionable material, introduced within the Tokamak

chamber while it was operating, could have undergone a chain-reaction by bombardment with neutrons. And it could have been a quite small mass, so leading to a lowyield explosion. The saboteur or saboteurs would have been killed by the blast, however, unless they could have developed a timing device to release the mass.

Stephen Tang felt unsatisfied. It all sounded so very unlikely, and it left open a lot of questions about motivation, not to mention practical difficulties of obtaining the enriched fissionable material in the first place, and inserting it within the reactor vessel. But nevertheless, he wasn't going to attract any ill-feeling by submitting a minority report. If the sabotage theory was good enough for Thanh Samphan, then it better be good enough for Stephen Tang as well.

But John Nguyen came up to Stephen at the end of one of the sessions, a couple of charts in his hand. "Have a look at these: they're the results on the irradiated samples we picked up. What do you think?"

Stephen studied the graphs carefully, and then looked up, puzzled. "There don't seem to be enough heavy particle tracks. It looks..."

"Yes?"

"Well,, I'm no expert, but I'd say that it looks more like what you'd expect from particle-antiparticle collisions. Lots of gamma rays."

"Hmmm. That's what I thought. But Bill says it depends on the exact nature of the fissionable material. We'll not convince him, so I suppose we d better shut up."

After another few days of heated discussion, Stephen was becoming weary of it all, longing to be back in his own office at ARL, doing mediocre but useful research. A footnote scientist, that's what I am, he thought. He had made the wrong decisions too long ago to change himself now. And next year, he turned 40. Too late, too late.

Dozens of assistants and clerical workers had been called in by now. and the top floor of the Redmond Barry was beginning to look like the centre of some new industry, an industry whose entire output would be one report that would explain the explosion to everyone's satisfaction. It would carefully recommend severe security restrictions on the access to any future Tokamaks, the construction of which would also be strongly recommended. Stephen found that he was distanced from it all. The scientific team didn't really need him, and he felt that he was just marking time.

Sitting one morning at the desk they had given him, the telephone rang. "Excuse me, sir," came the voice, "Ngoc Khieu here, the Room Allocations Officer from Admin."

"Yes?" said Stephen, bewildered.

"Well, we're very short of accomodation room in the colleges, as you'd know. And we're still holding open the rooms which used to belong to the unfortunate people killed in the blast two weeks ago. You asked us to do that, sir, according to our records. I was wondering if we could clear them out now. sir, and let some new people in?"

Now he remembered. After visiting Elli Wirruna, he d asked that those rooms be left as they were. But

he'd never got around to looking through them. Now he hesitated. He had the scientists' inbuilt reluctance to destroy information.

"I'm sorry," he said at last. "I should have gotten to it sooner. You can clear out the rooms as of tomorrow. I'll spend the rest of today looking quickly through them. All right?"

"Fine, sir," said Khieu, clearly happy to have a problem resolved.

Stephen also felt irrationally happy. He had no hope now of finding anything to overthrow the conclusions of the Commission, but he would have something to occupy him, get him out of his chair. He dug out the list with the names of those killed in the explosion. There were a lot there. No wonder Admin was fretting about the dormitory space.

He spent very little time on each room. The sleeping rooms at the colleges were small of necessity. The morning blurred together into an amalgam of various bedrooms and he found himself looking not so much for evidence about the explosion as for signs of how each person individualised their rooms, put their mark on it to make it their own. A poster here, a stuffed childhood toy there, a vase of flowers, now dead and stinking. These things had reminded the inhabitants of the rooms of their own existence, their own individuality among the millions of others who lived in this ant-nest of a city.

Then he came to Dr Michael Cruickshank's room. and somehow the blur stopped and he found himself looking through it with new interest. Elli Wirruna had been on her way here to fetch Cruickshank a book when the explosion knocked her down. He looked around, thinking again about that remarkable interview he had had with her.

The room was slightly larger than that allocated to students or research assistants, but not much. It was dominated by the bed, of course. But there was at least room for a small desk, with a couple of bookshelves propped on top of it.

There were no working papers to be found. The only thing on the desk was an odd piece of glasswork that Cruickshank had apparently used as a paperweight. Stephen picked it up. It was a model of a Klein bottle, a kind of vase-shape with the bottom tapering out into a tube which was then passed through the side to connect with the mouth inside. Obviously part of Cruickshank's interest in topology.

He skimmed through the books quickly. Mostly physics. No light reading, no thrillers, no poetry. Cruickshank must have been obsessed with his theory to the exclusion of everything else. There were no posters here either, no marks of individuality, except a small silver ornament on top of the bookcase, hardly big enough to catch the eye.

Stephen sighed. There was nothing here of any interest. He was wasting his time.

But as he went to the door, he turned around for one last look, and the silver ornament gleamed. He frowned. Possessing something like that seemed to be

out of character for Cruickshank. He went back into the room and picked the tiny thing up.

It seemed to be nothing more than a small sphere of glass cupped in a fine silver lattice which enclosed barely more than half its surface. But it was surprisingly light if the material were glass. Maybe it was just plastic. He poked his finger at it.

Once, long ago, as a child growing up in the crowded, hungry streets of Melbourne, Stephen Tang had had a weird experience. He had been walking towards a cyclone-wire fence across an alley, beyond which were playing some of his friends, when he had suddenly had the overwhelming conviction that he could walk through the fence as though it were not there. And, centimetres away from the wire, he had been forced to stop, dry-mouthed and trembling. Not from the fear that he would hit himself on the wire and look stupid, but from the terrible fear of what would have followed if he had indeed walked effortlessly through the wire. It was unbearable to contemplate. His whole sense of what was possible would have collapsed, and his world with it. And so, still trembling, he had turned away from the wire and sat down.

Now, in the tiny bedroom of Dr Michael Cruickshank, Stephen Tang's mental universe collapsed just as it would have if he had walked through that wire fence.

His finger passed straight through the sphere in the ornament and did not come out on the other side.

Giving an inarticulate cry, he sat down suddenly on the floor, his left hand still grasping, as if in a vice, the ornament that seemed to have swallowed the index

finger of his right hand. Desperately trying to retain his sanity, Stephen closed his eyes for a second, feeling dizzy and trying to think sensibly. He had felt no pain, and he wiggled his invisible finger to be sure it was still there. He opened his eyes. Then, very carefully, as though he were moving it through a maze of razor blades, he withdrew his finger. Trembling a little, he held up the amazing object to the light.

It still seemed as it had before, a small glass sphere, acting as a kind of lens and inverting images of what lay beyond it. Trying to regain his sense of reality, Stephen fumbled for his marker. You're a scientist, he told himself. Facts, observations, objectivity. Test, experiment, discover. Repeating this litany over and over again in his mind, he pushed the marker point first into the sphere.

He noted, first, that an image of the marker was now visible within the sphere, but diminished in size, shortened and distorted. There seemed to be no resistance, nothing solid within the sphere. But the sphere was only a centimetre in diameter and he had easily pushed four centimetres of marker into it without the tip emerging. He kept moving the marker forward.

Finally, when he only held onto the marker by its very end, he met a resistance. Gingerly turning the sphere and marker together, he saw that the very tip of the marker had now emerged on the other side and was wedged in the silver lattice. The marker, which was at least ten centimetres long, had been almost entirely swallowed up within a sphere many times smaller.

"Local induced deformations in the space-time matrix"! That was what Cruickshank had been working

on. And now Stephen held in his hands the reality of what those words had hidden. Somehow Cruickshank had found a way to pack ten centimetres of space - no, in terms of volume, a thousand cubic centimetres -into the space of one. He shook his head. The very language didn't cope with such a concept. What did he mean by "space"? All he knew was, there was far more room within that small sphere of space than there ought to be.

Still barely able to believe what he had seen, he stood up. His legs were wobbly, and he had to support himself on the desk. There was one more test he wanted to try. Carefully hiding the sphere inside his hand, he left Cruickshank's room and walked down to the communal bathroom. He put a couple of coins in the meter, ran a basin full of water and then slowly lowered the sphere into it.

It was like immersing a sponge. Air bubbled constantly out of the tiny object and the water level in the basin shrank away as though the plug had been removed. When the bubbles stopped, with only a thin layer of water above the submerged sphere, Stephen tried to move it. It felt as heavy as lead. He pulled it out of the basin, and water streamed out of the object as if from a tap.

He looked at the thing again, still amazed and confounded. So this was what Elli Wirruna had been so concerned to conceal from him. He had to see her again.

The nineteen flights of stairs had dimmed his curiosity somewhat. Gasping, he found his way to her door and thumped on it. This time, there was a kind of croak, and then a slow shuffle of feet, before the door came open.

He had been startled and shocked the first time he had seen Elli Wirruna. Now he was shocked again, but for a different reason. The young woman's dark face was marked with patches of flaking white skin, and her lips were cracked and bleeding openly. And she seemed to be losing her hair.

She stood silently regarding him for a long time. "So," she said. "And what did you find?"

Stephen silently brought out the weird sphere from his pocket. The silver lattice gleamed. "The idiot!" she said bitterly. "I suppose you found that in his room. When he was working, he could never think about anything sensible, never worry about security. I used to be on at him all the time." Then she was silent again, looking at the unnatural object in Stephen's palm. Finally, she unhooked the security chain.

"It doesn't matter, anyway, not now," she said, and her voice held secret agonies. "Look at me!" And she grasped her hair with one hand and pulled out a patch of it without effort. She moved to the bed and sat down, looking out of the window. "Radiation sickness. I think I knew, really, deep down, from the moment I woke up and they told me what had happened. I was too close, too exposed, there on the bridge. And so I'm going to die." These last words were spaced out, each one held for a second and then let go. Tears began to fall from her eyes as she stared blindly out of the window. Stephen,

embarrassed and shocked, sat down on a chair, not knowing what to say. He had not expected this.

After a while, she said: "I'm glad that you came. I can't get up and down the stairs anymore, for one thing. And now I'm not going to be able to continue Michael's work. And someone must. It mustn't be lost." She turned to him, a feverish light in her eyes. "You found one of the small spheres, you know it's something incredible. Can't you see the potential? Room, that's what it means! Room to live! Away from these damned crowds."

Stephen shook his head a little, not yet following her completely. "What do you mean, room to live?"

She gave him an angry glare. "You fool! You're as bad as Michael was. He couldn't see anything except his precious theory, he had no sense of practicality, no sense of the applications of what he had found. Theory, theory! My God" On unsteady feet, she forced herself to stand. "You don't know what I mean by room to live? Come here, then, and see!"

She staggered, almost toppled, towards a small wardrobe built into the wall of the tiny room, and threw open its door. Immediately under a long, thick belt tied to the clothes rod was an ordinary-looking

cardboard box, with a power cord leading into it. Triumphantly, she pulled open the flaps at the top. From inside came the faint gleam of silver.

Slowly, hardly able to believe what she was showing him, Stephen moved forward.

Inside the box was another sphere and lattice. But this sphere of distorted space was almost half a metre

across. He stood looking at it, thoughts whirling. "How big is it inside?" he asked at last.

She laughed, unpleasantly, the laugh of a sick and doomed person. "That's a tricky question to answer. The volume is about 72 cubic metres. But, another way to look at it, if you were to push a stick through it, the stick would have to be nearly nine metres long before it came out the other side. Put yet another way, the 4-space diameter of the bloody thing is only about three metres. Are you any the wiser?"

Stephen could only shake his head.

"You still don't understand what it is, do you?" she said in an angry, agonised tone. "Damn it, I don't ask for another Einstein, another Cruickshank, but I need someone with some sense! The bloody thing's a bubble in space-time, a miniature universe, a 4-sphere, an unbounded but finite volume of space! Oh, for God's sake, go down into it and have a look. Here, I'll go first and turn on the light." And, weak as she was, Elli Wirruna stepped into the weird sphere in the cardboard box and let herself down into it by means of the leather belt. It was like watching a conjuring trick.

Suddenly, the sphere lit up from inside, and he could see a miniature image of the black woman inside the thing. Refusing to allow himself to think, Stephen grabbed hold of the belt and followed her into the sphere.

The first thing that happened was that his stomach revolted, and he suddenly panicked. He was falling! Falling endlessly without going anywhere.

"Don't have kittens," came Elli Wirruna's voice. "Should have warned you. You're in free-fall in here. Steady, wait till you're used to it."

It took him a while, and he closed his eyes until his sense organs had righted themselves. Then at last, he felt able to look about.

He seemed to be floating inside a large spherical room whose walls were made of some kind of canvas, apparently tacked onto a wooden frame. Ropes criss-crossed the area from wall to wall. Floating inside this region were himself, the woman, and a varied assortment of objects like books, lights and sound equipment secured to the ropes. Together with the weightlessness, the large area came as a sudden release from the confines of Wirruna's cramped bed sitter. It was as though he had been suddenly, effortlessly transported to a roomy spaceship hanging above the Earth.

Cautiously, he turned his body. He was still hanging onto the leather strap, which now seemed to be embedded within a sphere just like the one he had entered to get into this place. He let go, and drifted out into the room, his mind almost as unfixed now as his body.

Elli Wirruna hung limply, like a corpse immersed in the sea. A trickle of tiny red bubbles of blood was floating from her mouth. But she roused herself as he looked at her. "Do you see? Tell me! I need to know you understand."

Stephen looked about, only now beginning to realise how weird this space was. The ropes were taut to the touch, yet to the eye they followed obvious curves. He moved to one, looked along it. It seemed perfectly

straight now, but the other ropes were even more strongly curved. There was a hole in the canvas wall near the end of the rope, and he pulled himself towards it and looked through.

On the other side of the wall was what seemed to be another spherical room, also lined with canvas, though this time with the wooden framework inwards. But then, suddenly, he understood. The canvas he was now looking at was exactly the same as that which enclosed the first room, except that he was now looking at the back of it. A single wall, which bounded a sphere inside, and another sphere "outside". The wall was in fact, in a sense, flat, cutting Elli Wirruna's private universe exactly in half. And it had obviously been erected to keep her sane. Otherwise, wherever she looked, she would be seeing the back of her own head.

Two-dimensional analogies were the only way for Stephen's mind to cope. Imagine the universe to be two-dimensional, like a flat sheet of plastic. Now soften a small circular area of this plastic, and blow onto it, blow a bubble into three-dimensional space ... To any two-dimensional creatures, such a region would contain far more area than its outside appearance would indicate. It would be anomalous, weird. And yet that was what Cruickshank had done with three-dimensional space: blown a bubble of it up into the fourth dimension. And he, Stephen Tang, was now moving around on the surface of that bubble, that fourth-dimensional sphere.

He turned to Elli. "Yes," he said. "Now I understand."

She looked at him triumphantly, her thinning hair floating in a halo around her head. "There's no apparent

gravity because the curvature is constant in every direction. You get used to weightlessness very quickly. There's no better way to sleep. Now do you see what I mean by room? Make eighty million of these 4-spheres, and every man, woman and child in this country can have as much room as they like to themselves. Or create ones with bigger volume. My God, you could put an entire office block in one of these."

That was all a bit much for Stephen, who was overloaded with wonder and speculation. "Let's get out," he muttered, and grasped for the leather belt within the latticed sphere at the centre of the room. Moments later, he was outside, hauling himself up on the belt. He had to help Elli Wirruna out of the weird region of space, she was so weakened and ill.

He lay her on the bed. Her body was clearly near exhaustion, but her mind was incredibly active.

"How did you get that thing here?" he asked.

"Made it at Solomon, then smuggled it out." Her voice came in gasps, each sentence punctuated by long silences. "You can move them easily, that was a surprise. There's no inherent resistance from space-time to moving the bubble, except that you have to move the mass that's inside the region. I had to pump my universe full of helium and make it airtight before I could carry it. Ordinary air would have weighed far too much. Imagine, though, carrying a universe with you inside a cardboard box! Think of the possibilities! Think of the potential!"

Stephen saw the potential all right, and he saw also that Elli Wirruna had wanted to keep the glory of the discovery to herself once Cruickshank had died. Leave it

a few years, and she could present the creation of the 4-spheres as her own triumph. But now she was dying, and it was too late. And there was something else that was worrying at him, nibbling at the edges of his mind, but he couldn't quite identify it just yet.

He brought his attention back to reality. The woman was talking, almost incoherently now, gasping and spitting blood. "All those damn people out there... three hundred years ago, this land was empty apart from my people. Just a few of us in all this wide land. We belonged to the land, and the land was us. And room! My God, the room! Plenty of room, plenty of space, room to breathe. But then the white people came, and it was bad enough. And then the Chaos, and all you bloody Chinks flooded in! My God! You asked me why I lived up here? So I could breathe, so I could breathe!"

And then she subsided into a feverish muttering. The exertion of climbing into and out of the 4-sphere and expounding its nature to him had been too much.

"Can I get you a doctor?" he asked, but she shook her head violently.

"Leave me alone, just leave me to die."

But after what he had seen it was impossible for him to go. And he was thinking something through, something that was still irritatingly just below the consciousness of his mind. He looked up and found himself staring at the Escher print on the wall. Ants crawling over a Mobius strip. The Klein bottle that had been on Cruickshank's desk was another example of the same kind of thing, an object with no inside and no outside.

He had been forced to use two-dimensional analogies just minutes before, to grasp the nature of the 4-sphere, and his mind was still running along in the same vein. If you were a flat, two-dimensional creature, and you lived within the surface of a Mobius strip...

Elli Wirruna had almost gone off into an exhausted sleep. Now he shook her awake. "Elli! You said Cruickshank was experimenting with strange topologies for the universe! Could he have been trying to create a space-time bubble connected like a Klein bottle? Answer me!"

Her eyes blinked open. They were the colour of blood. "Yes, yes, something like that. Theories, his damn theories..."

And Cruickshank had had no head for practicalities! Suddenly it came perfectly clear to Stephen in one astounding stroke of insight. If you were a two-dimensional creature living within a Mobius strip and you made a trip once around the surface, when you returned to the point of departure, you would have undergone a mirror-reversal. Twice around, and you would be back to normal.

And mirror-reversed matter was anti-matter!

He stood up with a shout. It was Dr Michael Cruickshank who had caused the explosion at Solomon!

Intent only on his theories of the topology of the universe, Cruickshank had created one of his regions of deformed space-time with a half-twist in its topology, a four-dimensional analogue of a Klein bottle or of a Mobius strip. And once air had rushed into the newly created region, some of the molecules had moved off in a

"straight" line within the region, gone once around the miniature universe, and returned to where they had started. Mirror-reversed, as molecules of anti-matter. And there they had met molecules which were still ordinary matter. The resulting annihilation of mass had resulted in an enormous explosion of energy. Less than a gram of mass destroyed would have been enough to do the damage at Solomon.

He looked down suddenly. In his excitement, he had crushed the fine silver lattice of the small 4-sphere he held in his hand. As he watched, the strange sphere began to gradually fade as the distortion of light it caused became less and less, until there was nothing left. It was gone.

He looked round at the bed. Elli Wirruna was descending into some inner mental world of her own. She could not have understood anything of what he had just discovered. But she seemed to rouse herself as he looked, and she whispered:

"Papers. I have all his papers. In the 4-sphere. In the blue box. You must publish them, get his work turned to use. Give us all some damn room. Room to breathe..."

He left her and went back into the anomalous region of space, the private universe that Elli Wirruna kept in a cardboard box in her wardrobe. The sense of unreality still filled him.

Floating and pulling himself along the ropes, he found the blue box and opened it. In the weightless state, it was all but impossible to properly look through the papers inside. But she seemed to have made photocopies of every one of Cruickshank's working papers, right up until a few days before the explosion. It was all here, the

whole theory, the whole discovery of how to create space-time bubbles.

With this treasure, he hauled himself up out of the 4-sphere. As he stepped out, he heard the sound of choking.

Dropping the box, he ran to the bed. Elli Wirroruna was unconscious, blue in the face, choking to death, her mouth wide open to reveal the dozens of bleeding sores that filled it. She was drowning in her own blood. He hauled her over the bed so that her head hung downwards, trying to drain the blood from her lungs. She was jerking spasmodically, and he felt utterly helpless. He should attempt some kind of artificial respiration, he knew, but he recoiled from putting his own mouth into contact with that bleeding, toothless mess. And even if he were able to save her now, within days her death would be as certain as the sunset.

In a minute the spasms had stopped, and the woman was still. A pool of bright red blood lay soaking into the cheap carpet at the side of the bed, reflecting the light like some gory mirror.

He looked away, and sat down. It was all too much, too much to bear.

On the floor lay spilled the copies of Cruickshank's papers. He knelt down and mechanically began to pick them up, one by one.

Now, both Cruickshank and Wirroruna were dead, both of them killed by the discovery that had obsessed them. And only Stephen Pham Tang was left to triumphantly announce the discovery to the world. He could go back and demonstrate that the Commission

was utterly wrong about the explosion at the Solomon Institute, shatter that expression of smug superiority on Thanh Samphan's face. He could be famous, a saviour, bringing to the world, even if he had not created it himself, a means of salvation from overcrowding, a means of salvation from the desperate lack of energy,, For, given the right safeguards, there was no doubt that one of Cruickshank's Klein-bottle regions would be an endless source of cheap energy, a region of space that by its mere geometry was capable of continually converting mass into energy. Kept in a vacuum and fed small amounts of matter, such a thing would provide enough energy for all the world.

But there was another side to it. He found it impossible to keep the image of the devastation at Solomon out of his mind, the image of human bones falling loosely down onto the radioactive glass. It would be all too easy to enclose a Cruickshank region within a vacuum and place it inside a bomb. The bigger the volume within the region, the larger would be the resulting explosion when air or water rushed into it. He could see no upper limit. A tonne of water flooding into a suitable region would provide an explosion equivalent, not to megatonnes, but to gigatonnes of TNT. It was unimaginable.

And he thought also of David Carnegie and Charles Hoang sitting telling him calmly about the graser. A Cruickshank region would be an ideal power supply for such a device. Instead of mere picosecond pulses of unbelievably lethal power, you would be able to operate the weapon continuously. Wielded from space, such a weapon could cut open whole planets.

What was he to do?

He was a scientist, not a militarist. And he would not be responsible for how the discovery was used. His hands would be clean. And the world needed space, and energy.

But he was also a human being who was once a child, and he remembered his childhood terrors of the Chaos that had killed three-quarters of the world.

He stood up in anguish, the papers in his hand. He couldn't decide! How could he be responsible for releasing such a potentially lethal invention onto the world? But how could he be responsible for suppressing such a potentially valuable invention needed by the world? It was too much for one man to bear.

He wished that Elli had not died. It could have been her responsibility, not his. She would have released it, no doubt about it. But she was dead.

He went to the door, opened it, and stood outside on the aging balcony. The weather was changing, and a thunderstorm was coming. A wild, hot wind was whipping by. He looked down over the balcony. A mass of screaming children ran about in the yard, oblivious to Stephen Tang high above their heads.

He stared at the papers. There were many individual sections, each bound together by a single staple at the top left hand corner. Somehow, he found himself being obsessed by the staple of the first section. He tugged at the top sheet, and ripped it away from the staple. He held out the sheet of paper, and the wind took it.

One by one, he released the sheets, letting the wind take them where it might. Like a flock of birds, they flew far and wide, high, high above the crowded city.