## DOCTOR WHO LOGOPOLIS Christopher H. Bidmead



Based on the BBC television serial by Christopher H. Bidmead by arrangement with the British Broadcasting Corporation

## 1.

Events cast shadows before them, but the huger shadows creep over us unseen. When some great circumstance, hovering somewhere in the future, is a catastrophe of incalculable consequence, you may not see the signs in the small happenings that go before. The Doctor did, however - vaguely. While the Doctor paced back and forth in the TARDIS cloister room trying to make some sense of the tangle of troublesome thoughts that had followed him from Traken, in a completely different sector of the Universe, in a place called Earth, one such small foreshadowing was already beginning to unfold. It was a simple thing. A policeman leaned his bicycle against a police box, took a key from the breast pocket of his uniform jacket and unlocked the little telephone door to make a phone call.

Police Constable Donald Seagrave was in a jovial mood. The sun was shining, the bicycle was performing perfectly since its overhaul last Saturday afternoon, and now that the water-main flooding in Burney Street was repaired he was on his way home for tea, if that was all right with the Super.

It seemed to be a bad line. Seagrave could hear his Superintendent at the far end saying, 'Speak up . . . Who's that . . .?', but there was this whirring noise, and then a sort of chuffing and groaning . . .

The baffled constable looked into the telephone, and then banged it on his helmet to try to improve the connection. If his attention hadn't been so

engaged with the receiver he might have noticed a distinct wobble coming over the police box. Its blue surface shimmered momentarily and grew bluer. The whirring sound stopped, but then so did the voice at the other end as the line went dead. The constable looked ruefully at the telephone. Now he would have to cycle all the way back to the station and get permission from the Super personally, by which time the sun would doubtless be gone and with it the prospect of a relaxing afternoon in the garden potting out the sweet-peas . . .

This speculation was the constable's last thought in this world. As he replaced the receiver his face was suddenly slammed up against the blue door, as if - but that was impossible - something inside the box had grabbed his hand.

His arm disappeared up to the shoulder. His head lolled back, the eyes staring. As the throttled, terminal gasp bubbled away to a whisper in his throat, from inside the box echoed the light delicate sound of a chuckle.

The TARDIS was full of surprises, but Adric wasn't ready for what he saw when he turned the corner.

Suddenly he seemed to be in the open air, in a sort of crumbling stone courtyard, with a floor unevenly flagged with stone slabs. A few small twisted trees grew up between the flagstones, and beyond them the boy caught the crimson flash of the familiar flapping coat. At least he had found the Doctor.

Adric was about to call to him when he was stopped by the solemnity with which the Doctor was pacing the pillared walk that flanked the quadrangle. His strange companion seemed deeply troubled.

The Doctor must have sensed that he wasn't alone, because he slowed his steps and turned. So caught up in his thoughts was he that at first he appeared not to recognise the dark-haired boy. Then Adric found himself being beckoned across the quadrangle.

The Doctor wasn't pleased to be disturbed; the cloister room was his special place for deep, private thinking. 'Whenever you see me in here pacing up and down like this, be a good chap and don't interrupt. Unless it's terribly urgent. It's not, is it?'

The boy shook his head. The Doctor shook his too; it was as if there was a loose thought in there, rattling among the centuries of wisdom.

'Well, now you know. In fact there's no need to come barging in here at all. If it's terribly urgent you can always ring the cloister bell.'

Adric had never heard of the cloister bell. The Doctor explained that it was a sort of communications device. 'Reserved for wild catastrophes and sudden calls to man the battle stations.'

'Battle stations? The TARDIS doesn't have them, surely?'

'Not as such,' the Doctor replied vaguely. 'Still, I sometimes wonder whether I shouldn't be running a tighter ship.'

He scratched at a nearby pillar. The stone was powdery, like chalk, and a rivulet of dust cascaded from the point beneath the Doctor's finger. 'I'm afraid the Second Law of Thermodynamics is taking its toll of the old thing.'

The Alzarians had given Adric a Badge for Mathematical Excellence, although his grasp of physics wasn't very good - but on the journey from his home planet Adric had had plenty of time to learn from the Doctor, and now he knew about the Earth physicist Maxwell, and his ideas on entropy. Entropy was the waste energy that builds up in systems, the rust on the wheels, the weeds in the vegetable garden, the heat that eats away at components in the computer. Entropy seemed to be much on the Doctor's mind lately. Maxwell's Second Law of Thermodynamics consisted of two grim words: 'Entropy increases.'

The Doctor sighed. 'The more you put things together the more they keep falling to bits. That's the essence of the Second Law of Thermodynamics,

and I never heard a truer word spoken. Have you seen the state of the time column lately? Wheezing like a grampus.'

'It will get us to Gallifrey, won't it?' Adric asked anxiously.

'Gallifrey?' The Doctor spoke the name of his own planet as if it were a new word in his vocabulary. 'Oh yes . . . Are you really set on visiting Gallifrey?'

Adric nodded. 'That is where we're going, isn't it?'

The Doctor sat down slowly. Luckily there was a carved stone bench set in the wall where they were standing, but there quite easily might not have been. 'That was the very question I was pondering, Adric. In a general way. There's bound to be a lot of fuss about Romana? Why she stayed behind in E-Space, official investigations, all that sort of thing ....

'The Time Lords won't approve?'

'As a Gallifreyan she's broken the cardinal rule - she's become involved, and in a pretty permanent sort of way. Perhaps we should let a few oceans go under the bridge before heading back home.'

Adric smiled to conceal his disappointment. 'And see Gallifrey later?' The Doctor nodded, but in no very positive way. 'Let me put another idea to you . . . The place I have in mind isn't too far off our route. Well, sort of, give or take a parsec or two. It's my home from home.' He turned to Adric with a grin. 'You'll like it. It's that place called

Earth I was telling you about.'

That same afternoon, outside a cottage house in a guiet village-like street many hundreds of parsecs from where the Doctor and Adric were, but less than fifty miles away from all that remained of the unfortunate Constable Seagrave, a care-worn woman was sitting behind the steering wheel of a battered sports car that was almost old enough to have been new when she was a girl. Despite the spring sunshine, she was well wrapped up against the possibility of cold. There was, as she was fond of saying, no sense in taking chances with your health.

A young woman in the neat purple uniform of an air stewardess came haring out of the house, her flight bag bumping at her side. 'Sorry to keep you waiting, Aunt Vanessa. Let's go.'

Aunt Vanessa hadn't been having much luck with the starter. Each time the engine fired, then spluttered out.

Tegan was barely twenty years old, but she was used to taking charge. 'More choke. And easy on the throttle as you turn her over.'

Aunt Vanessa nodded her white fur hat towards the house. 'While I do that, dear, I wonder if you'd mind shutting the front door.'

Tegan's Australian accent became even broader. 'Oh, rabbits! I promise I'll get organised one day . . . '

Tegan closed the front door and ran back down the path again. 'Sorry, first flight nerves, I guess.' In obedience to her niece?s imperious gesture,

Aunt Vanessa abandoned the intractable ignition switch and humped her bundled-up body across to the passenger seat.

Immediately Tegan pulled the starter the old engine sprang to life. Clicking on her safety belt reminded her of the training course she had just completed, and she went into the routine. 'Good evening, passengers. To ensure continued safety on this flight it is necessary to draw your attention to the oxygen apparatus situated above each seating position . .

Wary of draughts, Aunt Vanessa hunched further into her fur collar as the car pulled away from the curb.

Tegan changed smoothly up into third. 'This is brought into operation by gently pulling the orange tag and placing the mouthpiece over the nose and mouth. Disposable paper bags, together with our flight magazine, may be found in the recess in the seat immediately in front of you . . . '

And she drove off down the street. Although she didn't know it then,

Tegan's route was destined to take her past the mysterious police box and onto a journey very different from the passenger flight her training had prepared her for ? a journey she would never forget for the rest of the life.

Adric and the Doctor were walking quickly back through the maze of corridors to the TARDIS console room. It still puzzled Adric how the Doctor managed to find his way around the vast craft without a map. 'Earth's the planet with all the oceans, isn't it?' Adric asked as the Doctor paused at a junction of three identical passages. 'That's the chap.'

'It sounds wet.'

The Doctor set off again with long shambling steps that made it hard for Adric to keep up. 'Wet it is,' he said. 'At least, where we're going.' The Doctor had explained once already about the blue boxes, but it hadn't made much sense to Adric. A lot of what the Doctor said was like that. According to the Doctor the blue boxes looked more or less like the TARDIS, but weren't. They had no spacious accommodation, no viewer screens, and they didn't time-travel . . . Adric didn't see why the Earth people bothered having them.

The corridor had petered out into a narrow passage. The Doctor stopped in front of a door. 'They're a sort of elementary communications device. Telephone boxes, from the Greek. 'Tele' meaning 'a long way', and 'phone' meaning 'sound', and 'box' meaning . . . ' The Doctor opened the door. It was a small cupboard. 'Meaning we're lost . . . '

They weren't really, but the Doctor had to ask Adric not to ask any more questions while he concentrated on finding the way. It was quite some time before they were back in the console room, and the Doctor was able to resume a calm explanation of his idea about going to Earth.

'I see,' said Adric. 'We're going to visit one of these boxes that are like the TARDIS.' It sounded to him like another of the Doctor's typically batty schemes.

'You're getting your topsy mixed up with your turvy,' the Doctor corrected. 'The TARDIS is very like it! The blue box is what the mathematical model of the TARDIS exterior is based on.'

The Doctor was at the console, busily setting the co-ordinates for Earth. Even after several adventures with the Doctor there was so much Adric didn't understand about the Time Lord and his technology - but he wanted to, very much.

'Block transfer computation,' the Doctor explained when he had finished at the console.

A frown creased the smooth young face at his shoulder. 'I've never heard of that.'

Adric's precocious seriousness amused the Doctor. 'No reason why you should. Logopolis is a quiet little place - keeps itself to itself.'

'Logopolis? But I thought we were going to Earth.'

'No, Logopolis is the other place. We take the measurements there afterward.'

Adric was by now thoroughly confused. 'We're going to measure Logopolis?' 'We measure the police box on Earth and then take the measurements to Logopolis...' said the Doctor patiently. Catching sight of the boy's blank expression he had the tact to add: 'I'm afraid I'm not explaining this very well. It's all to do with the problem of the chameleon circuit...'

Adric opened his mouth, on the point of voicing another question. But at that moment the console room echoed to the sound of what might have been a big clock bell, deep-toned and stately. It seemed to be coming from a very long way away, and yet at the same time was somehow sinisterly present in the room.

The Doctor stopped dead, as if rooted to the spot. The expression on the

Time Lord's face sent a shiver up the boy's spine, and he froze too, and listened.

It was the first but not the last time Adric was to hear the cloister bell.

The traffic became heavier as they approached London, but Aunt Vanessa's little car was going splendidly. Tegan enjoyed the rush of wind in her hair and the feel of the engine under her control. She'd been a natural driver ever since the age of ten, when her father had first lifted her onto the springy steel saddle of the tractor on their sheep farm in Australia. Driving was great. But flying - that was really travelling. Tegan took her eyes off the road for a moment to glance up at the big blue canopy of the sky that seemed to go up and up without limit above them. Cars were all right, they got you moving, but they did keep you stuck on the one level, reminding you that you were just a little human being like everybody else with your feet in your shoes and your shoes on the ground. 'Tegan! Look out!' Aunt Vanessa's voice broke abruptly into her meditations.

The lorry was the size of a brontosaurus compared with Aunt Vanessa's little mouse of a sports car, and it was cutting in, straight across them, closing in from the middle lane. Tegan slammed on the brakes and wrenched the wheel over. The lorry passed in front of them with only inches to spare and travelled on towards London lumberingly unaware of the terror it had caused. With a screech of rubber the sports car thumped into the curb and came to a halt.

'Oh, rabbits!' Tegan exclaimed, jumping out. Through the windscreen she saw Aunt Vanessa's face peeping out from its nest of white fur in dazed indignation. 'I'm sorry, Aunt, honestly. I'm usually a pretty good driver.' There wasn't any damage done to the body-work, but when Tegan saw the front nearside tyre her heart sank. 'Aunt Vanessa, it's a blow out.' The elderly bundle of fur extracted itself from the passenger seat to have a look. 'So it is. Dear me.' She was taking it guite sportingly, considering, Tegan thought. 'Well,' said Aunt Vanessa, 'what do we do now?' Unknown to them that question was already decided. Perhaps Fate is always lying in wait a few yards up the road; in this case for Tegan and her Aunt Vanessa it was already in view. If they hadn't both been hypnotised by the immediate but relatively trivial flat-tyre disaster that loomed so large in their minds, they could have spotted it from where they stood. It took the unusual shape of a blue police box. An abandoned bicycle was leaning against it, the small door that housed the telephone was open, and from it dangled the receiver on the end of its cord.

Adric listened. Apart from the wheezing of the time column as it heaved up and down in the middle of the console, all was quiet. Adric found himself oddly disappointed. 'The cloister bell's stopped.'

The Doctor nodded gravely.

'What does it mean, Doctor?'

'Nothing very much when it's not sounding.' The Doctor was trying to make a joke of it, but Adric could see that the Time Lord regarded the cloister bell as far from funny.

'But something must have made it ring?'

The Doctor bristled at the question. 'Not necessarily. It could well be our old friend entropy crumbling away at the systems circuitry. We'd better check the main logic junction.'

With a quick glance at the console to make sure the flight to Earth was on track, the Doctor swept out of the console room. Adric followed. 'Is that something to do with the chameleon circuit you were telling me

about?' Adric asked.

The Doctor said that it wasn't, and went on to explain that while he didn't

mind being pestered with questions in the normal course of events - didn't mind at all, in fact found the boy's ceaseless interrogation of anything and everything rather stimulating - there were times (and this was one of them) when whys were unwise and silence was golden . . .

They travelled down the corridors without saying another word, and the Doctor wrapped his own dark thoughts around himself, with faint sighs and mumbles escaping his lips from time to time.

Eventually they came to a large oval arch set into the wall of the corridor. It framed a kind of panel made of a translucent material that Adric discovered to be oddly heavy as he helped the Doctor lift it down. Behind the panel was what looked like a mass of fine grey hair, except that if you looked closely you could see that each hair had a tiny light that moved up and down its length. The effect was dazzling; the thing seemed to be alive.

The Doctor poked the hair with his finger, and the lights flickered in response.

'Nothing wrong with the main logic junction, then.' He signalled to Adric to help him put the panel back. 'Well, if the intermittent fault wasn't inside the TARDIS it must be outside the TARDIS. Someone must be trying to get in touch with us. Long way away, poor reception.'

They began walking back the way they had come. The Doctor turned to Adric, as if seeking a second opinion. 'Don't you think?'

'Why ask me?' There was a sulky note in Adric's voice. 'I don't know anything about it. And I won't know anything if you don't tell me.'

The Doctor put his hand on the boy's shoulder. 'Sorry I snapped. I'm not quite myself at the moment. What do you want to know?'

So as they made their way back to the console room the Doctor gave the boy a brief outline of the chameleon circuit, simplifying the maths to a few concurrent transcendental equations to convey the general picture. At least it explained how the inside of the TARDIS came to be bigger than the outside.

The boy was quick to pick up the main point. 'So the inside space, where we are now, is non-existential?'

'The dimensions are real enough, but they don't quite join up in the usual way.'

'They couldn't, could they. Not if the exterior of the TARDIS only exists as a real space/time event and has to be mapped on to one of the interior continuums.'

The Doctor nodded. 'Precisely. Very good.'

'So you can turn it into anything you like?'

'Ah? a very sore point. Yes - according to the handbook - the outer plasmic shell of the TARDIS is driven by the chameleon circuit.' But what the handbook said and what the TARDIS actually did were two rather different things, as the Doctor had long ago discovered.

'In theory,' said the Doctor, 'the TARDIS can change its appearance more or less infinitely. In practice, however . . . '

The Doctor's voice tailed off. He had come to a halt in front of one of the doors. 'I always meant to get Romana to help me fix it one day'

The door was like all the others in the corridor. Rather oddly, almost as a ritual, the Doctor pushed it open. As Adric glimpsed the familiar furnishings, the soft curtains and the glass ornaments, he felt a pang for

the absent occupant. She was at the Gateway with Biroc and the Tharils, and he had reconciled himself to the fact that there was no chance in the world of seeing her again. But he had completely forgotten about her room. That was a shock; it was as if part of her were still here after all.

'I suppose we're going to miss her and K9,' said the Doctor in a voice that suggested the thought had only just struck him. He looked down at Adric, and the boy nodded, stuck for words.

The Doctor took a deep breath. 'But . . . the future lies . . . '

He looked up and down the corridor, pondering for a moment, as if not

exactly sure which way the future did lie. Then he drew the door of Romana's room firmly shut and pointed to a branch of the corridor that ran off to the right. 'This way,' said the Doctor.

2.

The time column was still oscillating uneasily when the Doctor and Adric got back to the console room. Silence seemed no longer to be golden for the Doctor; he was talking non-stop and Adric could hardly get a word in. '... which would all be perfectly fine, except that the chameleon circuit's stuck. I first noticed it that time in the Totter's Yard, and that was many years ago. Come to think of it, there was probably something up with it even before that. She was in for repairs on Gallifrey at the very beginning of things ... When I first ... borrowed her.' 'Borrowed her?' Adric was able to interject. Rather worryingly, the Doctor had vanished. Yet the voice continued ... 'On a sort of finder's keeper's basis. I should have waited until they fitted the new version of the chameleon circuit. But there were pressing reasons for my departure at the time.' His voice was coming from under the console unit. Adric walked round it to find the Doctor on his hand and

knees working at something on the undersufface. 'Ah, that's got it . . . '

said the Doctor.

Adric jumped back as a panel rose vertically up out of the console under his nose, and then hinged forwards to form a horizontal table. The boy found himself looking down at a keyboard with numbers and letters. A lean Gallifreyan digit prodded a button on the console and the viewer screen opened. The full set of fingers danced briefly across the keys of the startling new keyboard, and soon the screen showed a shimmering blue outline picture Adric recognised.

'The TARDIS exterior!'

'Right. Now in theory, you should be able to do things like this . . . ' The keyboard rattled as the Doctor entered in some more numbers and letters. While Adric watched, the picture on the screen slowly transformed into a solid triangular shape.

'A tetrahedron,' said the boy knowingly.

'Roughly, yes. Egyptian idea. A pyramid.' The Doctor worked at the keyboard again and an opening appeared in one of the sides of the object.

Adric was doubtful. 'Yes, I suppose that's useful.'

'Useful? A door's essential. We've got to be able to get in and out.' 'No, I mean being able to change like that.'

'Quintessential,' said the Doctor. 'Remember the Master.'

It was the first time since they had left Traken that the Doctor had mentioned his deadly enemy by name. He said it lightly, with no special emphasis. But even so Adric shivered at this reminder of the evil renegade Time Lord who had plunged the home planet of his friend Nyssa into darkness and confusion.

'If the chameleon circuit were working,' the Doctor mused, reaching for a lever on the console, 'I'd only have to pull this . . . and we'd be a pyramid.'

The Doctor turned to Adric with a shrug. The picture on the screen had reverted to the police box shape. 'Can't get away from it, you see.' He seemed to need cheering up, so Adric said: 'But why do you want to? It's sort of distinctive. A friendly sight, to look at.'

'And a sight too easy to look for. I'm not sure we should be distinctive.' Suddenly Adric understood the Doctor's concern about the chameleon circuit. The Master's own TARDIS had been in good repair, so he had been able to disguise it as something the Trakens thought was a harmless old statue. But the Doctor's vehicle was stuck in the shape of a blue police box - surely one of the most conspicuous objects in the universe.

'It's not as if anybody's looking for us,' said Adric. 'You've disposed of the Master now. '

'Yes ... I did, didn't I?' the Doctor replied, with a certain unease that left an almost tangible silence hanging in the air for a moment or two. In his mind's eye Adric could still see the terrifying blaze of colour around the Keeper's Chair as the Master had met his fate.

The Doctor cleared his throat. 'It may just be nonsense . . . but since we left Traken I've been feeling rather unsure about that . . . And then when the cloister bell rang . . . '

The Doctor's eye fell on a small display screen set into the console, and in a blink of the eye he had thrown off the mood that had gripped him. He grinned at Adric. 'Ah, Earth,' exclaimed the Doctor, as if those dark thoughts were now a million miles away. 'Nearly there!'

Aunt Vanessa looked down at the grass verge under her feet and worried about the rheumatic diseases that struck upwards from damp ground, even through sensible shoes and two pairs of stockings. Cars and lorries were whizzing along the by-pass not ten feet from where they stood, but none of them showed any signs of stopping to help. 'I really think we should telephone for help, dear.'

Tegan shook her head. 'Feeble. We'll crack this ourselves, or not at all.'

Her rummage in the boot had brought to light a greasy metal tube with a rod running through it at right-angles. 'Wheel spanner. Just the job.' Getting the hubcap off was easy. She jiggled the wheel spanner onto one of the nuts and stood on the lever. Eventually the nut came free, but as it turned it seemed to release a mysterious whirring, chuffing sound, which Tegan vaguely associated with the remaining air escaping from the tyre. Aunt Vanessa heard it too, coming from behind her. She looked round, but there was nothing there - only a couple of blue police boxes. 'By the way, dear,' said Aunt Vanessa, not wanting to interfere, but it did look dangerous, 'don't you think we should put a jack under there before you take the wheel off? They always do it that way in the films.' Tegan straightened up. The dear old cinema-goer was perfectly right, of course. Tegan strode round to the boot again. Rabbits, rabbits, rabbits!

The time column had stopped oscillating, and Adric knew this meant the TARDIS had come to the end of its journey. At a nod from the Doctor he worked the lever that opened the viewer screen.

The shutters parted to reveal a broad expanse of some flat grey surface on which coloured objects streamed in both directions. Adric guessed it had been carved out of the countryside, because you could see the greenness and trees on either side. The coloured objects had wheels, and as you looked closer you could see they were primitive vehicles, with people inside. Close to them was a blue box, exactly like the TARDIS.

'We've missed,' said the Doctor.

'What's supposed to happen?' asked Adric.

'I usually suppose we're going to miss.' The Doctor threw a disapproving glance at the console, and seemed to be addressing it directly. 'I just thought it might make a pleasant change to materialise on the right coordinates.' He checked some of the console settings, and made a quick calculation in his head. 'Two point six metres off target. What a landing!' 'That's not bad,' Adric pointed out, in fairness to the old TARDIS.

'That's what I said - what a landing!'

Adric instinctively reached for the lever that worked the exit door, but the Doctor stopped him.

'Aren't we going out there to measure it?'

The Doctor shook his head. 'No need to draw attention to ourselves. The TARDIS and I are getting rather better at these short hops.'

And the Doctor leaned over the console, gingerly resetting the coordinates.

Aunt Vanessa and her niece had been too busy to notice the arrival of a second police box on the verge of the Barnet by-pass, so they certainly didn't notice its dematerialisation. Passers-by in their cars who were not too caught up in their own small immediate destinies might have seen - though nobody did - one of the big blue roadside objects shimmer into translucency and depart. By not seeing it, nobody was misled - for in fact the TARDIS did not depart.

To be precise, what happened was this. At one moment there were two police boxes side by side. They seemed identical, though a close observer might have noticed that from one the telephone receiver dangled loosely on its cord, and the light on top of the other had begun to flash.

And at the next moment there was only one police box. It was the one with the dangling cord, but the cord was no longer dangling. An Earth person watching from the verge would have found this very puzzling. But like a lot of problems the solution was simple from the inside.

Adric was on the inside. 'You've materialised around it!' the boy exclaimed.

The blue shape was swimming into focus inside the TARDIS console room: a police box with a dangling telephone.

'With considerable finesse, as I hope you noticed.' The Doctor stepped forward to inspect it, something close to a smirk of satisfaction on his face.

But the boy was worried. 'Are you sure it isn't another TARDIS, Doctor?' 'I hope not. That would produce some very unpleasant dimensional anomalies. No, it's just an ordinary police box.'

There was an official-looking notice on a small panel set into the door: Police Telephone Free for Use of Public. Advice and Assistance Obtainable Immediately. Officers and Cars Respond to Urgent Calls. Pull to Open. Adric had seen identical wording on the outside of the TARDIS, and had taken it to be some sort of joke of the Doctor's. Officers and Cars had never, to his knowledge, responded to Urgent Calls, although there were several occasions when he and the Doctor could have used a little extra help.

He reached for the thing dangling on the end of a cord in order to tidy it away in the little box in the front door, but the Doctor quickly took it from him. 'Best not to touch,' the Doctor said. 'Heisenberg's Uncertainty Principle, and so forth.'

'What's that?' the boy asked.

'I'm not entirely certain. Something to do with not being able to measure an object without disturbing it.'

The Doctor looked at the phone in his hand, and then waved it at Adric. 'Disturbed it already, you see.' He paused to debate with himself for a moment whether to leave the phone as it was or hang up. Then he hung up the phone and delicately shut the little door.

The Doctor seemed to know an awful lot of people with Rules and Theories and Principles. Adric opened his mouth to ask more about Mr Heisenberg, but the Time Lord shushed him with the gesture of a finger to his lips, and took a folding steel ruler from his pocket. 'Get something to write with and take these dimensions down,' said the Doctor. 'I've been meaning to do this for centuries.'

The handle of the jack was so stiff that Aunt Vanessa had to help Tegan with it, which Tegan privately viewed as one small triumph in an afternoon of defeat. Together they managed to get the car propped up, then Tegan showed Aunt Vanessa how to work the wheel spanner, and went round to the boot again. She glanced at her watch as she hauled the spare tyre out. It was a good job they'd left Aunt Vanessa's house in plenty of time. There was no panic yet - as long as nothing else went wrong.

'I'm so sorry,' said Aunt Vanessa, taking a very early rest from her efforts. 'What a thing to happen on your first day.'

The wheel was caught up in the tangle of a string shopping bag and a dog lead and an old cardigan with holes in the elbows. 'Car's are OK,' said Tegan, 'but I guess I'm just spoiled with having our own plane back home.' It was a Cessna, and Tegan's father had taught her to fly, though he said she was still a little too impetuous to go solo.

The moment Tegan dropped the tyre onto the verge she knew something was wrong. It wasn't heavy enough, and it didn't bounce with the sort of ringing sound you expect from a properly inflated tyre. She looked up accusingly at Aunt Vanessa. 'What kind of a maintenance schedule are you running here, Aunt V! This tyre's completely flat too!' Aunt Vanessa smiled a faint disarming smile that had always stood her in good stead when people from strange religious sects turned up on the

doorstep. Tegan knew the smile of old, and refused to be warmed. She turned away and looked about her, as if seeking help from elsewhere. On the far side of the road, beyond the rushing traffic of all those people in cars who quite infuriatingly were getting where they wanted to go with no trouble at all, Tegan saw, standing on a mound of grass, a figure dressed in white, gazing in her direction. No, it wasn't white, it was a kind of gauzy, pale, vague, fading . . .

Tegan blinked her eyes and looked again. There was nothing there. Or so she thought at the time.

'There can't be much more of this,' said Adric, trying not to sound rude. His notebook was filling up with figures and the Doctor seemed to have been calling out measurements for ages.

The Doctor was on his knees, and didn't look up. 'Measuring a police box means measuring it in every possible dimension.'

Adric counted the entries in his note book. 'It can't have . . . thirty-

seven dimensions. You said it was an ordinary Earth object.'

'Every dimension and in every detail. The Logopolitans convert this into a precise mathematical model.'

'Of the police box? Why?'

'You're very fond of short words that begin with W and end in question marks,' said the Doctor, levering himself up to give Adric another measurement. 'I like to see that in the young. But by way of variation you might try longer questions like "What else can I do to help?"'

'All right. What else can I do to help?'

The Doctor pointed to the top of the police box. 'You can climb up there for me. Here, I'll give you a hand.'

The top of the police box gave Adric a view of the console room he hadn't seen before, and it was odd to have the viewer screen below eye level. He noticed there were two Earth people working at a vehicle that had pulled up awkwardly onto the grass verge.

Adric stared at the younger of the two women, feeling a strange tingle in his spine. It wasn't because her face looked rather beautiful, framed by that dark red hair under the severe purple cap that matched her uniform. Adric had the sudden completely ridiculous feeling that she was somebody he knew very well, though of course that was impossible, because he had never been to this planet before. Or perhaps it was the even more ridiculous feeling that he was going to know her!

'Are you all right?' the Doctor asked, getting his attention by prodding him with the end of the folding ruler.

Adric dismissed the thought from his head, but as the measuring continued he couldn't help casting occasional glances at the viewer screen.

When at last the measurements were done they went over to the console to enter them into the memory management system. The Doctor seemed very pleased with the day's work, although Adric still wasn't sure why they had to go to Logopolis.

'Didn't I explain that?' The Doctor seemed surprised. 'To overlay these dimensions on the TARDIS. The dimensional interference patterns will shake the thing loose.'

Adric nodded slowly. 'And that's block transfer computation?' 'Part of it. It's a way of modelling space/time events through pure calculation. It's not easy to explain in a word...'

It took a lot of words. Adric gathered that over the centuries the Logopolitans had developed a completely new kind of mathematics that analysed the structure of the physical world - or rather the very nature of structure itself. But as the Doctor continued his explanation, with many diversions into astronomical history, wave theory, and even, at one point, the life cycle of the procyon lotor, it gradually dawned on the young Alzarian that the Doctor wasn't very sure of his ground theoretically. Block transfer computation! To Adric the idea of a mathematics that could, among other things, bring physical objects into being through pure calculation was immensely exciting. It was infuriating that a man who knew so much about completely useless things should be so woolly about such an important subject.

The Doctor had begun his explanation while he was in the middle of resetting the co-ordinates. But in the course of talking to Adric and waving his arms about to illustrate points in his argument he had lost his place, and now he had to go back and start all over again. He would have finished the job with no trouble this time, if Adric hadn't asked, with a measure of deliberate irony, 'If it's all as easy as that, I don't see why we need to go to Logopolis at all. We can do it ourselves, here.' This brought the Doctor to a thoughtful halt. 'It's not that simple, of

course . . . I went into it all when they first offered to do the chameleon conversion for me . . . it's highly specialised...'

'A bit beyond our intellectual capability?' the boy asked innocently. 'Well, I wouldn't say that. It's not just a matter of understanding distributed cluster algebra. The actual working out's very tedious, lots of fiddly computations. Much better to leave it to the Logopolitans. They can do it standing on their heads.'

Adric was genuinely surprised. 'Not with a computer?'

Doctor had encountered these idiomatic difficulties with Adric before. When you've been brought up in a different universe there are bound to be small cultural barriers, even with the best will in the world.

'Standing on their heads . . . it's an expression.' The Doctor explained what it meant, and then went on: 'But now you come to mention it, they don't use computers. It's all done by word of mouth.'

'Is that another expression?'

The Doctor shook his head and muttered something. He was concentrating on the console, determined to get it right this time.

'They speak it?' Adric exclaimed.

The Doctor shrugged. 'Mutter. Intone.'

'Intone the computations? Why?'

'I wondered that too.' A mouthful of large white teeth beamed down disarmingly. 'Never quite had the nerve to ask them.' Then as he turned back to pull the dematerialisation lever the Doctor's eye was caught by one of the small indicator panels that were dotted about the console.

There were so many knobs, levers, read-out displays and switches that Adric had, quite early on in his relationship with the Doctor, abandoned all hope of mastering the technology of flying the TARDIS, although he had managed to do it once, quite by accident. But the doctor knew exactly what he was doing, and silly, woolly or just plain baffling as he could be at other times, when working at the console he took life very seriously.

So Adric knew straight away from the Doctor's expression that something was wrong.

The Doctor tapped the indicator panel. 'You've got a lively enquiring mind, Adric. Explain this.'

The panel was labelled Weak Force Flux Field Indicator, and the needle was jammed over to the right-hand side in an area marked in red as Beyond Limits.

'It couldn't be an instrumentation fault, could it?' Adric suggested. The boy felt obliged to say something intelligent.

'Very easily, knowing the state of the TARDI S.' The Doctor hit the panel again, this time with a certain amount of vindictiveness. On looking again he pumped his cheeks, making the breath whistle between his teeth. 'No, I don't think so. What we've got here is a gravity bubble. And fairly local, too.'

'Is that dangerous?'

'We'd better not dematerialise till we've investigated.' He threw Adric a less convincing replica of the reassuring grin. 'I'm probably overlooking the obvious again. Back in two shakes.'

The Doctor jerked back a lever on the console and strode across to the double doors that swung open in response. Viewer screens and time technology were all very well, but nothing was better than seeing for

yourself.

The blue external doors opened a fraction. The Doctor peeped out and looked around.

It was good to be back on Earth again. It was just the right size from the point of view of gravitational pull, and the atmosphere was rich in oxygen, which tended to give the foliage a green colour that was relaxing on the eyes. He stepped out and took a deep breath, forgetting for a moment that the TARDIS was parked beside the noise and the fumes of the passing traffic.

Sunspot activity - he squinted up at the sky - seemed to be about normal for the time of century, but in any case the Doctor discounted natural causes: the field was too localised. There was no obvious high technology in the vicinity as far as he could see, and the landscape around him showed none of the secondary effects he would have expected, given the strength of the field. There would surely at least be a high wind.

He remembered the turmoil of darkness that had blown across Traken at the time of the Keeper's passing, and how the Master had sought to step into his place. That last battle had certainly drained the Doctor's strength, but at least Traken had been restored to the harmony that had made it famous. Tremas the Councillor and his daughter Nyssa were happy again.

What if the Master had somehow escaped from Traken? The Doctor pushed the thought out of his mind, and was about to duck back into the TARDIS again when his eye fastened on something on the far side of

the road. A pale figure was watching, its outline humanoid in so far as it was definable. The Doctor stared, and the figure seemed to stare back. The Doctor reached out for support, and leaned against the TARDIS door, almost

white-faced, his two hearts beating a little faster.

Something quite extraordinary was happening. He had sensed it, and now - here it was!

Inside the TARDIS the gravity bubble, or whatever it was, had produced a pearly cloud over the viewer screen. Adric wasn't particularly disappointed to have lost sight of the young woman who had given him such strange feelings, because the feelings had gone now, and he knew that the temporary giddiness must have been due to being so high up in the console room. In any case, there was something much more interesting to think about. In the Doctor's temporary absence, Adric's curiosity had drawn him towards the police box.

The small hatch with the telephone in it wasn't the way in; it was only a sort of cupboard set in the main doors. And they were locked, just like the TARDIS. Adric took a metal coathanger from the hatstand and straightened out the hook so that he could work it into the lock to turn the tumblers. 'Don't touch that!'

Adric jumped at the sound of the Doctor's voice. 'Sorry, Doctor. I just thought it might have something to do with the gravity bubble.'

The Doctor was grim-faced. 'I'm afraid you might be right. And that's a very good reason to leave it alone.'

Adric stepped back from the police box. Then a small, extraordinary thing happened. One of the blue doors creaked slightly. As they watched it swung open as if of its own accord.

The Doctor approached the police box cautiously, reached out for the second door handle, and began to turn it as if it were made of icing sugar and might break off at any moment.

It was obvious straight away from the size of the interior that this was no ordinary police box. With tremendous care the Doctor stepped through the double doors.

Perhaps it was the yellowish tinge to the light that made the room the Doctor entered so inhospitable: somehow sterile and dangerous territory. The air was cold, too, and as the Doctor looked about him the vapour from his breath hung in the atmosphere like puffs of smoke. Apart from this the Doctor felt at home, because it was home - or something very like it. 'The TARDIS console room!'

The Doctor heard the boy's exclamation without turning round. 'Get back to the TARDIS,' he hissed.

'But this is the TARDIS, Doctor!'

'A TARDIS, perhaps.'

'It looks just like yours . . . '

'Don't argue with me! Back to the console room and stay there.'

The Doctor spoke with such force that Adric hastily bundled back into his head all the questions that were urging to be asked. He was about to move to the door when the Doctor reached out and grabbed him quite savagely by the shoulder.

'Wait! Don't move. You may be safer with me.' The Doctor wasn't looking at Adric; his eyes were narrowed, fixed on some point on the other side of the console where the yellow light seemed particularly thick.

The boy followed his gaze. The object was familiar enough, but for some reason the sight of it almost stopped his heart. Standing by the console of the room that was identical in every detail to the Doctor's console room, was a police box. Its small telephone door was open, and from it the receiver dangled on the cord.

'It's hopeless, Aunt Vanessa! Just hopeless!'

Tegan disconnected the foot-pump and threw it back into the boot. No amount of legwork would blow up a tyre with a hole in it. 'Honestly, Aunt Vanessa, how long have you been driving around with a dud spare tyre?' She looked at

her watch, and the remains of her confident self-sufficiency evaporated into thin air.

Aunt Vanessa remained cool. 'Don't worry, there's still plenty of time to get the garage.' She was peering across to the other side of the road; the point where it flattened away into the distance was marked by little fluttering flags enshrining what looked like a set of petrol pumps. Tegan stood the wheel on end. Her hands were smudged with grease and mud, but so far she had avoided getting any dirt on her uniform. She thought of the clean, air-conditioned interior of her 747; there was still time to catch the flight, if she made some quick, level-headed decisions. 'OK, Aunt

Vanessa, I admit defeat. I won't be a jiff.'

'Mind how you cross the road,' Aunt Vanessa called out after her, as Tegan set out for the garage, awkwardly rolling the tyre in front of her.

That's a point, thought Tegan. How do I cross the road with this thing? But she had only gone a few yards when she came across the obvious solution to all their troubles. She read the notice. Police Telephone Free for Use of Public. Advice and Assistance Obtainable Immediately. Officers and Cars Respond to Urgent Calls.

For some reason it said Pull to Open, which must have been a mistake. Because when she pushed against them the double doors opened inward. 'That's funny,' said Tegan to herself, peering into the interior. 'That's very peculiar indeed . . . '

And leaning the tyre against the outer wall, where she noticed somebody had been foolish enough to park an unlocked bicycle . . . Tegan stepped inside.

The Doctor hung up the receiver and gently closed the small door. Adric shivered, and not just because of the cold. 'But if this is another TARDIS...!'

'It may be, it may not be,' the Doctor interrupted. 'Too early to tell. Other things can produce this sort of dimensional anomaly.' Cautiously the Doctor pushed against the doors, but they seemed locked tight. Adric remembered that he was still holding the coathanger. At first the Doctor refused to let the boy approach the door himself and took the coathanger from him. But whatever else the Doctor was good at he certainly wasn't a natural lock-picker, and eventually he had to stand aside for his young companion. 'But please be very careful,' he warned. As Adric delicately explored the lock with the end of the wire the Doctor

As Adric delicately explored the lock with the end of the wire the Doctor stayed close beside him.

If Tegan had arrived in the real TARDIS console room a fraction earlier she would have seen the light on the roof of the police box spring into life, dancing blue reflections across the circular indentations that decorated the TARDIS walls. At the same moment the police box itself began to drain of colour and form; whirring and chuffing . . . it dematerialised like an idea forgotten.

As it was, she entered through the double doors a split second too late, but the sight still made her catch her breath. 'It's some kind of  $\dots$  flying saucer!'

She moved slowly towards the glitter of instrumentation in the middle of the room, frightened and yet drawn to the technology. It reminded her of the cockpit of the Cessna, as if the instrument panel of that small plane had been magically multiplied in the reflections of a kaleidoscope. She cast her eye around the walls, and noticed an old-fashioned hatstand the last piece of furniture you would expect to see - complete with a few hats and a very long scarf that trailed down to the floor.

At that moment the double doors of the TARDIS swung together and closed with a thud that resonated round the room. She ran to them, scrabbling at the unyielding surface for handles, anything to get them open. She was

## trapped!

The yellow light thickened for each set of doors they went through, and each time the air was colder. The rooms were all the same in every other respect - it was what the Doctor called a 'simulacrum'. They always found the police box in the same place, a few feet to the right of the console as they entered through the doors. And each time the phone was dangling from its cord.

Adric had suggested going back, but the Doctor had known it would be impossible. Adric didn't understand at first, and insisted on trying to leave the way they had come in. But the entrance was a heavy yellow nothingness when you approached it from the other direction; matter seemed just to cease.

The Doctor's face was grim as he watched his young companion bring the coathanger to bear once again on the police box door. To Adric it always seemed to be the same lock. How many locks and doors? He had opened so many now that he had completely lost count.

'It couldn't be an infinite regression, could it?' Adric asked through chattering teeth. The room they were entering was lit by even darker amber light than the last.

The Doctor approached the police box and, as he had done so often before, picked up the receiver and hung up, closing the small door. 'There's a chance it may stop suddenly. Behind one of these doors there may be something completely different. Then we'll know it's over.'

'And if we don't find something completely different?'

The Doctor shrugged, but gave no other answer.

'We'll be stuck here forever, won't we, Doctor? You can't get out of an infinite regression.' There was a note of panic in the boy's voice. 'That's true, isn't it?'

'True, but boring,' said the Doctor. And with a wink to dispel any hint of tedium, he gestured to Adric to open the next police-box door.

Tegan explored her prison. She was torn between immense curiosity about what was clearly some sort of flying machine, and a fear of the strange craft that was so unlike anything she had ever seen.

She surveyed the array of switches, buttons and levers on the console. There must be intelligent life at the end of this lot, surely? One of the buttons looked rather like an intercom switch. She pressed it and spoke into the small grill beside it. 'Hello, anybody receiving me?'

There was no answer. Collecting her courage, she tried some more buttons on the console. 'Hello? Come in, anybody . . . My name is Tegan Jovanka, and I'd like to talk to the pilot.'

She stopped and listened. There was something. The sound came from behind a door she hadn't noticed before. She crossed over to it and pushed it open. Through it she glimpsed a corridor that appeared to lead deeper into the craft.

She paused at the door and listened again. The deep note came in pulses, resonant like a bell. It sounded distant, but at the same time seemed to be very much an urgent presence in the room. 'Hello?' Tegan called into the corridor. 'Is that the crew through there?'

There was no reply but the continued mournful chime. Tegan took a deep breath and walked through to explore the corridor. The punctured wheel, the airport and Aunt Vanessa were three minor problems that had slipped her mind completely.

But Tegan was very much on Aunt Vanessa's mind. The elderly lady had been sitting wrapped up in the car for what seemed an age of waiting, and at

last, being careful where she put her feet on the muddy verge, she had decided for the sake of her circulation to stretch her legs in the direction of the garage.

The abandoned tyre leaning against the police box aroused her suspicions immediately. Something had happened to Tegan, and what was needed was a telephone.

And there it was! Aunt Vanessa was so delighted to find Fate giving Luck a small push in her direction during the course of the afternoon's rigmarole that she forgot to be careful where she trod. She was within reach of the police box when her feet skidded from under her, toppling her against the double doors.

They opened under the impact. When she scrambled painfully to her feet again she was standing on solid ground, astonished to find herself inside a large . . . laboratory, was it?

She heard a light chuckle and turned round, still a little dazed from her fall. 'Tegan . . .? What on earth have you . . .! Goodness me . . . '

The sight was so terrifying that before the threat had fully formed in her mind she was stumbling back towards the double doors. She struggled with them; they seemed to be closing on her, trapping her in with that . . . evil!

And then her feet were skidding in mud again. She backed away from the monstrous presence that lurched towards her across the grass in slow-motion pursuit. Still it stayed with her, this chuckling thing for which she couldn't form a name, piercing her with a gaze that froze the thoughts in her brain.

Somehow Aunt Vanessa found herself beside the tyre. She reached for it, hoping to use it for a shield, and despite its surprising weight managed to lift it from the ground. The chuckle that came from the pursuing figure was frankly derisive.

The traffic on the road passed by unheeding. No one heard the throttled cry, the chuckle of triumph, or smelled the ozone left in the air by the sizzling discharge of the electronic device.

Even the spare tyre that rolled out from the verge and wound its way between the stream of passing cars remained unnoticed for several minutes.

The yellow light was so dense around them now that Adric could only make out the Doctor as a lumbering shape beside him. The boy's fingers were blue with cold and the locks were becoming harder to manage. With each door his heart sank deeper, and he could tell from the Doctor's voice that even a Time Lord's sense of proportion is not proof against all disasters.

'Careful!' the Doctor whispered when the wire coathanger missed the lock and scraped across the face of the door that the dingy light had transformed from blue to a deep oily green. 'We're getting closer into the nucleus of the bubble . . . if it has a nucleus.'

'It is a gravity bubble, then?'

'With this many images there's only one thing it could be.'

'What can be causing it, Doctor?'

The Doctor hesitated, as if reluctant to share his thoughts with the boy. 'When we materialised round the police box - someone had been here before us.'

Someone? The lock was stiff, and as the Doctor's low whisper continued in his ear Adric had to concentrate to keep his mind on the position of the tumblers he could feel at the end of the wire. He understood what the Doctor was trying to say, but it was hardly thinkable. Another TARDIS, materialising round the police box before they arrived? Someone must have anticipated what he and the Doctor had planned to do!

The lock clicked open. Adric turned his head towards the Doctor and his voice came huskily. 'But who?'

The Doctor put his finger to his lips, and moving Adric gently to one side

reached out to push open the door.

The light of the sky rushed into their eyes. They were both astonished to find themselves in the open air, standing beside a police box on the by-pass.

The police inspector had spotted the illegally parked sports car and instructed the constable to pull over. While the police inspector crossed the verge to investigate, the constable identified a hazard to traffic in the fast lane and nipped out between the passing cars with a due regard to safety to roll the tyre out of harm's way.

The constable was gratified to see the inspector running towards him with a view to giving him a hand dragging the tyre onto the verge. Or so he thought, until the inspector reached him.

What the inspector had to report was brief, breathless and, as far as the constable was concerned, utterly incomprehensible. The inspector was on the point of steering the constable over to the car to corroborate the story with the evidence of his own eyes, when they spotted the suspect.

The constable knew at once from the gentlemen's attire that they'd got an odd one here. Your average member of the public does not wander abroad in a long red coat and even longer scarf.

Despite the shock, from which he had clearly not properly recovered, the inspector was able to muster a professional tone as he addressed the tousel-haired newcomer. 'Good morning, sir. Would that be your vehicle over there?'

The Doctor must have sensed unwanted complications. He signalled to Adric behind his back to stay under cover of the police box. 'Not mine, inspector,' said the Doctor, tactfully identifying the man's rank from the silver pips on his shoulder. 'No, I haven't driven for ages. Not a car, that is.'

The inspector maintained a respectful tone, though his suspicions were hardening fast. 'I wonder how you come to be here, then. There's not much else here but the road.'

'I . . . well, I admit that might be a little difficult to explain.'

The Doctor found himself being steered by the elbow in the direction of the abandoned sports car. 'And while you're working that one out, sir, perhaps you could also have a go at explaining this.'

The Doctor stared into the back seat, his face frozen into an expression of horror. What he saw confirmed his worse fears: somehow the Master must have escaped from Traken. When he spoke again the Doctor's voice was urgent. 'He's still around here somewhere!'

'He, sir?' The inspector glanced at the constable with a silent warning to be ready in case of trouble.

'The Master, of course,' said the Doctor, pointing to the gruesome evidence in the back seat of the car.

In the dreadful transformation every detail had been perfectly preserved. There was no mistaking the smart blue uniform of Constable Seagrave, who had last been heard of putting in a call down a bad line from the nearby police box.

The other body was unknown to any of those present. But if Tegan had been there she would have been able to tell them that the inert shape, shrunken like the constable down to the size of a doll, was all that remained of her Aunt Vanessa. 4.

The Doctor was trying to explain something to the two official-looking men in blue uniforms. From behind the police box, Adric caught a few words: 'Now just a minute, Officer. You don't realise what's going on here . . .' The inspector's face was a grey wall of officialdom. 'No, sir, but I'll take the details when we get back to the station. Lucky for you, it's not up to me to judge.'

'Lucky? Oh, now surely you don't think . . .' The Doctor tailed off. He knew from past experience that jumping to conclusions was a favourite exercise on Earth. And people in uniforms were much the same all over the universe.

The inspector glanced across at the constable. 'We're not paid to have opinions, sir. Just to do our duty.'

'Well, I have opinions,' the Doctor retorted, gesturing towards the ghastly evidence in the back seat: 'This is the calling card of one of the most evil creatures in this universe, and I don't intend to stand here and debate the issue with you.'

This last remark was as much for Adric's benefit as anything else. 'I'm afraid, gentlemen,' the Doctor went on, 'that I'm going to have to get after him.' So far the Doctor had been careful to avoid looking in the boy's direction. But now he threw the briefest glance towards the TARDIS, and momentarily caught Adric's eye. 'So, if you can help me create a diversion . . .'

The inspector's eyebrows went up a notch further. 'Yes, I see, sir. You'd better come straight along with us.'

'Of course, I'd love to. But . . .'

With tact, but firmly, the constable took the Doctor's arm. 'To assist us with our enquiries.'

Adric pressed back against the TARDIS, thinking furiously. Here was a chance to repay the Doctor for . . . well, for just being the Doctor. He remembered their first meeting on Alzarius, when the Time Lord and Romana had taken him in and tended his wounds, and how subsequently the Doctor hadn't minded all that much to discover the boy stowing away on the TARDIS. The two policemen began to steer their shambling suspect towards their car, and Adric had to back round a corner of the police box to stay out of sight. He didn't know that the thing he had stumbled over was called a bicycle, but it was portable, bulky and would provide a step up to the top of the TARDIS. It gave him an idea.

The two policemen had a firm grip on the Doctor by the time they got to the car. When the constable stopped to open the door the Doctor allowed himself to be surprised by the sight of the police box, and said, as if the thought had just struck him, 'Would you mind awfully if I just phoned my solicitor?'

'That's not for this sort of thing, sir. It's a police call box.'

'That's what I like about this country!' The Doctor exclaimed, mustering up an authoritative enthusiasm that heightened the two officers' bafflement. 'A place for everything and everything in its place!'

Whatever the Doctor was planning to do next, he was obviously not about to get into the car willingly. The inspector had a way of dealing with difficult cases. 'If you're asking for a formal arrest, sir . . .' The inspector had already made up his mind that the tall tousle-headed man in the absurd red coat was dangerous, a lunatic perhaps. The big toothy grin he got from the Doctor in response to the official warning was further confirmation of this suspicion. In consequence the inspector was ready for anything - except the thing that actually happened. No reasonable person could have anticipated that a bicycle would come arching through the air above them, to land with a clatter on the police car roof. The Doctor was not a reasonable person in that sense, and in any case he had the advantage of glimpsing Adric the moment before, perched up on top of the police box with the bicycle held high over his head.

When the two startled officers turned to their vehicle, the Doctor detached himself quickly from their company and sprinted towards the police box. 'Quick! Get him, Davis!' The inspector's shouted command came too late. By then Adric had jumped down from the roof, almost tumbling onto the Doctor, and the pair of them had bundled in through the blue double doors. Constable Davis and the inspector squelched across the grass to the police box, to arrive there just as the lock snicked shut. The constable put his shoulder to the doors, and when they refused to budge he shouted and hammered on the panel with his fist, which gave the inspector a chance to demonstrate the superior intelligence that had earned him his rank. 'No problem, Davis. He's in there, and we're out here. He can't stay cooped up forever.'

'What do we do, sir? Sit it out?'

'Can't waste the taxpayer's time, Davis. There's a key in the car. Get it.' Intelligence misleads. The inspector reasonably mistook the police box for a police box, but if he had known as much as the Doctor about the thing he was planning to unlock he would hardly have been so confident. Knowledge of that kind, however, would have involved certificates in time flow mechanics, not easily come by on Earth.

The Doctor's own certificates were hanging on a wall in one of the TARDIS's rooms, although he couldn't remember which. That was the trouble with infinitely reconfigurable living quarters - to avoid confusion you tend to keep to a few favourite well-lived-in areas and leave the rest to the dust and silence. Certificates, in the Doctor's view, were historical evidence of having been taught something - not guarantees of present knowledge. They belonged in long-abandoned rooms.

Even if they had been impressively decorating the console room walls, no amount of certificates would have told the Doctor why the TARDIS seemed at

that critical moment to have forgotten all it knew about time flow mechanics, and was behaving as if it were nothing more than the inspector's plain and simple police box.

It might have been the cloister bell. Adric had drawn the Doctor's attention to the sinister chime the moment they got through the doors. 'It's ringing again, Doctor. Shouldn't we do something about it.'

The Doctor was busy at the console. 'A choice of emergencies. In a moment. Better dematerialise first.'

The police box - or whatever it was they had materialised around - was gone, and the Doctor very much hoped it had taken the gravity bubble with it. The console seemed to think otherwise. Adric knew little about the workings of the mechanism, but it wasn't hard to detect the laboured noise emanating from the time column, which flashed in a half-hearted way and resolutely failed to move.

'It should be oscillating by now, Doctor.'

The Doctor glanced down at the weak force indicator. The needle was lower now, but still well inside the red zone. 'The gravity bubble's still very close. It's dragging us back.'

'What about the cloister bell?'

'Shut the door.'

Adric did so, but was uneasy about it. 'We can't just ignore it.'

'Nonsense! Of course we can,' snapped the Doctor. Adric didn't know that the First Law of Crisis is to panic about one thing at a time. The Doctor was too busy with the console, checking the displays and making quick calculations in his head, to give lessons in the fundamentals. 'There must be something we can simplify here,' Adric heard him mutter to himself. Suddenly his bony index finger, which had been scanning the rows of dials and switches, descended on a small panel, stabbing at it accusingly. 'Architectural configuration . . . that's the one!'

Adric leaned closer to see what he was doing. The panel was labelled Interior Space Allocation, and at the touch of a few buttons was displaying what looked like a series of graphs with whole areas beneath the curves filled in with colour.

Anticipating the question on Adric's lips, the Doctor said, 'We'll have to find some more power from somewhere. All this space,' he waved a loose hand at the panel, 'takes up energy. I'm going to jettison Romana's room.' 'Are you sure?' asked Adric, very upset by the idea.

Uncharacteristically the Doctor's temper flared up. 'Why do you expect me to be sure? This is life! Nothing is sure!' The boy couldn't remember ever seeing him so angry.

The Doctor returned to the panel, and for a moment his finger wavered over the red button marked Execute. Adric held his breath. He knew the ominous tri-syllable only referred to the routine to jettison Romana's room, but from the tension in the air the word Execute might have applied to Romana herself. His mouth was dry. He felt he should say something to reassure the Doctor, but all that came out was, 'I'm sorry. I just wondered . . .'

'This needs a quick decision, not a debate,' the Doctor snapped, as much to himself as to Adric. Then he pressed the button.

Instantly the illumination in the console room flashed brighter. Adric breathed again, and the Doctor turned to him and nodded, as if some profound truth had been demonstrated. 'You see!' The time column began to wheeze into action. They had lost Romana's room, and regained access to the space/time vortex.

The constable returned from the car and handed the key over to the inspector.

On inserting it into the lock the two officers witnessed an unusual chuffing sound. Both raised their heads, mentally noting that the light on top of the box had begun to flash. The constable didn't think much about

it, but the inspector voiced the speculation that it must be some sort of new security arrangement. He found it harder to explain what he saw next. The inspector pushed the doors open while the constable stood back, ready to help in the event of trouble. The first he knew of it was the expression on the face of his superior. The inspector turned to him and hissed: 'There's some trick to this. Davis - I want a full report.' The constable followed the other's gaze towards the police box. His mouth slowly sank open, as if in silent mimicry of its compact empty interior.

They were in flight. The oscillations of the flashing column that was the central feature of the console were regular now, riding the time waves like a ping-pong ball bobbing on the open sea. The Doctor was patching some hasty co-ordinates into the panel to fill the forward reference he had to file for take-off - Adric understood that much about programming the console - and some of the old liveliness had come back into his eyes. Adric was glad to be able to say something cheerful. 'We've done it, Doctor! That other thing - if it was a TARDIS - must have gone.' The Doctor turned from the console to face the boy: the light in his eyes had been a trick of the twinkling reflections from the panel lights. 'Somehow I rather doubt it.'

He cast a second look at the oscillating column, then, assured that all was well with the mechanism, took Adric by the arm and steered him towards the door that lead to the TARDIS interior.

Adric found himself being ushered out into the corridor. 'What's the matter, Doctor?' the boy asked, confused. 'Aren't you going to answer the bell?'

'This won't take a minute.'

'What won't?'

'Answering the bell,' said the Doctor as his head disappeared back into the console room.

Adric blinked at the closed door. But before he had time to realise how hurt and puzzled he was by the Doctor's behaviour, the door opened again. The Doctor put something into his hand. 'Company while you're waiting. He's very strong on patience.' The door closed.

The book was heavy, bound in dark-brown leather. Adric tipped it to look at the spine and saw it was called The Complete Poetry of John Milton. Opening the book brought a smell of distant classrooms. At the same time the corridor fell silent. The cloister bell had stopped tolling.

Corridors! Tegan was sick of them. Whether you ran down them or walked, they all wound into more corridors, or branched into junctions that lead again to corridors, or perhaps opened out into halls, from whose tall archways sprang more junctions that narrowed inevitably to yet more corridors.

Her state of mind had hardly been helped by the constant tolling, distant but always with her. And now, as she paused for breath, it seemed to be ringing in her head. She listened. It was in her head. Just in her head. It had stopped.

She was lost - inside a crazy little blue phone box. And there was no one to help: just her, and the silence, and corridors from here to kingdom come. So when she turned a corner and saw the patch of daylight through a distant arch, she ran to it as a thirsty desert trekker might run to a water-hole.

The daylight was a mirage; but she only came to that realisation after she had studied her surroundings for a long moment during which fear fought with curiosity, and both were slowly overcome by a rising indignation at the absurdity of the place. The ancient stone walls and the pillars supporting the arched roof of the walkway that circumscribed the courtyard, were all constructed inside a large dome. Some invisible source bathed this great roof with a pale blue light in emulation of the sky, even as far as the suggestion of clouds.

She sat down on a low bench and said aloud, 'This place is completely and utterly daft.'

As if in answer the stone columns around her trembled slightly to the reverberation of a faint whirring, chuffing sound. A patch of intense blue, attached to no particular object, seemed to be forming in the middle of the courtyard. Vague at first, it soon acquired corners and a flashing light on top.

Tegan stood up slowly, staring in broad-minded Australian disbelief at the police box that had materialised in front of her eyes.

The book was all printed in short lines that wasted a lot of the paper on the right-hand side of the page, and they gave the narrative a cumulating rhythm that Adric found unpleasant at first. But as he got into the story it was about flying people called Angels who were at war against the Evil creatures that lived in a Burning Lake - the rhythm seemed to help the way the story built up.

The Leader of the Burning-Lake Dwellers reminded Adric of the Master. Just as the Master had once been a Gallifreyan and was still a Time Lord, the evil character in the story was refugee Angel. So although the landscape of the story, with its Thunder and Lightning and Black Fire, was so obviously a fiction, this central correspondence with the truth riveted Adric's interest.

He was ascending a huge staircase that lead to a gate built of gold and studded with diamonds when he was jolted back from the book to the normality of the TARDIS. The door was opening.

The Doctor stood in the doorway, his face pale under the wild curls of his hair. 'Well, now we know,' was all he said as he ushered Adric back inside. 'Know what?'

'The message was very faint. But it was from Traken all right.'

'Traken!' The bright angels flew from the boy's mind. 'How's Nyssa? What's wrong?'

Taking time to choose his words carefully, the Doctor closed the door. Nyssa was safe enough; it was from her that the message had come. But Tremas, her father, had vanished. 'The Master must have had a second TARDIS hidden away somewhere,' the Doctor concluded. 'There's no doubt now that he escaped from Traken.'

'And he's taken Tremas with him?'

The Doctor made a vague gesture of affirmation; he had said as much as he dared tell the boy. Tremas, the brilliant Traken scientist and trusted Consul, had been a man in his prime, whereas the Master was very near the end of his twelfth regeneration. No Time Lord had survived the process for a thirteenth time. Clearly the Master had been desperate.

Adric clutched at the Doctor's sleeve. 'Then where have they gone?' The Doctor hesitated. He couldn't tell Adric of his fears that the Master had physically taken over Tremas. Was he living in his body now? To achieve that was beyond the capacity of a Time Lord alone, but with some of the power of the Keepership still lingering . . .

Angry with himself, the Doctor suddenly thumped the console. He had the self-control to choose a part some distance from the delicate array of needles, but the percussion was still enough to set them jumping. 'I was so sure we'd got him . . . But all the time he's been two moves ahead of me. He must have known I'd try to fix the chameleon circuit.'

These were speculations he could share with the boy; indeed, he had to. After his escape from Traken the Master must have come to Earth to lie in wait, wrapping his own time machine invisibly around the police box. It was the only way to infiltrate his superior technology into the Doctor's

## TARDIS.

There was one thing Adric didn't understand. 'But to know you were coming . . . he must have read your mind?'

'He's a Time Lord too,' the Doctor brooded. 'In many ways we have the same mind.'

Adric looked round the familiar walls of the console room and shuddered. If the Doctor was right the Master was somewhere in the TARDIS, imbedded like a virus in living flesh. If they landed in Logopolis they ran the risk of carrying the infection to an innocent planet.

'Then we can't really land anywhere, can we?' the boy asked.

Adric heard him mutter something in reply, but the Doctor wasn't really listening. His eye was wandering around the console room as if trying to trace the invisible string of a long tangled thought. The thought seemed to begin with the console itself and wind across the floor to the big double doors and then back again, eventually ascending slowly up the walls to the ceiling.

The Doctor crossed to the small door that led to the TARDIS interior and pushed it shut, examining the way it fitted into the door jamb. He seemed satisfied by what he saw and went over to retrieve the TARDIS Manual from under one of the feet of the hatstand, where the small book spent a lot of its time compensating for an inadequacy in the hatstand design, or perhaps a slight unevenness of the floor.

The Doctor had been leafing backwards and forwards through the pages for several minutes when he suddenly looked up brightly and said, 'Actually, there is one way of getting rid of him. I'm just trying to work out how much damage it might do to the TARDIS systems.'

The Doctor explained his dangerous idea. In principle it should be possible to flush the Master out - literally - by the simple expedient of materialising the TARDIS under water and opening the doors.

'Drown the TARDIS?' Adric exclaimed. 'But you can't!'

'I can and I have to,' said the Doctor flatly. 'And that is that.'

The strange pale blue light that seemed so like daylight must have been affecting her eyes, Tegan decided. The object she was examining was as solid as anyone could wish: a perfectly normal police box, even down to the stuff about police coming to your assistance written on the front. It was everything else that was crazy. She remembered - if her memory hadn't gone completely bananas along with everything else - that the crumbling stone courtyard she was in now, along with all that spaghetti of corridors, was supposed to be inside one of those police box things. Tegan was essentially a sensible girl, and she knew when she was out of her depth. What she had to do now was find some official person, preferably the captain of the craft - and give him a piece of her mind he would never forget. She had walked round to the back of the police box by now, just in case there was some trick to it. No, it looked, felt and smelled just like the real article. What she didn't see, as she leaned against the blue wall at the back trying to work out some positive plan of action, was the door at the front of the police box slowly edging open.

He thought it was a map at first. And then as the details on the viewer screen grew larger Adric could see it was an aerial image of a real city. Traffic moved along the grey veins of roads between the buildings, many of which were stained with age, although patches of silver and glass highlighted some newer structures with gleams of sunlight. The main feature of the city was a thick grey-green river bangled with bridges. It lay across the centre of the screen like a serpent sprawled across a patterned cushion.

The time column had stopped oscillating. They were hovering in mid-air. 'London,' announced the Doctor.

'Why not the sea?' asked Adric. 'You said there were a lot of oceans on this planet.'

The Doctor crossed to the console and delicately re-set the co-ordinates. 'It's an ancient tidal river called the Thames.' The watery burial of the TARDIS would be taking place somewhere worthy of respect, he assured Adric. 'Besides, if we do it this way we won?t have so far to swim.'

The boy helped the Doctor with the first part of the elaborate preparations. They had to close down most of the console system, and as the twinkling lights and little coloured instrument panels went out one by one the reality of what the Doctor was planning to do came home to Adric. A flood of water would sluice in and wash out the whole TARDIS. The console room, the corridors, the cloister room and the myriad rooms behind doors he had never opened would be drowned under tons of thick green water. It seemed such a drastic way of driving out the Master.

'But you can't just abandon the TARDIS.'

The Doctor passed an affectionate hand over the console. Yes, one does feel a tremendous loyalty to the old thing after all these years.'

'I don't mean that, Doctor.' It seemed to Adric that the Time Lord was overlooking the obvious again. 'Be practical. How are you going to get to Logopolis?

The Doctor pulled a switch and the secondary lights at the base of the time column went out, leaving the console looking lifeless. The only working technology in the room now seemed to be the viewer screen, which still showed the serpent motif of the Thames. 'There's a gap in your education, Adric. Why are we going to Logopolis?'

'To repair the TARDIS.'

'And if we don't have a TARDIS?' The Doctor began to walk round the console, double-checking that all the switches were off.

'But we've got to have a TARDIS! What are you going to do for transport?' 'They also serve who only stand and wait,' said the Doctor simply, pointing to the works of John Milton that Adric was still holding, 'or haven't you got to that bit yet?'

He approached the screen. 'We're partially materialised and hovering. There's just enough power in the peripheral reserves to keep us up until I short the lines with this lever. We'll drop the TARDIS . . . here.' He pointed to an area where the river widened.

'Drop it?' The more Adric knew about the Doctor's plan the more dangerous it seemed. 'Couldn't we just materialise under water?'

'This way we make sure we land in the right place. A gentle splash-down.' Nevertheless, the Doctor made sure of getting a good handhold on the console and persuaded Adric to do the same. 'Well . . . there may just be a slight jolt. Ready?'

Adric nodded uneasily. 'Yes . . . if you are?'

'That's not very affirmative,' replied the Doctor sourly. 'I'd feel more confident if you just said "yes".'

They both held on tightly. The Doctor's hand closed on the lever.

Leaning against the back of the police box, Tegan glowered around the silly courtyard with exasperation. In the absence of anybody to complain to or order about she had begun to talk to herself, addressing herself by name. 'Right, Tegan. This is obviously some kind of elaborate joke, so we've got to find some way of putting a stop to it. The shock's the worst thing, and that's over. So everything's got to get better from here on in.' What happened next showed that her powers of prophesy were as

underdeveloped as her geography, as far as the TARDIS was concerned. Although nothing of her surroundings changed in the few moments that followed, she experienced a sudden, deeply unpleasant sensation that made her heart pound. It was like being in a lift that has taken it into its head to make a violent downward lurch.

She clung to the police box for support, feeling indignation and alarm, in that order. Then just as everything seemed stabilised again, a massive shock wave came up through the floor, cascading loose rubble from the stone walls and sending her flying.

She picked herself up from the flagstones. 'This is just too much. It's unbelievable.' Apart from the dust her uniform was undamaged, although she could feel numb places on her body that were bound to turn into bruises. 'Crazy idiot of a pilot. Wait till I have a word with him . . .'

And then she froze. From the other side of the police box she heard a sound. If she had been convinced it was human she would have described it as laughter; a hollow, light chuckle.

She remained still. Nothing happened. Without moving from the spot, Tegan called out cautiously, 'Who . . . who is that?'

The same terrifying judder threw Adric up onto the console, and he came to rest against the stationary time column. Not until the reverberations had died down did he open his eyes. The first thing he saw was a sprawling heap of red coat, curls and scarf from which the odd arm and leg jutted out. The heap gathered itself together on the console room floor, and the Doctor's face grinned up at him.

'Adric? Still with us?'

The boy slid down from his perch and helped his companion to his feet. It wasn't his idea of a 'gentle splash-down' and he told the Doctor as much. The Doctor tried to make light of it. 'Must have touched the bottom.' When he had finished brushing himself down he noticed that the boy was still glowering at him in an unfriendly way. 'Look on the bright side, Adric. We were very lucky the water was there to break our fall.'

Tegan's eyes darted around the cloisters, trying to detect among the stony shadows the figure whose presence she felt as a dank chill. The echo around the walkways made it impossible to locate the low chuckle precisely, but fear was urging her backwards towards the arch that had first brought her into the room.

She touched the flaky masonry of the wall behind her, but what she had mistaken for an archway in the quick glance she had allowed herself turned out to be nothing more than a shallow alcove that rustled with ivy. Still not daring to take her eyes off the danger in front of her, she began to feel her way along the wall.

The echo of that chilling sound floated through the walkway again, closer now. There was still nothing to see - or rather everything to see: darkly moving leaves among the foliage, deeper shadows within the shadows. The Doctor was standing with his back pressed hard against the doors, and his feet planted firmly on the TARDIS floor, as if getting ready to hold back a battalion of battering rams. Adric was by the console, manning the door lever.

The Doctor went through it briefly once more, to make sure the boy understood. The trick was not to attempt to swim out while the water was rushing in. They would tread water and breathe while air remained in the console room; then when the influx had steadied they could pull themselves out through the double doors using hand-holds on the fittings. Until they got out into the open river attempts to swim were bound to end in being swept down by the current into the interior of the craft.

'And be careful,' said the Doctor finally. 'The water pressure could send us both flying.'

Then the Doctor gave the word. As soon as Adric had pulled the lever he ran over to the Doctor to help him with the doors, putting his back up against them and digging in his feet. Now that the security mechanism was released he had imagined it would take all his strength to hold back the flood, letting the water seep in slowly at first, just as the Doctor planned. In fact it was as easy as leaning against a wall.

After a moment of getting the feel of the doors - this too was part of the Doctor's carefully developed plan - the boy looked at the Time Lord. The same question was in both their minds.

'Perhaps,' said the Doctor slowly, 'we're not down very deep.' 'Deep?' replied Adric. 'There's no pressure on these doors at all.' The Doctor paused, though he still didn't dare to let the doors go. 'I

think you're right,' he said at last.

'I am right.'

'Very good, Adric. Very affirmative.'

Together they straightened up and stepped into the middle of the room. There was no less stateliness than usual about the way the massive doors steadily opened inwards. And no torrent followed, not even a trickle. With an embarrassed glance at his young companion, the Doctor walked out of the TARDIS and found himself standing on a wooden floating pontoon moored by the river's edge.

The pontoon had been eroded by the river and woodworm and time - mostly by time. It was a miracle the TARDIS hadn't gone straight through it. As it was, the planking had broken under the impact and the base of the TARDIS had been forced into it for a couple of feet, coming to rest against a metal girder that underpinned the wooden structure.

The Doctor looked around the deserted riverside. On both banks abandoned dockland stretched as far as the eye could see, a landscape of rusty skeleton buildings wreathed in weeds. The water that rocked the pontoon from below was thick with greasy green algae. But for the motion it looked solid enough to walk on.

'There you are, you see,' the Doctor said to the boy, who stepped out behind him. 'I knew there'd be a perfectly simple explanation.'

Adric was glad of the Doctor's assurance that nothing serious had gone wrong with the plan. The initials TARDIS stood for Time And Relative Dimensions In Space machine, and it was a well-documented fault in the Type 40 model that sometimes the time dimension was a little less relative to the other dimensions than it should be. According to the Doctor's diagnosis they had arrived at exactly the right spot - but a century or two too late. In the interim the bend in the river had silted up, moving the bank, and with it the pontoon.

Although perfectly satisfactory as an explanation the Doctor seemed unhappy with it, as though the event were hedged about with other quite different - and perhaps unspeakable - possibilities. As the Doctor grew pensive, Adric became aware of the whistle of wind through the girders of a bridge that

arched the river a little way upstream. The Doctor was staring at the bridge.

'Well, we nearly got it right,' Adric said as cheerfully as he could. The Doctor stepped gingerly along the swaying pontoon for a better view of the bridge. 'Nearly - but not quite right,' he said absently. 'There's something not quite right about all of this. Before the police came, I saw something . . . somebody. Faintly, in the distance.'

Adric's mouth was dry when he came to speak the name. 'The Master?' 'The Master . . . perhaps that was it. Or perhaps . . .' The Doctor's voice tailed off into a chilling silence. His eye had come to rest on something high up on the bridge that overlooked them. Adric could swear the pale, vaguely defined figure hadn't been there the moment before. The distance made it quite impossible to distinguish any details of the face, but Adric knew positively that the solitary figure was looking directly at his companion.

Eventually the Doctor said, in a strange harsh tone that was quite new to Adric, 'Nothing like this has ever happened before.' And without taking his eyes off the figure on the bridge, he gestured to Adric to stay by the TARDIS. 'I've got to get to the bottom of this,' was the Doctor's parting remark, as he left him to cross the broken pontoon towards the bank. He picked his way through the weeds and rubble, making for the bridge where the watching figure stood translucent against the sky.

At first the figure didn't move, except to keep his face towards the Doctor, who was now scrambling over the rusty girders that littered the approach to the bridge. Then Adric saw the mysterious observer detach himself from his point of vigil and move towards the Doctor. Like a pair of duellists they met on the bridge, facing each other.

The bargaining began; at least it seemed like bargaining from where Adric stood. The Doctor's scarf blew wildly in the wind, mimicking the earnest gesticulations of its owner. Whatever the Doctor was saying, the other's replies came more slowly and were less animated. But far from calming the Doctor down, they only seemed to be stirring him on to greater agitation. And then the Doctor was turning to gesture towards Adric, as if the boy's presence was somehow part of the debate. But whatever point the Doctor was trying to make, the other seemed obstinately to reject.

Adric's fear crystallised into a single thought: the Doctor was face to face with somebody - or something - of which he too was terribly afraid.

There had been no sound from the stone pillars or the police box for a long time now, only the rustle of the ivy she moved against in groping her way along the wall. But never for a moment did Tegan dare take her eyes off the courtyard in front of her: somewhere among those crumbling pillars, those small ragged trees, that invisible mocking presence must still be lurking. Then, close by her ear, came a sudden sharp bat-squeak, and a gust of air chilled her cheek. Tegan almost jumped out of her skin.

It was a door, unoiled for centuries, moving in the breeze from somewhere outside. At last there was a way out! She rushed through it, slamming it shut behind her.

She was back in the network of those endlessly winding corridors. Round and round, she thought, like a hamster in a cage.

The Doctor marched into the console room, followed by Adric. 'Door,' snapped the Doctor.

Adric ran to work the lever, his head bristling with questions. But the Doctor was rapidly flicking switches on the console, bringing the colony of little lights and panels back to life. 'Co-ordinates. Come on, come on . .

. Co-ordinates - are they set?'

'Where are we going?'

'Logopolis, of course. Set?'

At a nod from his companion the Doctor pulled the dematerialisation lever and the time column began to flash and oscillate. At least everything was working; that was reassuring. But Adric found the Doctor's drastic changes of plan very unnerving, and so was the gloomy silence that settled over the console room once they were in flight . . .

Adric's voice was small in the huge silence. 'Doctor? What . . . what happened out there?'

'I have dipped into the future,' the Doctor replied, as if to himself. His face was a mask, animated only by the steady pumping light from the time column.

The journey to Logopolis seemed to go on for ever. Eventually, when the Doctor detached himself from the console and began to pace the floor, walking in disconcerting unison with the oscillations of the time column, Adric could bear the tension no longer.

'Aren't you going to tell me anything about it?'

'Of course,' the Doctor replied, making a concerted effort to cheer up.

'Well, as much as I can. Which isn't very much . . .' What it was that stopped him revealing everything he didn't say. Adric was able to deduce that the Doctor's concern with his own fate and that of the TARDIS was now almost a trivial matter. His fears were focused now on some future event or series of events that he was only able to describe obliquely.

'On Earth they call it "bad luck". A chain of circumstances that seems to fragment the laws that hold the universe together. We're in for a run of

it, a storm of it, a positive earthquake of "bad luck".' Then he took Adric by the shoulders and spoke to him face to face. 'The Master is a Time Lord - and that means we have an obligation to deal with him ourselves without endangering others.'

'Keep it in the family,' Adric agreed. 'And we will.'

'Not we, Adric. You are one of the others.'

The boy flushed. 'But I can help you . . . can't I?'

'In the ordinary way, yes, invaluable. But this is something far too dangerous.'

A remark of the Doctor's had puzzled Adric. As a Time Lord he was always dipping into the future; that was precisely what had made the phrase so chilling. The answer was now written in the Doctor's eyes. He was talking about a kind of future normally closed to him - and that could only mean his own.

'The man on the high bridge told you about the "bad luck"!'

The Doctor nodded, and Adric drew a sharp breath. 'So it was the Master out there. You've done a deal with him!'

The Doctor's eyes narrowed. 'How do you deduce that?'

'I just guessed,' the boy said.

'Never guess unless you have to. There's quite enough uncertainty in the world already.' And he didn't say another word until it was time to land in Logopolis.

The Doctor deemed it polite to show himself first, by way of warning the Logopolitans of his arrival. He put the TARDIS into hover mode above the City and flicked on the viewer screen.

The two travellers looked down on a huge shallow dome smoothed out of the pale rose natural rock. Swirling involutions etched deep into its surface: these seemed to be the city streets, for in the depths of the pink shadows Adric could just make out cave-like holes that he took to be dwelling-places. Apart from a few tiny moving figures there was little sign of life. From the perspective of the hovering TARDIS the City of Logopolis looked like a giant brain.

At one end the rock piled up into a mound that might have been a single

large building - some kind of scientific establishment, Adric deduced from the massive parabolic antenna mounted above it. A transmission site, perhaps?

The Doctor approached the screen and looked hard at the big skeletal bowl of the aerial, unable to answer Adric's question. 'Must be a recent addition. There'll be plenty of time to find out all about it.'

He touched a button on the console and the TARDIS began to move across the City to where the smooth dome of rock graduated into a flat plateau. Then, as they prepared to land the most extraordinary thing happened.

The door leading to the inner part of the TARDIS opened with a bang. Tearstained, showing signs of her exhausting wanderings through the maze of the TARDIS corridors, the red-haired girl in the purple uniform marched into the room.

Tegan's voice exploded like a shrapnel-bomb in the quiet of the console room. 'I demand to see whoever is in charge of this ship.'

6.

The plateau at the north end of the City was flat and open, overlooking a horizon of pale rose sands that merged mistily into the opalescent sky. But the silent figures in flowing dark robes had not gathered in the High Place to look across that breathtaking view. As more of their number spilled in from the direction of the City, stepping out from the shallow gullies which in their southward development became the myriad alleys of dwelling places, all eyes were turned towards the materialising blue police box.

Their Leader was a man of about sixty, though from his assured posture and the shine of his skin beneath his short steel-grey hair he seemed to be in his prime. The crowd around the TARDIS thickened and the Leader stepped forward to greet the Doctor.

But rather rudely in the face of all this hospitality the TARDIS door remained closed.

Tegan was the cause of the trouble. She stood defiantly in front of the console, facing the Doctor and Adric.

'I've told you - Tegan Jovanka. It's my name. And before I answer any more questions, I want to know exactly who you are.'

Adric briskly introduced himself and the Doctor.

'And this,' said the Doctor, pointing at the viewer screen which now

displayed the sombrely dressed crowd gathering around the TARDIS, 'is

Logopolis. Where I happen to have some urgent business. What am I going to do with you?'

Tegan had a very positive answer. 'You can take me right back where you found me. My aunt is waiting in her car to take me to the airport.'

The Doctor had just taken the data block out of the memory management system and was on the point of reaching for the door lever. 'Your aunt? A plump brown-haired woman? A red sports car?'

Tegan was taken aback. 'You know Aunt Vanessa?'

'I've . . . er . . . seen very little of her,' the Doctor prevaricated.

'Right, that settles it. You'll have to come with us.' He levered open the door, waving Adric and Tegan out towards the waiting Logopolitans.

At that moment there was no blue police box inside the cloister room. A handsome dark green tree of the variety Prunus Laurocerasus, or cherry laurel, had, however, become apparently firmly rooted in the ground a little distance from where the Doctor, Adric and Tegan emerged to face the welcoming party. The Master's TARDIS did not suffer from the same defects as the Doctor's. In particular, the chameleon circuit was working perfectly.

The Doctor allowed the Leader of the Logopolitans to conclude his short speech of welcome. Crisp, well-regimented applause illustrated that Logopolis was indeed honoured by the Doctor's visit.

'Nice of you to put it like that, Monitor,' said the Doctor. 'I arrive . . . 'he threw a meaningful look towards Tegan ' . . . with a somewhat

enlarged entourage. But we're very honoured to be here.'

Tegan was about to raise her voice in protest, but Adric lifted his finger authoritatively to his lips, a trick the Doctor often used.

The Doctor and the Monitor began to saunter towards the pink folds of rock that led to the City. Promising to explain everything if she promised in turn not to make a fuss in front of all these important people, Adric induced Tegan to follow.

'Time has changed little for either of us, Doctor,' the Monitor observed. 'You continue to roam the universe, and we persist in our simple existence on this planet.'

The Doctor laughed. 'That antenna on the other side of the city - far from simple, I should have said.'

'Occasionally our researches require what is sometimes called "technology".' With a generous sweep of his hand the Monitor acknowledged the Doctor's point. 'But for the most part our computations are enough.' The gully they were walking along had grown into a small, smooth-shouldered canyon. Logopolis began here. Adric detached himself from Tegan's whispered questions long enough to look closely at the caves he had noticed from the TARDIS; he now saw they were square, open-fronted cells carved from the rock on either hand. At first they dotted the walls intermittently, but as the Doctor's entourage drew closer to the heart of the City the perforations became more regular, until eventually they were completely adjacent, with only a column width separating each cell, row upon row of them, winding the full distance of every street.

The crowd, that had been following at a respectful distance, was now diminishing. One by one the Logopolitans left the procession, each taking up his station at the entrance of his small, well-ordered dwelling.

The air had begun to chirrup to a sound that might have come from a swarm of large crickets. The Doctor was so deeply engaged in his philosophical exchange with his distinguished host that he seemed not to hear it. Adric couldn't explain it to Tegan - there was a lot that he hadn't been able to explain - but at that moment they turned a corner that looked down into a street they had already passed.

A Logopolitan sat at the entrance to each cell working beads on a kind of small frame held on his lap. 'They're just like abacuses!' Tegan exclaimed. As he clicked his beads each seemed to be chanting softly under his breath, and Adric remembered what the Doctor had said about the muttering and intonation. Waves of information were being passed from cell to cell, calculated upon and then passed on again to the next. It was like being in the middle of a huge, living calculating machine.

The canyons became tall. The Monitor lead them towards a building that was far larger than the rest, boasting what appeared from the layout of the windows to be several storeys. They mounted the flight of steps that lead to the big rectangular entrance.

What was left of the crowd remained outside. Tegan was thankful at least to find the air cooler in the large hall. And then there were more of the same pink steps, before they entered a room that was quite different from the other architecture she had seen. Its surfaces were perfectly even and rectangular, certainly not carved from the rock.

'Our Central Register,' the Monitor announced.

'You have been busy, Monitor,' said the Doctor, handing over the data block. 'All this is new.'

'And more than we need for our immediate researches. Back-up facilities.' The Monitor took the data block over to a long grey work-station that ran the entire length of the wall and settled himself in front of what looked at first like a black console screen. Adric expected some picture to appear there when the Monitor put the data block in front of it. But instead the Logopolitan leaned forward and, consulting the data block from time to time, began to whisper. Adric edged closer and saw that what he had taken to be a screen was a dark cavity in the wall.

The sound was meaningless to Adric. It was composed of short words that the Monitor articulated with great clarity, carefully separating each from the next as though every syllable were precious. Somehow Adric was reminded of the words in the story about the Angel. But the rhythm in the Monitor's incantation owed much to the fact that the same sounds kept coming round again and again.

'Kayrie gorrock gorrock kayrie zel. Kayrie nerus nerus kayrie zel. Kayrie av kayrie av perdunesta zel. Ressa carra otto perdunesta zel...'

Out in the narrow streets the susuration of sound was changing, taking on the shifting rhythms of the Monitor's voice as the new whispered numbers chained from cell to cell. The abacuses began to clack their calculations, building to a fugue that echoed through street after winding street. At the very edge of Logopolis the sound of the whole city blended into the moan of the wind hurrying over the plateau from the stretch of rosy sands below. Two objects dominated the high flat ground: the TARDIS and a plump, cherry laurel tree, whose dark-green, glossy foliage marked it as an unlikely product of that stony soil.

And then there was no tree.

Suddenly, with no intermediate stage, in the place of the succulent green shape stood an architectural pillar, stocky, yellowing and fluted. Only the subtlest hint of the laurel tree remained, in the outline of the sharptoothed, lance-shaped leaves carved around the base and the capital. The pillar stayed there for a moment, rather as a dragon-fly waits for its wings to dry in the sun. And then, with a chuffing, whirring sound, it dissolved from sight.

The Monitor rose from the console and turned to the Doctor. 'The code is being compiled.'

'Thank you, Monitor. I'm certainly looking forward to having a properly functioning TARDIS.'

'Is this business going to take long?' Tegan demanded.

The compilation would only take a matter of minutes, the Monitor assured them. This wasn't enough to calm Tegan down - nothing was. The Doctor, who still needed to clear up some points of detail with the Monitor about how the new figures were to be re-entered into the TARDIS system, appealed with a silent gesture to Adric. Do shut her up, his glance suggested.

'It's not the Doctor's fault you wandered on board,' the boy said, matching Tegan's aggression with a little of his own. He contrived at the same time to draw her to the window, well away from where the Doctor and the Monitor were trying to have a civilised discussion.

'Wandered? That ship was deliberately disguised as a police box. Talk about flying under false colours.'

'Yes, I'd better explain about the TARDIS. You see, there's this thing called the chameleon circuit. It's simplest to look at it as a sort of logical gearing between the real-world interface and the internal quasidimensional continuum . . .' In mind-numbing detail, Adric began his discourse.

Below the window the winding streets bristled with whispers and the clack of abacuses. In each cell entrance sat a Logopolitan, flicking his beads and intoning the information on to the next. The cells were the simplest of living quarters: a pallet on the floor, a few cooking implements hanging from hooks on the wall, and around the perimeter of the small white-washed room a neat collection of rectangular tablets that might have been the Logopolitan equivalent of books.

One cell in all that winding chain was more elaborately furnished than the rest, although the occupant sitting at the entrance was too absorbed in the business of 'the Numbers' to realise it at the time. Behind him, at the rear of the cell, a stout, yellowing, fluted pillar had formed, reaching from roof to ceiling.

The savage sizzling sound that echoed round the cell went unheard on the street outside, drowned beneath the rising susurration. Quite suddenly, the stool where the Logopolitan had been sitting was empty; the abacus had fallen to the floor. Beside it lay the occupant, immobile, eyes staring at ceiling, diminished to the size of a doll.

While the whispers and clacking of abacus beads rose to a pitch, Adric was coming to the end of his short lecture on the chameleon circuit's functioning - or rather, reasons for not functioning. He had told her everything he knew on the subject, and what he did not know he had invented. At least it kept Tegan quiet until the Monitor returned from the console with the results of the compilation.

'This will restore your chameleon circuit, Doctor,' said the Monitor. 'Splendid, Monitor.' The Doctor took the data block. 'The TARDIS and I have been looking forward to this.'

They were moving towards the door when the Doctor paused to look around him. 'You know, Monitor, there's something rather familiar about this room. But none of this was here last time I came.'

'Your extensive travels put us stay-at-homes to shame, Doctor. Doubtless on one of your trips to the planet Earth you have visited the Pharos Project.' The Doctor snapped his fingers. 'Of course, the Pharos Project!' Then he realised he was no wiser, and had to ask 'What about the Pharos Project?'

'And what is a Pharos, anyway?' Adric interjected.

The Doctor was strong on Ancient Greek and replied before the Monitor had a chance to speak. 'Means a lighthouse. It's the name of a famous Earth project designed to transmit messages to remote planets.'

'I understand they're trying to get intelligent life to respond,' the Monitor added.

The Doctor smiled. 'But the life is too intelligent to do that before it knows what the Earth people are up to!' He was looking round the room again, and suddenly turned to the Monitor. 'Of course! This is almost identical to the Pharos computer room . . .'

'I always thought you underestimated our Logopolitan skills,' said the Monitor with some pride. 'It's a perfect logical copy.'

'Block transfer computation!' exclaimed Adric, not wanting to be left out of the conversation.

'That . . . and a little more,' the Monitor agreed. 'You see, structure is the essence of matter.'

'And the essence of structure is mathematics!' Adric added excitedly. He had grasped the point, and was keen to let everybody know it. By mathematically modelling the Pharos Project in sufficient detail and supplying the necessary raw energy, the Logopolitans had been able to recreate whole sections of the Earth structure on their own planet. On the steps down to the street the Doctor said, 'In that case, Monitor, you must be able to model any space/time event in the universe.'

'Yes, true,' replied the Monitor modestly. 'But for the moment let's content ourselves with solving your little problem, Doctor.'

No wonder they think so little of travelling, the Doctor mused to himself. On their journey back to the TARDIS the party gathered another following of flowing-robed Logopolitans. The Doctor drew the Monitor out of earshot of Tegan and Adric and said in a low voice 'I wonder if I can ask you a very special favour, Monitor?'

'My dear Doctor . . . of course.'

'I need this repair rather urgently,' said the Doctor, choosing his words carefully, 'because what lies ahead for me is . . . not for them. I'll have to leave them here, Adric and the girl. Would they be too much of a burden?'

'I'm sure we can make them comfortable, Doctor.' The Monitor was puzzled, but it would have been a breach of etiquette to press questions.

They had arrived at the TARDIS a little ahead of the others. The Doctor turned to his old acquaintance. 'I'll be back when I can. Which, to be frank with you, Monitor, will be soon - or not at all.'

The Doctor's handshake was firm. He lowered his voice and added, 'I hate farewells. I hope you won't mind a small deception to keep this simple.' The Monitor understood immediately. 'You don't want them in the TARDIS with you?'

Tegan and Adric caught up with them at this point, in time to hear the Doctor say, as if in reply to a remark of the Monitor's, 'Dangerous, eh? How dangerous?'

The Monitor took his cue. 'Well . . . there's a chance the computation may produce . . . an instability.'

The Doctor seemed to take a moment to ponder the question. Then he turned to Adric and Tegan. 'An elementary eggs and basket situation, wouldn't you say? Not to put all of the one in the other.'

Adric tried to protest, but the Doctor persuaded him that even though there might be only one chance in seven hundred million of the process going wrong it was still silly to jeopardise more lives than necessary. Tegan saw the sense of that. Then, with the tiniest wink to the Monitor the Doctor disappeared through the blue double doors.

Adric wouldn't let the matter rest. He turned to the Monitor. 'Then the Doctor is in danger? He said he was expecting danger - great danger, he said.'

The Monitor smiled at Adric's agitation. 'A simple precaution. There is very little that can go wrong.' But seeing the alarm still on the boy's face he felt compelled to add: 'In fact, I must confess, nothing at all . .

. I'm afraid I misled the Doctor in order to have the pleasure of your company while he engages on this mundane task. Now, perhaps you'd like to see more of Logopolis . . .'

'No offence to you personally, but I'd prefer to see a lot less of it.' The Monitor's high diplomacy calmed Tegan, but it didn't stop her speaking her mind. 'Can you give me some idea how long we're going to be delayed here. I do have a job to do.' Adric apologised to the Monitor for his brash companion. 'I'm sorry. She's upset . . .'

'Too right I'm upset,' Tegan declared. 'Wouldn't you be?' But if she was honest with herself she had to admit it was kind of exciting too. At the interview for the job they had asked her what her hobbies were, and she'd said 'Flying and travelling'. If that committee of stiff-necked personnel officers could only see her now!

'That's very odd,' said Adric. 'It looks like . . . Nyssa!' He was peering past Tegan at some distant point behind her. She turned to see a small female figure standing on the skyline, right on the edge of the plateau. She seemed to have appeared from nowhere.

The girl began walking towards the group round the TARDIS. And then she waved.

Adric's mouth opened in astonishment. 'It is Nyssa!'

The figure was running now. 'It's the girl who helped us on Traken,' Adric had time to explain, before Nyssa's arms were wrapped round him in an embarrassing hug of greeting.

Tegan shook Nyssa's hand. 'Hi, I'm Tegan. Did they hijack you too?' The brown curls bounced around her pale young face as Nyssa shook her head. 'A friend of the Doctor's brought me. He's here somewhere.'

They looked around, but there was nobody but themselves and the Logopolitans.

'A friend of the Doctor's?' asked Adric. 'Are you sure?'

Nyssa's serious round eyes echoed surprise that he should doubt her word. 'Of course. Is the Doctor here?'

Adric pointed to the TARDIS, and Tegan added, 'He's trying out some kind of new trim for the machine. Have you seen inside that thing? It's the most amazing . . .'

Tegan broke off abruptly, struck by something about the appearance of the TARDIS. During the arrival of Nyssa the Monitor had drawn closer to it, some doubt creasing his normally smooth features. Tegan looked at the time machine, unable to define what it was that was so evidently wrong. But turning to Adric and Nyssa she realised that they saw it too.

The colour was too bright! And as they watched, it quickly became brighter, until it was fluorescing violently.

At first Adric wasn't convinced it was a fault. 'It's the chameleon circuit. The Doctor's reprogramming it...,' he explained to Nyssa. But they could all see the look of alarm on the face of the Monitor and his fellow Logopolitans.

Adric rushed to the Monitor's side. 'What's the matter?'

'A transfer instability. It may be only momentary.'

The Monitor seemed to be right. The fluorescence was visibly dying down. Instinctively, Adric, Nyssa and Tegan pressed forward, but the Monitor gestured to them to stay back.

'Something is wrong!' Adric cried.

At first it seemed like a trick of the light, some reaction of the eyes to the fluorescing. But as they watched it became clear without any doubt. The TARDIS was smaller!

Tegan turned to the Monitor. 'You'd better do something,' she snapped. The Logopolitan shook his head in dull amazement. 'I don't understand . . . I don't understand . . .'

'Look!' Nyssa exclaimed, although all eyes were already on the TARDIS. 'It's still shrinking!'

Alarm was spreading among the gathering of Logopolitans, who were drawing back from the sight. The TARDIS was now no taller than a man's height, and still diminished slowly as they watched.

Adric grabbed the Monitor's arm. 'But the Doctor's in there!' he shouted. At a distance from the horrified crowd, elevated by the height of the smooth fold of rock on which he stood, the translucent watching figure remained immobile, waiting his time. And he knew that time was coming. But 7.

The Doctor's young friends pressed in around the Monitor, and Tegan's voice was louder than the others. 'It's your numbers doing this. You must be able to do something to put it right.'

'Quick! Please, we must get him out of this!' Adric demanded, tugging at the Monitor's sleeve.

A greyness glazed over the fine features of the Logopolitan. 'This is unheard of . . . A fault in the computations?' He pushed his fingers, some ornamented with simple rings, through the neat silver curls of his hair. Then the moment of hesitation was over. In a voice crisp with authority he spoke to the distressed crowd around him. 'Collect the visitor's machine. The honour of Logopolis is at stake.'

And Adric thought he heard him add under his breath, 'And more than our honour . . . much, much more.'

The TARDIS was now no bigger than a large cabin trunk, and even a child of ten would have had to stoop to get in through the miniature door. It was still fluorescing intermittently, but its surface didn't seem to be hot to the touch when the Logopolitans hoisted gently it into a horizontal position.

Nyssa had run forward to supervise the lifting of the TARDIS. Now as the procession swept towards the city she fell into step beside the Monitor. 'What are you going to do with the Doctor?'

The Logopolitan Leader turned his head towards her gravely. 'Our best. That is all we can do.'

And they hurried on to the Central Register through the winding maze of Logopolis, not knowing if the Doctor, inside that shrunken and still shrinking toy, was alive or dead.

The Doctor himself was little wiser. He had been only part of the way through the tedious business of reading the figures off the data block and keying them at the console when the room began to fill with an insidious buzzing sound, like an infuriated mosquito caught in a jam jar. It was then that the distortions started. He first noticed a curious truncation of the time column, as if he were looking down on it from the perspective of the ceiling. His own hands, working at the keyboard, suddenly seemed a long way off. The buzzing grew, until he wasn't sure whether his head was in the room or the room was in his head. As he folded to his knees the floor rose smoothly to meet him halfway, like a well filling with dark oil.

An idea came swimming towards him through the thick buzzing blackness: dematerialise. Whatever was causing the spatial anomaly might be local. There was a chance of escape, if only...

The console was a giant mushroom that towered miles above him. He tried to struggle to his feet against some huge pressure. But he fought it, and eventually in agonising slow motion his knees straightened, and he found himself thin and tall, stretched like an over-tightened violin string between ceiling and floor.

His hand, almost an independent creature at the end of his long arm, managed to pull the dematerialisation lever. The buzzing continued to grow. He tried to conjure power from the auxiliary buttons arrayed around the lever, but still nothing worked - only the viewer screen, which was now filled with a jolting picture of rose-coloured rock perforated by shadows that the Doctor's brain only dimly registered as a hugely magnified image of a Logopolitan street.

And still the buzzing grew louder and higher in pitch until his whole body
vibrated to it. And then, as if the violin string had snapped, the Doctor staggered and collapsed to the floor.

The procession of dark-robed figures hurried on with the tiny TARDIS. Logopolitan courtesy, and a real concern, made each one anxious to accompany the Doctor to the Central Register, so on this occasion the streets behind them were left rimmed with empty cells. There was, however, one cell on the route that was not empty.

From behind a yellowing, fluted column set just inside one of the dwelling places a face appeared, dark and spikily bearded. The thin lips parted, uttering a chuckle dry as the dust that was still settling in the train of the receding procession.

'At last, Doctor!' smiled the Master. 'At last I've cut you down to size.'

The Doctor knew nothing of the proximity of his oldest and deadliest enemy, indeed at that moment he knew little of anything. The TARDIS viewer offered a juddering succession of clues: a sea of serious faces, pink stone walls, flashes of bright sky. The image of a large building, approached by a flight of steps, lurched across the screen. And then a carved stone staircase, followed by the sharp white light, streaming from the interior of a lofty room, where the jolting giant images finally came to rest. Gargantuan in proportion, the face of Adric loomed in, filling the viewer screen. Behind him the ballooning features of Tegan and Nyssa signalled the vast scale of their concern.

The Doctor saw none of this. His crumpled figure lay at the foot of the screen, inert beneath the weight of that unstoppable buzzing.

By the time they had reached the Central Register the TARDIS had been small enough for two Logopolitans to carry. They set it upright and now stood back, waiting for new orders from the Monitor.

Adric, Tegan and Nyssa knelt around it. The fluorescing had died down, and in every respect the TARDIS looked entirely ordinary - except that there was now no room for anything larger than a new-born kitten through that doll's-house door.

'Hold on, Doctor. The Monitor is going to help us.'

But there was no point in Nyssa calling, Adric pointed out. The Doctor might be able to see his surroundings on the TARDIS screen, but due to a long-standing fault it couldn't carry sound.

Adric straightened up and looked around him. He felt so powerless in this alien room with its high white walls and rectangular racks of equipment whose purpose he could only guess at. He remembered what the Monitor had said: it was a logical copy of the Pharos Project. Why had they made the copy of a computer installation when Logopolitan computations ran without computers?

The Monitor was stationed in front of the long grey console. That part of the installation must be Logopolitan in origin, thought Adric, the hub from which 'the Numbers' emanated, and to which the computations returned. Just as he had done before, the Monitor was leaning forward, intoning into the black aperture that Adric had first mistaken for a screen.

'Etra secque secque eram nol. Etra secque kayrie gorrock gorrock kayrie zel. Kayrie nerus nerus kayrie zel . . .'

The sound was hypnotic. And then Adric almost jumped out of his skin as a sharp grating noise split the air close behind him. One component of the Earth technology had sprung to life, a flat cream-coloured box, the front panel of which now glowed with light. Adric deduced from the paper covered with figures that emerged from the top that it was a sort of primitive printing mechanism.

The Monitor was beside him now, reaching to tear off the print-out. 'It's somewhere in the dimensioning routine,' their host pronounced, scanning the paper. 'We can trace it, if there's time.

'Perhaps I can help?' Adric suggested. He explained about the Alzarian Badge for Mathematical Excellence - not boastfully, but just so that the Monitor would understand he wasn't dealing with an ordinary boy who would only get in the way.

The Logopolitan Leader explained that the printer was producing a machinecode dump of the routine that had caused the trouble. 'Can you read Earth numbering?' he asked. He tore off the print-out and handed it to Adric, who studied it for a moment.

'Yes,' the boy said. 'The Doctor taught me.

'It's a copy of an Earth machine, so I'm afraid we have to make do with their clumsy symbols.'

It was in hexadecimal notation, using Arabic digits up to nine followed by the first six letters of what was called the Roman alphabet, so that the first fifteen numbers could be represented by a single character. In some ways it was a complicated way of counting, instead of the more usual Earth notation which used only as many symbols as there are fingers and thumbs on the human hand. But ten is a very awkward number, the Doctor had explained, only divisible by two and five. The hexadecimal notation was based on the number sixteen, which can be halved four times, and then produces perfect unity.

The Monitor signalled to Adric to follow him. 'I must check the External Registers. Read it to me as we go.'

Tegan had been kneeling beside Nyssa, watching the TARDIS closely for the past few minutes. It was still shrinking visibly, though the rate seemed to have slowed. She saw Adric and the Monitor leaving the room, and scrambled to her feet to follow them. But in the doorway she stopped and looked down the length of the hall they had entered. One long wall that stretched away into the distance as far as she could see was lined with dark-robed figures, each seated before a console that was a scaled-down version of the Monitor's in the Central Register. They spoke earnestly into the apertures in front of them, filling the room with the rhythmic incantation of 'the Numbers'. As Adric and the Monitor moved slowly away down the hall, Tegan hung back in the doorway, appalled by the sight of all those earnest, joyless faces.

The Monitor moved from work-station to work-station, looking over each shoulder and listening in. Behind him trailed Adric, reading aloud from the print-out. 'Zero-A, Zero-four, Zero-Zero, nine-two, two-C, eight-seven . .

They had turned a corner and passed through a doorway to enter a second similar room. Adric was barely conscious of his surroundings; it took all his concentration to read accurately from the paper in his hand. The Monitor's progress was slow and deliberate; only once did he hold up his hand to interrupt Adric's flow as he leaned over a fellow Logopolitan to exchange a few whispered words.

He returned to Adric shaking his head. 'I'm sorry, I thought we had found something. It's somewhere in this sub-routine . . . somewhere.' He paused to look up and down the room, and Adric took the opportunity to survey the perspective of hundreds of whispering workers hunched before their consoles.

'But Monitor, why do you need so many people? I still don't understand why all this can't be done with machinery?'

'For many uses machinery is unsurpassed. But Logopolis is not interested in those uses. Block transfer computations cannot be run on computers.' 'Why not?' the boy asked.

'Our manipulations of numbers directly change the physical world. There is

no other maths like ours.'

Adric was surprised by the weight of sorrow in the man's voice. If he hadn't wanted so eagerly to know more, Adric might have had the tact to stop pressing his questions. 'You mean the computations themselves would affect a computer?'

'Change its nature and cause it to malfunction,' the Monitor confirmed. 'Only the living brain is immune.'

'But you have a computer out there. You were using it.'

'To record the code, and prepare new algorithms, yes. But we must never run our programs on it.'

Adric scanned the print-out in his hand with new respect, and the Monitor, seeming to take this as an indication that they had rested enough, said 'Perhaps we can continue . . .?'

Adric felt a surge of panic. In the process of resting his eyes from the hard black print he had completely lost his place among all those figures that, he had to confess, meant nothing to him.

The Monitor must have realised Adric's predicament. Gently, without having to consult the print-out, he said, 'We had reached zero-seven, zero-four, A-zero, three-zero, three-eight. We should be somewhere towards the end of the third block.'

The silver-haired Logopolitan was smiling at him. Adric's pulse slowed, and he found his place again. Together they moved on down the long row of seated workers.

The Doctor stirred and tried to lift his head. Even in his coma, immobile within the black winding-sheet of unconsciousness, the persistent sound, screwed up now to the pitch of pain, had somehow penetrated his awareness. Some fierce red luminosity swam in the darkness behind his eyes; it sapped the strength from his neck, and his head sank once more onto the TARDIS floor.

If he had been able to open his eyes he might have seen, imaged on the viewer screen, the Logopolitan devices Nyssa had identified as loudspeakers. From the distorted perspective they seemed like giant steel-gauze hands cupped protectively around the tiny time machine. The gauze vibrated slightly as the energy pulsed through it.

The deadly buzzing began to fade. Quite suddenly it stopped altogether. In the silence that fell like soft snow, the Doctor opened his eyes.

There had been nothing out of place in the Registers, the Monitor was sure of that. The secret was out here in the deep and winding streets, alive with whispers and the click of abacus beads. But there were far too many of them. They could never check them all in time.

Still reading from the print-out, though noticeably flagging now, Adric walked close beside the Monitor. He had become almost hypnotised by his own incantations. 'Eight-three, zero-three, A-three, three-seven, two-B, two-B, three-F, zero-D...' The paragraph of figures came to a conclusion in one more restful island of white space on the page before his eyes. 'That's the end of the third block', he told the Monitor.

The Monitor was turning from side to side as they walked, glancing at the bowed, seated figures and the abacuses in the entrances that lined the street. He dipped his head to Adric in acknowledgement and said 'The work is wearying to those unused to it, but we must continue.'

Adric took a deep breath and began again. 'Fourth block begins... Zero-three, zero-two, zero-zero, F-eight...'

'Zero-zero, E-eight, I think,' the Monitor corrected, without interrupting his surveillance.

The Monitor was right; Adric had misread the figure. 'Sorry, E-eight,' said Adric, wondering at the precision of detail held in that smooth grey head.

'It is difficult, I know,' said the Monitor, putting his hand on Adric's shoulder. 'But accuracy is of vital importance...'

Meanwhile in the Central Register a small group of the Logopolitans that Tegan had noticed conferring with the Monitor earlier were setting up a pair of large flat devices on either side of the TARDIS. They looked a little like portable screens.

'Some sort of sonic projectors,' Nyssa suggested, raising her soft, clear voice a little over the sea-shell sound of myriad whispers that washed into the room from the Registers beyond the doors.

Tegan was puzzled. 'What's the good of that?'

'They must be creating a temporary zone of stasis around the TARDIS. But I'm afraid I don't understand their science.'

'That goes double for me,' said Tegan. The Logopolitans had waved them politely back from the TARDIS while they set up their screens. Now Tegan was steering Nyssa towards one of the doors. 'But one thing's clear as daylight. Come and take a peek in this room here...'

She pointed through the doorway to the External Register, and for the first time Nyssa saw the source of the echoing whispers. 'They all seem very dedicated,' she said, watching them.

'Dedicated! That's one way of looking at it. You know what I think? I think it's sheer exploitation. Just look at their faces.'

'They certainly all seem very serious,' Nyssa agreed. 'But I've seen that look on my father's face - intense dedication. These people are scientists. They're trying to help the Doctor.'

'If you ask me they must be under some huge threat to keep them so hard at work,' Tegan said. 'Not that it seems to be doing the Doctor any good.' The two girls were walking back to where a knot of Logopolitans were gathering around the TARDIS. Some of the group stepped politely aside as the girls approached.

Nyssa stopped in front of the TARDIS, measuring it with her eye. Tegan had noticed the same thing. There was no doubt about it: the TARDIS had stopped shrinking.

Adric's throat was very dry now, and he spoke with obvious effort. '...eight-nine, nine-A, zero-A, one-one, E-seven...'

Once again the Monitor stopped him. It was the fourth time in the past three streets. Adric was becoming an unreliable reader. 'E-nine,' the Monitor corrected, a little testily.

Adric stared at the paper in front of him. The little black figures were starting to dance in front of his eyes. 'Sorry,' the boy said. 'E-nine, three-three...' But he broke off almost immediately. 'Did you say "E-nine"? It says E-seven here.'

The Monitor seized the paper. 'You're right, E-seven. And the next three numbers are wrong...' He looked rapidly up and down the street, calculating the shortest route. 'Come on, this way.'

Tegan's elation at finding that the shrinking process had come to a halt was quickly replaced by a renewed sense of despair. 'The TARDIS isn't much use to anybody that size, stable or not,' she said to Nyssa who was kneeling beside her. If only one could see in through those small black windows.

'Perhaps it gives us some time,' said Nyssa, after a moment. 'Time to do what? We don't even know if he's alive in there.'

But the Doctor was alive. After his ordeal the very idea astonished him,

but, as he sat up, holding his head in his hands, the suspicion shaped itself into a theory which hardened into a fact. Yes, he was alive! The moment he saw the Logopolitan devices magnified in the viewer screen he realised what had happened. 'They've arrested the dimension spiral. Things are looking up.'

The street seemed narrower than the others, and the sounds quieter. The Monitor stopped at the junction to make sure of his bearings.

'This is the street. The error should be somewhere here...'

They advanced side by side, just as they had in so many streets before. But now the Monitor moved more slowly, like a cat that can smell its prey. The first two cells on the left-hand side of the street were occupied by chanting Logopolitans, busy at their abacuses. But the third cell stood empty.

Adric noticed it first. The shrunken body lay carelessly beside the vacant stool like a neglected child's toy. There was a faint, fresh smell, like ozone, in the air.

The next two cells revealed the same gruesome story. Horrified, the Monitor looked up from the tiny body he had knelt beside. 'Sabotage,' he said darkly.

'Murder,' corrected Adric. 'That's far worse.'

The Monitor stood up, and his voice was low and harsh. 'Interference with the workings of Logopolis. That could be the most dangerous crime in the universe.'

At the time it struck Adric as odd that the Monitor should raise his eyes as he spoke, looking not along the length of the street, but fixing his gaze quite definitely on one particular point in the sky.

What the Monitor was looking at Adric was soon to discover. But the boy recognised at once the shadow of terror that lurked beneath the surface of those leaden eyes.

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Adric looked up and down the street, alert for any sign of the being he had come to hate so much, and all the time trying to keep his gaze from drifting back, as it kept doing in fascinated horror, to the tiny corpses of what had once been Logopolitans. The Monitor meanwhile had picked up one of the abacuses and was rattling off some rapid calculations, pausing occasionally to make emendations to the print-out.

And if he had seen the Master? Adric wondered what he would have done, and realised how much he had come to depend on the Doctor's wisdom. Without him it was hard to reach a decision - a state of mind he was certain the Doctor would not condone. Adric vowed then and there to make it his mission to find the Master.

Almost as if he had conjured up the image from his mind, a figure appeared at the far end of the street. It was standing on the terrace of pink rock above the dwelling places, and was clearly no Logopolitan. Instead of the flowing dark robes, it wore - or rather, was imbued in the aura of - a white, shimmering translucence that seemed to fade even as Adric looked. It was the figure the Doctor had negotiated with on the bridge! The Monitor had been too involved in his own work at the abacus to see any of this. Now he got up briskly, rolling up the print-out. The movement distracted Adric's gaze for a fraction of a second, and when he looked again there was nothing where the watching figure had stood but rocks and the shadows of rocks.

'Quickly!' said the Monitor. 'We must return to the Central Register at once.'

At least the hideous buzzing had stopped and the console room now looked its old self again. But the exaggerated gravity that slowed down his movements, and the giant faces of Nyssa and Tegan in the frame of the viewer screen were enough to remind the Doctor that he and the TARDIS were still literally in a tight squeeze.

If the error was in the dimensioning routine there was a remote possibility of being able to dematerialise by shorting out the chameleon circuit altogether. It was a dangerous business, but it was something to do! Struggling against gravity as he moved towards the console, the Doctor tried to draw together in his mind the remnants of his knowledge of time map structuring. Romana's help would be useful, he thought. Or come to that, anybody's.

He went to work, overlooked by the girls' huge unseeing faces. Grounding the chameleon circuit was a massive task - the whole Real World gearing would have to be unharnessed before he could get to the necessary components - and the result was risky at best, and at worst unthinkable. In the heart of his two hearts the Doctor must have realised that the only real chance of help was from outside. Yet a streak of stubbornness was driving him to a course that might only add to the danger. Wielding the sonic screwdriver he began to remove the first panel of the console.

The screen-like objects on either side of the miniature TARDIS were emitting a faint hum, Tegan realised after she had been kneeling beside them for a while. Nyssa had explained that they were probably sending out some sort of cancellation wave to hold the effects of the scrambled dimensioning in check.

And a lot of use that was. Tegan looked in despair at the tiny vehicle that had spirited her to this strange and remote place. It had already caused her such distress that she didn't care if she never saw it again. Except that it was her only way back to civilisation. And the Doctor was in it. Adric broke into her thoughts, rushing in through the door with the Monitor. 'The Monitor's done it,' the boy exclaimed as Nyssa and Tegan scrambled to their feet. 'He's found the error.'

The Monitor quickly explained as much as was necessary. The error was in Block Four of the dimensioning routine, and somehow the correct figures had to be got to the Doctor so that he could re-enter them into the console. 'Assuming he's alive in there,' said Tegan, taking the amended print-out from the Monitor.

It was her idea to hold up the printed sheet towards the TARDIS, in the hope that the Doctor would be able to read it on the Viewer Screen. 'Let's just hope he knows what to do,' she added.

Adric helped her unroll the print-out. 'He will. He's the Doctor!' And his own words reminded him of his vow to track down the Master. How long they would have to wait until the Doctor was out of the TARDIS, or what state he would be in when he finally emerged, were unknown quantities. Meanwhile the evil Time Lord was somewhere near, stalking the Logopolitan streets. Adric jumped up. 'I've got to go back,' he said. 'The Master . . . he's out there.'

Nyssa caught hold of his arm. 'The Master? I'm coming with you.' Nothing would put Nyssa off. 'I came here to find the Master I must know what's happened to my father.' Adric saw the determination in those serious olive-green eyes. He took her hand, and, with a wave to Tegan and the Monitor, they ran down the stairs towards the street.

Up until that moment the Doctor had been sitting under the console, studying one of the small components littering the floor around his feet, a collection of multi-coloured objects that might have been mistaken for infants' toys.

It was no pleasure disassembling the Real World gearing. There are some things in life, the Doctor thought to himself, that shouldn't be tampered with - and the TARDIS was certainly one of them. She was so temperamental that it was almost impossible to isolate a fault without generating a number of others.

Then he reminded himself that it was because of the TARDIS he had come to Logopolis. Funny, that. You put up with its tantrums through the centuries, and then a sort of vanity drives you to try and improve the old vehicle. To tamper, in fact. But in that he had been out-tampered by the Master.

'The cheese-board is the world, and the pieces,' the Doctor said aloud as he began to dislodge the next component in the chain, 'are the phenomena of the universe. As my old friend Huxley used to say.' Or was it chess-board? Yes, chess-board, of course . . . And then he remembered with a chill the rest of what Huxley had said. He had been speaking of the battle of science to wrest knowledge from that stubborn opponent, the Nature of Things. But the words might quite as well have applied to the Master. 'The opponent never overlooks a mistake, or makes the smallest allowance for ignorance.' Ignorance was the word. There was no denying it: he was an ignorant old Doctor, and he had made a mistake.

He lifted his eyes again to the viewer screen, but the earnest young faces were gone now, he noticed with some disappointment. Now the Logopolitans were blocking the viewer with a sheet of paper covered with numbers. His head had actually ducked back under the console before he realised. Numbers! He jumped up again - or rather tried to. If the exaggerated gravity hadn't slowed the movement he would certainly have cracked his head on the under-side of the console.

Magnified on the screen, the Monitor's precisely hand-written emendations stood out clearly against the machine print. Very pleased with life, the Doctor reached for the data block.

'The mark of the Master,' said Adric with a shudder, pointing out to Nyssa the doll-like, dead Logopolitans. He had managed to trace his way back to the street where the Monitor's search had wound to its ugly conclusion. 'He must have added his own voice to the Numbers, and corrupted the Doctor's code,' said Nyssa, the anger flashing in her eyes. Adric remembered that this was the man who had almost destroyed her planet, and who was almost certainly responsible for her father's disappearance though in what way the Doctor hadn't explained.

Adric pointed out the spot where he had seen the translucent figure that seemed to have followed them from the planet Earth.

'The Master?' Nyssa asked. Neither of them, they realised, knew what the Master looked like.

'Him . . . or something worse.'

They had begun to explore beyond the end of the street, where a T-junction lead off out of sight in both directions. The susurration and clack of beads came more strongly from their left, so Adric presumed that way lead back to the centre.

For some reason they both had an instinct to explore to the right. It was nearly the undoing of both of them.

The trouble was, there was no way of knowing if the Doctor could see the figures, and if he could, whether he was in a position to do anything about it. Her aching arms and the crick in her back told her she had been holding

up the print-out quite long enough, but Tegan had the continuing feeling that if she stayed kneeling in front of the TARDIS just a little bit longer it might make the difference of life and death to the Doctor. To say nothing of whether she ever got home or not.

The Monitor arranged a compromise. But having instructed two Logopolitans to hold up the sheet of paper while Tegan stretched her legs, the last thing the Monitor expected was to find himself being marched by this imperious young woman over to the door that lead through to the External Register.

'Would you mind explaining something to me?' she demanded, indicating the long row of earnest, pallid faces seated before the consoles. 'Back home in Brisbane we'd call a place like that a sweat-shop. What's going on?' The Monitor seemed not to understand. Tegan explained the phrase 'sweat-shop', and went on: 'You're not going to tell me they're all working of their own free will.'

'Academic research', said the Monitor, 'commands its own dedication.' 'You can't tell me this is just academic research. Look at them - they're grey with worry.'

'And what about you, Tegan - are you dedicated to your work?' Tegan admitted she was top of the training course for the airline job. But that was different. 'We all enjoyed it. These people are being forced into - whatever they're up to. They don't smile, they don't talk.'

The Monitor spread his hands in a careful gesture of incomprehension. 'Their language is the language of the Numbers. It is their talent and their passion, and their work is very serious. They have no need to smile.' Tegan was aghast. 'No need to smile!'

Touching her arm, the Monitor steered her gently back into the Central Register. 'And as for speech,' he continued, closing the door behind them, 'we are a people driven not by individual need, but by mathematical necessity. The language of the Numbers is as much as we need.'

'But if they can't talk at all . . .' Tegan broke off, looking in the direction of the TARDIS. It was fluorescing again. In panic she ran to it, snatching the paper from the Logopolitans. She was about to turn on them for neglecting their job, when the Monitor stepped in.

'The Doctor's reversed it,' he said, delight brightening his parchment face.

It was true! The TARDIS was growing larger as they watched.

It was a street with few cells, on the very edge of the city where the whispers were quieter. Adric and Nyssa were running; for Adric had been almost certain he had seen the translucent figure again.

Nyssa's hair coiled in the wind as she ran beside him. 'Where?' 'Never mind - follow me,' said Adric, racing ahead.

She was about to comply when the hem of her skirt caught in one of the small thorny plants that grew along the pink rock wall. She paused to lean against a nearby pillar and unhook herself. The tiny tenacious barbs were reluctant to let go, and she had to sit on the base of the pillar, which was decorated with a frieze of carved leaves, and lean back against its squat, fluted column while she picked the thorns out of her skirt. When she looked up, Adric had turned the corner - in which direction she couldn't be sure. Rising to follow, she became aware of a pair of eyes watching her from the gloom of the cell. The eyes were familiar. She raised her hand to shade out the light and peered into the shadows. 'Father?' She held her breath.

The figure in the shadows stepped forwards, and Nyssa was overjoyed at what she saw.

'Nyssa! Nyssa, my dear,' said the Master, holding out his hands to her. He seemed changed; younger than she remembered him, his silver hair now dark and his face leaner. But Nyssa could never mistake her father's voice. They walked through the narrowing streets until they came to the gullies that led out onto the plateau, and all the while she listened to that low voice as it unfolded new ideas for research, plans for the future and stories of past deeds. She realised as they stopped to look out over the distant rosy rolling hills that she had been so caught up in the joy of seeing him again and hearing that dark hypnotic voice that she had scarcely taken in a word.

'What is this "mission" of yours, father?' She reached out to touch his hand, and was surprised to find it icy. 'Tell me. You seem so changed by it, so cold, somehow.'

'Logopolis is a cold place. A cold, high place overlooking the universe. It holds a single great secret, Nyssa. Which you and I will discover together.'

'And the Doctor,' she added. 'The Doctor can help us.'

'Oh yes, the Doctor can certainly help us.' He smiled a thin smile. Then he withdrew his hand and said suddenly, 'You must return to him.'

'I don't want to be parted from you, father.'

'No need to be.' There was a chuckle in the voice of the man beside her and from his coat he brought out an armlet. Chased into the gold was a design of leaves sprouting in pairs along a stem studded with small bright stones. He clipped it on her upper arm. It seemed to catch at her flesh, making her wince momentarily with pain. 'This will keep us in mind of each other,' he said. And then he was gone, leaving her to wander back to the city alone.

At last the TARDIS was full-size again! It fluoresced briefly for the last time, and then the door opened and the Doctor stepped out.

'Monitor, I can't thank you enough.'

'Tegan, too,' said the Monitor. 'But please, Doctor. There's really no need

The Doctor enthusiastically shook the Monitor and Tegan by the hands nevertheless. 'No, you two have saved my life. There have been quite enough deaths already.'

The Monitor was surprised. 'You know about the deaths?'

The Doctor was distressed to learn from the Monitor about the Logopolitan lives that had been lost. But he had been referring to Earth, intending to lead up to something that had to be said. He took the young woman's arm. 'Tegan, your Aunt Vanessa . . .' he began.

'Yes, how do you like that? She's probably back at the cottage by now, with tea and crumpets, while I...' She broke off, catching sight of the Doctor's grave expression. 'She's all right, isn't she, Doctor?'

The Doctor told her the news as simply as he could. Tears welled up in her deep brown eyes. 'That dear, sweet lady...'

They were standing by the window, looking out over the myriad streets carved into the Logopolitan rock. The Doctor fumbled in his pockets for the cleanest handkerchief he could find, and said, 'That's why I'm going to put a stop to the Master if it's the last thing I do.'

Tegan blew her nose. The Doctor turned from the window and, looking round the big white room, said, 'There were one or two more of us. Where is everybody?'

'Your companions went to hunt for this person called the Master,' the Monitor explained.

'Idiots! Adric should know better by now.'

The Doctor's explosion of anger brought Tegan back to something of her old form. 'He was only trying to help. He saw somebody out there.'

The Doctor swept the common-sense response aside and, telling them to stay in the Central Register, and to be very, very careful, ran from the room.

Tegan followed him to the door and watched him sprint down the sweep of carved stone steps that lead to the street.

Adric had turned the corner and run the whole length of the second street before realising Nyssa wasn't with him. When he reached the spot where he had last seen her he called her name again. No responding voice disturbed the distant whispers.

Adric searched like this for what seemed hours. When he finally found her, wandering in a daze quite close to where they had parted, she seemed oblivious of the time that had passed.

'Did you find him?' was all she asked.

Adric shook his head. 'We'd better get back to the Doctor.' After they had walked through several streets, during which time Nyssa had only answered in monosyllables his attempts to talk to her, he stopped and said, 'Nyssa? Are you all right?'

A faint smile lit up her small round face. 'My father's here.'

'Your father? So you found him!' Adric exclaimed.

Nyssa seemed to hesitate. 'Yes . . . it was my father.'

'But that's wonderful. What's he doing here on Logopolis?'

She had been sworn to secrecy, so she said nothing of the 'mission'. But she did show Adric the armlet. 'It's too small for me. I've been trying to get it off . . .'

It was certainly pinching into her forearm. But when Adric inspected it he was surprised to discover that the precious stones inlaid into the chased gold were electronically illuminated from inside. 'It's a sort of . . . communications device. Yes, it does look tight . . . '

Tugging at it may have disturbed a loose connection, because it sparked suddenly. Adric jumped back, feeling a powerful electric shock. He recovered almost immediately, and was surprised to find that Nyssa had felt nothing.

All she said was, 'I hope you haven't broken it.'

He tried a second time to remove it. There was just enough room to get one of his thumbs under it, and he was experimenting with the best way of gripping it with the other hand when he noticed Nyssa's arm begin to flex in a curious mechanical way. The hand opened and with clinical precision began to advance towards his neck.

'Hey, what are you doing? I'm trying to concentrate,' Adric laughed. The hand was closing on his throat. Adric was surprised at the strength in those small fingers, but the most extraordinary thing of all was that Nyssa herself seemed not to notice anything at all. Her face was averted, entranced while the steel grip bit tighter into his neck.

And then he heard a voice he had thought he might never hear again. 'Adric! Nyssa!'

The Doctor was striding down the street towards them. The fingers around Adric's throat instantly relaxed, and Nyssa cried out with delight, 'Doctor! You're free!'

Adric's delight at seeing the Doctor again was tempered by a feeling of guilt at having abandoned him to the perilous instability of the TARDIS to go off hunting for the Master with Nyssa. The Doctor left them in no doubt that they were lucky to have survived the folly; and then as they hurried back to the Central Register, seemed prepared to drop the subject. There was one thing he wanted to clear up, though. 'Tegan says you saw him.' 'Yes, here, in one of these streets,' said Adric.

'What did he look like?' the Doctor asked innocently.

Adric was confused. He had only once seen the Master, on Traken in his guise as the Melkur. And yet he knew by instinct. 'You know. The man you were talking to on the bridge . . .'

'The man on the bridge?' repeated the Doctor.

'Yes . . .' The boy hesitated, thrown by the Doctor's tone of irritation. Then it happened again - as if just thinking of that vaguely outlined watching figure were enough to conjure him up! Adric was sure he wasn't seeing things. The figure was at ground level this time, standing still and translucent at the far end of the street. The boy pointed. 'There, that's him.'

Adric thought he heard Nyssa gasp, but turned to find her laughing. 'That can't be the Master . . .' she said. 'That's the man who brought me here from Traken. A friend of yours, Doctor.'

Adric was astonished, but the Doctor confirmed her story with an uneasy nod. 'Yes, a sort of . . . passing acquaintance. He brought you here on my account.'

Adric still felt some dread at meeting this creature whose presence he had once felt sure even the Doctor feared. But as they approached, some cloud must have shifted overhead, because a shaft of sunlight hit the spot where the figure had been standing. The gleam thrown back from the pink rock momentarily dazzled Adric. He blinked his eyes, and when he looked again .

.. 'Doctor, he's gone!'

Oddly the Doctor didn't seem surprised.

Who was this dreamlike figure who seemed to be hovering on the edge of their existence? As they pressed on towards the Central Register Adric pursued the subject. 'I was almost sure it was the Master.'

'I warned you against unnecessary guesswork,' snapped the Doctor. 'But he was the man who told you bad luck was on the way.'

'He was right,' said the Doctor. 'And worse to come.'

Worse! Why was the Doctor so sure? 'And you believe him?' the boy persisted. 'Why?'

'Because he is here,' said the Doctor, his eyes fixed on the route ahead. Like so much that the Doctor said it seemed to make no sense. It would have puzzled Adric more if he had known that on this occasion the Doctor was speaking no more than the exact and literal truth.

It still didn't seem right to Tegan. She watched the serious faces of the two Logopolitans who had come to collect the stabilising screens around the TARDIS, and, while they silently wheeled them through into one of the External Registers, wondered if there would ever be any - well, fun - on Logopolis?

The Monitor tried to tell her of the invisible joy that comes from selfless dedication, but she couldn't understand it. In a way it was presumptuous of her to try; Logopolis was a completely different civilisation from anything she was used to. And yet Tegan still had this feeling that the Monitor was

concealing something.

The two Logopolitans rounded a corner and wheeled the pair of screens through into the second External Register. Of the long row of Numberers busy chanting into the apertures, only one turned from his work to watch them pass. He wore the dark flowing robe of a Logopolitan, but he lacked the pale complexion, and his face was brightly animated above his sharp black beard. With the faintest chuckle the Master rose and followed the two screens.

The door to the Technology Store opened to admit the screen-bearers. But before they could pass through, a discreet flash and short sizzling sound halted the screens in the doorway.

Nothing had happened to distract the busy Numberers. Had they looked up they would have seen one of the two screens turn in the doorway to face the way it had come, manoeuvred by a single figure in dark flowing Logopolitan robes. A faintly sweet smell of ozone hung in the air. The two screenbearers lay in the doorway, their corpses shrunken to the size of dolls. The Master took a small silver box from the folds of his robes and attached it to the rim of the screen. A change came over the long hall: all sound drained from the scene, and then one by one the Numberers froze into immobility. All that penetrated the deadly silence was a tiny chuckle of triumph.

Beneath her aggressive exterior, which the Monitor assumed was due to feelings of insecurity in the alien surroundings, Tegan was clearly an intelligent young woman. But he judged hers to be a mind not drawn to abstractions: the objects of her thought were concrete.

This presented a difficulty in the way of conversation while they waited for the Doctor to bring back Adric and Nyssa. The Logopolitan world was predominantly a world of thought; such solid furnishing as lay about the place were incidental to the life of the City. By way of compromise they settled upon a discussion of the screens, items of solid technology that had certainly proved useful.

The Monitor heard the door behind them open. As if by way of illustration, one of the screens they had been discussing appeared there. He moved towards it, about to question its return. The man dressed as a Logopolitan was clearly an alien. The Monitor halted in his tracks; the newcomer radiated evil.

'Please remain where you are,' said the Master. 'I have it in my power to bring Logopolis to a complete halt.'

And Tegan's blood froze to hear again the chuckle that had first terrified her in the TARDIS cloister room.

They were still some way away from the Central Register when Nyssa stopped suddenly. 'Listen!'

'I can't hear anything,' said Adric. And then he realised. Logopolis, the city that buzzed with numbers and the clacking of abacus beads . . . was now completely silent.

'Logopolis has stopped!' Nyssa exclaimed.

The Doctor peered into the nearest cell. As they had come to expect, a Logopolitan was sitting in his customary place at the entrance. But this one was completely motionless and silent, his abacus lying unused on his lap.

Adric saw the Doctor reach out to touch the still figure. To his horror the flesh crumbled away to dust as if it were a hollow, fragile shell.

The Doctor straightened up. 'It's started already,' he said grimly. 'The Master's attack. I was vain enough to believe it was me he was after. Logopolis is his target.'

There was nothing Tegan or the Monitor could do. The screen, with the Master's added silver device, was pointing into the aperture of the Monitor's console, pouring its lethal silence into the whole city.

The Monitor's distress was evident in his voice. 'Turn that machine off immediately. You fool! You have no idea what you are doing.'

The Master smiled. 'Merely emitting a sound-cancelling wave. Logopolis is now temporarily suspended, Monitor. The silence gives us an opportunity to discuss its future.'

'No!' The monosyllable was full of pain. 'It won't have a future, and nor will anything else unless you stop now.' The Monitor was pleading. 'You are eroding the structure and generating entropy.'

Tegan had no idea what was happening, but she could see from the Monitor's face that something had gone horribly wrong - something the Master had not anticipated.

'An absurd assertion, Monitor,' said the Master, with an arrogant curl of his lip. 'I know the power of this device down to the last decibel.' 'But you don't know Logopolis!'

The Master stared back with cold, empty eyes. 'But I shall know it, shan't I, Monitor? Before I allow the fascinating sounds of life here to resume you will have told me all there is to know. Of the secret work you are doing here perhaps . . . I heard rumours of your plagiarism of the Earthling's fruitless Pharos Project. Why have you created a copy here on Logopolis, Monitor? The time has come for you to share your secret with me.'

There was madness in the smooth controlled voice that made the Monitor move back instinctively, shaking his head. 'I cannot tell you. No one must know. That has been our firm decision.'

So the Monitor had been concealing something! The thought flashed through Tegan's mind as she heard the Master say: 'Then we will wait until you change your decision. Patience is a particular virtue of mine.'

'If you call killing the Logopolitans a virtue.' Tegan turned at the sound of the familiar voice. His scarf and coat flying, the Doctor strode into the room, followed by Adric and Nyssa.

The Master's laughter fell like a shower of acid rain on the white-walled room. 'Killing them, Doctor? You expect me to believe that?'

The Doctor certainly did. In a few terse sentences he gave an account of what they had seen in the street outside, and added, 'So you see, the Monitor's right, Master. Your spirit of free enterprise is more damaging than even you can imagine.'

'Father! What are you doing?'

There was a note of surprise in Nyssa's voice. She had been slowly walking towards the Master, and now she stood before him, reaching out, her round face a question.

'That's not your father, Nyssa.' The Doctor gently took her arm and drew her back. 'Tremas is dead. Killed by the Master here!'

'Dead!' She saw the truth in the Doctor's eyes, and turned to confront the object of his accusing finger. 'You've killed my father!'

Again the Master's laugh grated on the still air. 'But his body remains useful.'

Adric was astonished to see this small, aristocratic girl so brimming with icy anger. She tore herself from the Doctor's grasp and rushed at the

Master. But as she was almost upon him a curious thing happened. The arm on which she wore her new gold armlet seemed suddenly to be suspended in the air, pulled up by some invisible hook. It jerked Nyssa back: she tugged at it, trying to reach the Master with the other hand. But the mocking face lay just beyond her flailing fingers.

'I'm grateful to Tremas,' the Master sneered. 'Without this body I could not have conquered Logopolis.'

'This isn't conquest - it's devastation,' the Doctor shouted.

'Yes, you will destroy everything.'

It must have been the note of terrible urgency in the Monitor's voice that made the Master hesitate fractionally before he said, 'You exaggerate, Monitor. Logopolis is not the universe.'

'But it is! Logopolis is the keystone.' The Monitor's face was ashen. 'If you destroy Logopolis, you unravel the whole causal nexus!'

'Causal nexus! You insult my intelligence, Monitor.' But the Master was less sure now. He paused before the Monitor, glowering into those opaque grey eyes, trying to read the purpose behind this preposterous suggestion. In the silence Tegan whispered to Adric, 'What's he talking about?' 'Something's interfering with the law of cause and effect,' the boy replied. His gaze was fixed on the Master, who seemed about to strike the

Monitor. Out of the corner of his eye he saw the Doctor rush forward. 'Listen to him! The Monitor's right! We've seen it!'

'Please step back, Doctor. Or . . .' The Master touched a button on the silver box attached to the screen. Nyssa cried out in pain as her arm swung round threateningly towards the Doctor.

'Let her go,' said the Doctor between gritted teeth. But for safety's sake he took a step back.

Adric was rasher than the Doctor. His anger drove any thought of the consequences out of his mind, and he dived for the screen, sending it flying across the room. At that moment a hand closed around his throat. 'Nyssa! Let go.' Once again the small fingers dug deep into his neck. He screwed his head round to see blank astonishment in her eyes.

'I . . . can't . . .' she cried.

The Master voice was cool. 'That is a demonstration of the causal nexus, Monitor. The electro-muscular constrictor gives me complete control over that hand. Please replace the screen, Doctor. Or one of your young friends will eliminate the other.'

The Doctor had no choice. Seeing him forced to do as the Master demanded, Tegan's anger boiled over. 'You revolting man. I wouldn't take orders from you if you were the last man in the universe.'

'Which he may well be, if he carries on like this,' said the Doctor when the screen was in place again. 'Don't you see what the Monitor is telling us, Master? Logopolis isn't the academic backwater it seems, but somehow crucial to the structure of creation.'

'I have never been susceptible to argument based on abstract nouns, Doctor.' The Master touched the silver box and Nyssa released her grip. The Doctor pointed to the door. 'Then come out into the streets and see what's happening.'

His adversary stroked his beard with a gloved hand, considering the idea for a moment. Then he shook his head. 'No need for that, Doctor. I can demonstrate the continued functioning of Logopolis from here.' He reached towards the silver box. 'This device only creates temporary silence. And can be switched off.'

The Master unclipped the box from the screen, and after a moment put his ear to the aperture in front of the console to listen.

The Monitor had said nothing for a while. Now his voice was quiet and clear, with only a hint of a tremble. 'You will hear nothing. Local disruption of structure is already irreversible. Logopolis is dead.'

The Master hesitated on the steps of the Central Register. Below him the street was beginning to silt up with a fine pink sand that cascaded down from the shifting rocks. Apart from the cracking and hissing of this motion, there was total silence.

He ran down the steps, followed by the others. While the Master inspected cell after cell, ducking the intermittent showers of debris, the Monitor said softly in the Doctor's ear. 'We knew there was this danger. We often speculated on what it might be like.'

The Master clutched at an abandoned abacus; it crumbled in his hands. He turned to the Monitor. 'You've done this deliberately. A ploy to deprive me of my prize.' As he spoke a nearby cell collapsed in a slide of rubble. 'Don't raise your voice,' the Monitor warned. 'Nothing is solid now. Entropy has taken over.'

The Master looked wildly round the street, as if trying to escape the truth of the Monitor's story.

Tegan, who understood very little of this, tugged at Adric's arm. 'But what's he done?'

Everything had begun to waste away when the Master interfered. That much Adric was able to explain. 'The Numbers. Somehow they were holding the whole structure together.'

'The causal nexus broken? I don't believe it.' The note of defiance in the Master's voice was distinctly unconvincing now. But he went on: 'No, Monitor . . . this is some crude defence mechanism, a device to delude an enemy. Come, Nyssa, we'll wring the truth out of them.

He punched a button on the silver box, drawing Nyssa towards him. But when, with a second button, he tried to elevate her arm . . . nothing happened! He stabbed at the box with an angry finger. 'It's not working! What have you done, Doctor?'

The Doctor stared him out. 'Not me, Master - you! The entropy you released is eroding your systems too.'

'Entropy? Absurd . . . the power is weak . . . some freak interference. Increase the power.'

'More power will only speed the collapse,' said the Monitor quietly.

The Monitor was right. The ornament on Nyssa's arm suddenly shattered and crumbled to the ground. The Master stopped dead, staring at the remnants of the armlet. When he looked up again, it was at the Monitor, who had begun to speak with slow deliberation.

'The things around us are now no more than husks of themselves. From this point the unravelling will spread out until all the universe is reduced to a uniform, levelled nothingness.'

'So it's true!' the Master cried.

'Don't move. Anybody . . .' The Monitor's voice came as a whisper. Instinctively they all obeyed. Even the Master stood in silence, surrounded by the creak and shuffle of shifting structures. All eyes were on the Monitor as he continued. 'You have already guessed - our Numbers were holding the Second Law of Thermodynamics at bay. The universe is a closed system. In any closed system entropy is bound to grow until it fills everything. The deadly secret, unknown until now beyond the bounds of Logopolis, is this . . .' The Monitor's voice trembled, and they had to strain to hear his next few words. 'The fact is, the universe long ago passed the point of total collapse.'

For a moment Adric didn't take it in. The Second Law of Thermodynamics predicted that any system would eventually end in 'heat death', overwhelmed by the entropy it had produced. But how could the universe have passed the point?

'We had the means to postpone the time,' the Monitor was saying, as if in reply to the boy's unspoken question. 'The only way was to dispose of entropy. The universe was closed, so we opened the system by creating voids into other universes.'

'The Charged Vacuum Emboitement!' the Doctor exclaimed. 'We passed through one of your voids, Monitor.' He glanced at Adric. If it hadn't been for an accidental encounter with a CVE, the Doctor and his TARDIS would never have wandered into the small universe where he had met the boy. 'We thought the CVE was a natural phenomenon.'

'I wish it were,' said the Monitor. 'Then there would be no need for them to be sustained by the energies of Logopolis.'

Suddenly Tegan understood the inhuman dedication of all those rows and rows of Logopolitans. So this was what had been driving them on: the fact that

they and they alone were capable of keeping the whole universe going long after it ought to have ground to a halt.

'But without those energies,' the Monitor continued, 'the Charged Vacuum Emboitements will be closing now. It depended on our continual endeavours - a temporary solution while the Advanced Research Unit worked on a more permanent plan. But nothing will come of that now.'

There was silence for a moment. Then the Master, who had been thinking furiously said, 'What Research Unit?'

'A team devoted to discovering a stable solution that did not depend on our own continued efforts. But now the team is destroyed. To think of that work too going to waste . . .'

'There must be something we can do,' Tegan interrupted loudly. She turned to the Master and shouted, 'This will teach you to meddle with things you don't understand.' And then she wished she hadn't. The rocks above their heads, weakened to the consistency of pink sugar, began to cascade down, thundering into the street. She felt her arm grabbed, and then they were all running - where, she couldn't see for the dust and the Doctor's scarf blowing across her face.

They stopped, and she looked back to where they had been standing. The street was now a flat gully, still filling with silt that hissed down from the mounds of crumbling rock on either side. 'What did I do?' said Tegan. 'Your loud mouth.' Adric whispered.

'We are beyond recriminations now,' sighed the Monitor. 'Beyond everything  $\ldots$  '

'Almost everything.' The Doctor's voice was even and controlled. He turned to the Master. 'I can see only one possible course. As Time Lords you and I have a special responsibility.'

'No,' the Master replied immediately, as though he had been anticipating the suggestion. 'I refuse to contact Gallifrey.'

'I'm not very keen on the idea myself. But I was going to suggest we pool our resources.'

The Master pondered the thought for a moment. 'If we do that there will be no question of your returning to Gallifrey. Perhaps for ever.'

'I'm happy to leave that problem for the future,' said the Doctor. 'If there is one.'

Nyssa's jaw tightened as the Doctor extended his hand to the Master. But it was Tegan who spoke first. 'Doctor! What are you doing?'

'How can you!' Nyssa exclaimed. 'The creature who killed my father . . .' The Master remained still, savouring the moment. Then he raised his own black-gloved hand and moved towards the Doctor. 'Together, then.'

It was then that the Doctor looked round, very much sensing the hostility of his companions. He began gently at first: 'I can't choose the company I keep. Not in these circumstances. In fact I have never chosen my own company.' He pointed at Nyssa, his voice a little harsher now. 'You contacted me, you begged me to help you find your father.' Then his eyes shifted to Tegan. 'And you, Tegan, your own curiosity brought you into this . . .' His tone was positively harsh as he turned to Adric. 'As for you,

boy, what are you? A stowaway!'

Adric realised that the Doctor was doing this to make their separation from him easier to bear, but it was painful nevertheless to be reminded that he had forced his company upon the man he so admired. And it was even more painful to see the Doctor turn his back on his companions and reach out towards the evil black hand of this being who was his sworn enemy.

'Together,' said the Doctor, looking hard into the Master's face. 'The one last hope.'

'For all of us,' the Master acknowledged.

Solemnly the two Time Lords shook hands.

10.

'Now . . . I want no arguments from any of you. Adric, Tegan and Nyssa . . . that way!'

The rocks which had once formed high cliffs around them had now crumbled down to a landscape of gentle undulations; a pink plain lay where the great whispering City had once stood. Beyond the Doctor's gesturing arm they saw only the distant outline of the Central Register, surmounted by the wire basket of the antenna, broke the skyline. But his finger was pointing to a small rectangle some way ahead.

'The TARDIS!' exclaimed Nyssa.

Tegan peered at the distant blue shape. 'It's followed us!'

'But how can it do that,' asked Adric, 'with no one in it?'

'Did I say there was no one in it?' snapped the Doctor.

The two Time Lords stood shoulder to shoulder. The crisp, imperative tone of the Doctor, and something about the evil certainty of the Master's smile, persuaded them of the uselessness of pleading to stay. The Doctor was collaborating with the Master, and there was no place for them now in his plans.

He waved them off with an irritated flap of his arm. 'My friend will take care of you.'

The three companions trudged towards the TARDIS, speculating about who this 'friend' might be. Nyssa guessed it must be the man who had brought her to Logopolis.

She was right. They saw the translucent figure standing at the door, but he had slipped inside before they were close enough to make out his features. It was not until much later, when the TARDIS was in flight, that they were to meet him face to face.

With a sense of relief the Doctor watched them enter the TARDIS, aware of the evil presence at his elbow. At least there was a chance they would be

safe. Then he became aware that the Monitor was nowhere to be seen. 'The fool has deserted us!' said the Master. 'Doesn't he realise he has no chance of survival without our help?'

Desertion didn't sound like the Monitor's style at all, the Doctor pointed out. He had gone somewhere for a purpose.

'Purpose!' exclaimed the Master. 'A word almost without meaning now. If he's trying to salvage the Research Team's work he may have gone back to the Central Register.' The Master shaded his eyes and peered towards the distant building. Parts of it had been eroded already, but it seemed to be standing stronger than the rocks around it. It occurred to the Doctor that this might be because of its relative newness. But there was no telling how long it would last.

Together the Doctor and the Master began to pick their way towards it through the debris. Occasional small landslips opened up beneath their feet, impeding their journey, and reminding them of the increasing instability. Soon even this dusty ground would become unstable. And more was at stake than just Logopolis. Even as they advanced painfully towards the Central Register, the rot was spreading outwards through the universe, the Second Law of Thermodynamics unleashed after aeons of constraint. 'I suggest we collect the Monitor, then get out,' said the Doctor.

'How? In my TARDIS?'

'There's no other way.'

The Master smiled. 'You're presuming a lot, Doctor.'

'Aren't I?' said the Doctor. 'And on so short a friendship.'

By the time the two Time Lords had reached the steps of the Central Register the TARDIS was parsecs away. But the dematerialisation had not gone quite according to the Doctor's plans. The light was already flashing, ready for departure from Logopolis, when the door suddenly opened and Tegan backed out, her flight bag over her shoulder.

'Come back!' It was Adric calling from inside. 'None of us wants to leave the Doctor. But it's best to do as he says.' He appeared at the door, pleading with Tegan.

'Best for him, maybe. It's not personal devotion, I can tell you that. But he's guaranteed to get me back to London Airport, and I'm going to stick with him to make sure he keeps his word.' And she set off resolutely back the way they had come.

'Tegan!' But it was no good just calling her name, and he couldn't run after her and leave Nyssa. The TARDIS was already beginning to chuff and whirr. Adric closed the door . . . and the TARDIS was gone.

Tegan found the spot where the Doctor and the Master had been standing, but the only sign of them was a set of vague footprints. At first it seemed an easy track for someone brought up in the outback to follow, but small potholes kept appearing, and the wind blew streaming veils of dust across the ground, obscuring the horizon.

She was entering what once must have been the middle of the City, if what remained of the dwellings was anything to go by. The ruins were taller here: cells open to the sky, some of them almost complete except for their roofs. The ground was more solid, but in a way that made it more dangerous. Instead of shifting sand beneath her feet, great crevasses would occasionally open up just where she was about to step.

Should she have stayed in the TARDIS, she wondered. That was the trouble with having an independent mind. Tegan consoled herself with the thought that if being lost and frightened on a rapidly disintegrating planet was good for the moral fibre, hers must be receiving a tremendous boost.

The Central Register was still recognisable, although portions of the ceiling and walls had crumbled away, letting in the opalescent light of the

Logopolitan sky. The two Time Lords found the Monitor where they expected, seated at the Earth computer surrounded by sheets of print-out. Several of the large disk-drive units that surrounded the console were humming with activity.

The Doctor touched the Monitor's arm. 'The stability is now critical. You must come with us.'

'For precisely that reason I must stay here, Doctor.'

'What can you do here?' said the Master. 'You told us Logopolitan maths wouldn't run on a computer.'

The Monitor gestured to the print-out strewn across the desk in front of him. 'We were developing this as the program to take the burden from our own shoulders: a series of data statements to keep the Charged Vacuum Emboitements open of their own accord.'

'The Advanced Research Project?' asked the Doctor.

The Monitor nodded. 'The computer holds a complete log of that research.' The Master snatched at the print-out. Somewhere in all this carefully annotated mass of numbers there might be a permanent solution to the problem of keeping the CVEs open. While the Monitor continued his preoccupation with the console, the Master and the Doctor poured over the document, tracing and retracing the folds of logic.

Eventually, the Master left the document and went to peer over the Monitor's shoulder. It had become clear to the Doctor, who paused now to suck the end of his scarf and think, that although the work of the Research Team was far from complete, it had certainly been on the right track.

The Master felt differently. He returned to whisper into the Doctor's ear, 'His work is loose, speculative, useless. We cannot wait for him. We must vacate.'

A creaking sound, emanating from the walls, reminded them that the local structure would not hold much longer. 'Vacate?' echoed the Doctor. 'Where to? The collapse will spread out like ripples in a pool throughout the whole of space-time. No, what we have to do is . . .' He tailed off into silence, somewhat stuck for options.

'Well, Doctor?'

The Doctor waved his arms vaguely but enthusiastically. 'A positive response. Something definite, resourceful. Entropy works by rusting the resolve quite as much as by crushing cities into sand dunes.'

'You have a concrete idea behind all that poetry, Doctor?' sneered the Master.

The Doctor had to admit he hadn't. He put his hands back in his pockets and returned to his study of the print-out.

'My dear Doctor. You're a poor scientist. It's easy to see why you make so many mistakes.'

'And why you make so few friends,' the Doctor replied.

The bitter exchange was interrupted by the Monitor rising from the Earth computer. 'I have done what I can in the time. A desperate last effort. It only remains to align the antenna and beam the program out to space.' The antenna still held firm on what remained of the roof. It was a doubtful enterprise; even the Doctor for all his optimism had to admit that. He was

about to follow the Monitor through the narrow door that lead to the upper storey, when, through a gaping hole in the wall, he saw a familiar purple uniform in the street below. 'Tegan!' shouted the Doctor.

'Thank heavens you're still here, anyway.' She arrived breathless at the top of the steps, her uniform dusty and her shoes scuffed.

'Tegan! I told you to get out of here.'

'No thanks, Doc. I'm staying with you. You're the only insurance policy I've got.'

The Doctor dragged her inside, ducking a shower of debris. Above them, through ever increasing gaps in the ceiling, they could see the Monitor treading warily across the roof towards the antenna. At one point he stopped to wave to them. 'There is a CVE close by we might be able to re-

open, he called down, pointing to an area of sky.

Tegan held her breath; his progress across the crumbling roof looked suicidal. 'What's he doing?'

The Master snorted by way of answer. 'He can do as he pleases - he's harmless. But you and I, Doctor, we must form a plan. I propose . . . one: withdrawal to a position of temporary security; two: reconfiguration of our two TARDISes into time cone inverters; three: creating a stable safe zone by applying temporal inversion isometry to as much of space-time as we can isolate . . .'

Tegan had been unable to take her eyes off the Monitor, and now her scream interrupted the Master. He and the Doctor turned to look upwards. Another shower of silt was pouring from the ceiling, caused by loose stonework tumbling from the roof where the Monitor was flailing, as if trying to retain his balance. And then, as if in slow motion, they saw him slip. But the horror of it was that instead of falling heavily, the figure of the Monitor began to float down through the ceiling towards them, like some huge flake of ash blown in the smoke of a fire.

The body hit the floor with scarcely a sound, cracked open like a hollow shell, and powdered away to dust.

Tegan stared at the spot, her hand pressed involuntarily against her mouth. 'Horrible, horrible.' She heard a harsh, dry voice that seemed to speak her thoughts and looked up to see the Master backing away towards the door. 'Hardly more horrible than turning people into shrunken dolls,' she shouted at him.

The Master's eyes were wild and staring in his pallid face. 'No! Anything but that. Do what you like, Doctor. Logopolis is yours!' At the door he turned and ran, disappearing down the stairs with debris cascading after him.

'Doctor! We must stop him!' She ran to the window overlooking the street. 'The Master's getting away.

The Doctor had said nothing for a long time. Now he spoke slowly, as if all sense of urgency had drained from him. 'Which means we can't - as he's got the only TARDIS left on Logopolis.'

'Then we've got to get after him.' She ran to the Doctor, but he gestured to her to let him think for a moment.

'Reconfigure the two TARDISes into time cone inverters,' muttered the Doctor, pensively echoing the Master's proposal. 'Yes, it would have worked - for at least part of the universe. What a waste of a brilliant mind.'

A slab of plaster exploded into fragments at Tegan's feet. 'And a waste of two more brilliant minds if we don't do something soon.'

'You're right. The Monitor's program to re-open the CVE . . . There's a slight chance . . .' The Doctor's movement towards the Earth computer opened up a rift in the floor, cracking the console. The disk drives juddered to a halt. 'Correction - there was a slight chance.'

The Doctor fell to musing again, infuriating Tegan, who put her lips to his ear and said loudly, as if she were talking to a deaf old man, 'Come on, Doctor. We've got to stop the Master from taking off.'

The Time Lord raised an eyebrow. 'Why? There's no point in running from place to place without a positive approach to take with us. The solution is here . . . somehow . . . Or somewhere very like this. I had a strange feeling we were very close - before this!' He tapped the Earth computer emphatically; a panel split and clattered to the floor. The Doctor knelt down, absent-mindedly inspecting the damage. 'I sympathise,' he said, patting the machine. 'I've never felt so close to dissolution before.' Dissolution? The word sounded so final to Tegan. 'This can't really be the end, Doctor. It can't be.'

The Doctor smiled up at her, as if only then reminded of her presence. 'Of course it can't. There must be something we can do. Some desperate, remote chance. Remote!' He paused to savour this last word, as if there might be the flavour of salvation in it.

'If it's remote it won't be here, will it, you stupid . . . Doctor!'

Tegan's voice betrayed her panic, but it came out as anger.

The Doctor's eyes flashed back in reply. He clapped his hands together. 'Of course! Here but not here! That's it.' He suddenly turned on what remained of the computer, and began tearing it to pieces with his hands. 'Doctor! What are you doing?'

'An experiment in optimism. Come on, you can help. I want this thing in pieces.'

Utterly baffled, Tegan threw herself down beside him and helped him tear away the brittle casing.

It seemed to take forever. There were several layers; some could be torn out like damp cardboard, while others were solid and had to be eased out with the Doctor's sonic screwdriver. By the time the interior lay exposed her hands were raw from the effort.

The Doctor said little during the work, and when she had asked him three times what on Earth he meant by 'here and not here' all he said was: 'Precisely - on Earth.' And then he went very quiet, rolled back the voluminous sleeves of his coat and reached into the wreckage.

The thing he eased out was a long rectangle the colour of emerald, to which was attached a neat pattern of small objects that looked like large flat beetles with silver legs. Tegan recognised them as some sort of electronic component.

The Doctor turned the board over in his hand, inspecting it carefully. 'As I thought . . . Bubble memory.' He handed the device to Tegan with a broad smile. 'Bubble memory . . . You realise what this means?'

'No, as a matter of fact I don't, Doctor.'

The Doctor reached into the machine again, and produced several more of the flat boards, passing each one carefully over to Tegan. 'Bubble memory is non-volatile. Remove the power - and the bit-patterns are still retained in tiny magnetic domains in these chips.'

So that was the Doctor's idea! The Research Team's last program was still here, in the pile of memory boards Tegan held in her hands. 'Which would be great if we had a computer to run it on,' she said.

'But there is! Exactly like this one.' The Doctor grinned as the light began to dawn in her eyes. 'On Earth, as you suggested.'

'The Pharos Project!' Tegan exclaimed.

'Exactly,' said the Doctor. 'Now all we have to do . . . is get there.'

'Master! Wait! There may be one last chance. Master!'

The Doctor's voice was hoarse with calling. Tegan took her turn, giving her loud Aussie voice full rein. 'Master! Don't take off. Please . . . The Doc thinks he's got the answer.'

Inwardly Tegan was close to despair. Screwing up their eyes against the gusts of fine pink dust, she and the Doctor had trudged out from the ruins of the Central Register in a wide sweep of the flattened landscape. It seemed to her that even if there were something in the Doctor's crazy plan for the fragile memory boards she was carrying, the chances were that the Master was long gone.

But the dismal wasted world of Logopolis presented the Doctor's sometimes facile optimism with one small ray of hope. He thought - though the calculations to confirm his theory would have taken several days - that a dematerialising TARDIS would have to create a major disturbance to the unstable landscape, something they were bound to notice. Apart from the constant cracking and shifting of the ground beneath their feet there had been nothing on that scale since the landslide Tegan had caused. If the Doctor's guess was right, the Master was still on Logopolis!

On the basis of this long shot they were trekking the dangerous territory, hoping to run into the man the Doctor hated most in the whole universe. Tegan's dark doubts grew with every precarious ruin they explored. But she was the one who found the glove.

'Doctor! Over here!' She knelt and peered at the shiny black object. It was lying palm up, partly covered by a mound of pink dust that had piled up around the base of a flat fluted pillar lying horizontally along the back of the cell.

The Doctor seemed a long time coming; perhaps he had missed the cave. With the idea of going to the entrance to call again, she reached out to pick up the glove.

The black leather fingers closed tightly around her hand.

The Doctor heard Tegan's screams and arrived at a stumbling trot. In struggling to escape she had pulled the hand out of the ground, revealing a flailing length of arm. She was also in danger of bringing down what remained of the roof. The Doctor clapped one hand firmly over her mouth and grabbing the disembodied arm with the other heaved backwards with all his strength.

The Master's face emerged from the sand beneath the pillar. 'Just in time, Doctor,' he said, spitting out dust. 'I have almost had my fill of Logopolis.'

The Master had stumbled through a multitude of ruins before finding the fat fluted column jammed tightly into one corner of the cell, supporting the sagging roof. In the geological upheaval it had shifted too close to the wall for him to be able to open the door.

At first he had tugged at it impatiently, and then with violence. Powdered rock plummeted from the roof, the pillar teetered and then crashed down towards him, bringing with it a fresh cascade of rubble. The settling dust had brought an uneasy silence to the cell. Trapped under the immense weight of his own TARDIS there was nothing to do but wait.

Patience had brought its reward. Scrabbling with their hands at the loose ground Tegan and the Doctor finally managed to prise the Master from under the pillar and pull him to his feet.

The Master dusted himself down as best he could. 'I'm grateful, Doctor.' 'Splendid,' said the Doctor, 'because now it's your turn to help us.' He glanced down at the pillar, and noticed that the door, normally concealed by the fluting, had come ajar, hinting at the inky vastness of the interior. As the three of them hauled the column upright, the Doctor added,

'One good lift deserves another, don't you think? Next stop Earth.'

Adric had come to think of him as 'the Watcher', this strange friend of the Doctor's who came and went like pictures in the fire, and never spoke. The Watcher seemed to prefer solitude; now he wasn't even allowing them to share the console room with him. It reminded Adric of the time the Doctor had put him outside the door while he answered the cloister bell, except that now instead of Milton, Adric had Nyssa to share the corridor with him. 'But the Doctor usually lets me help him.' The boy's protest went unheeded and the door closed.

'I don't think he needs our help,' Nyssa said. 'He seems to know what he's doing.' When he had fetched her from Traken he hadn't said anything, just beckoned. But there was something oddly familiar about the strange figure that had stopped her feeling afraid. He seemed very like the Doctor in many ways, but so solemn, as if he carried all the troubles of the world on his shoulders. 'It's as if he was watching over me,' Nyssa said.

So Nyssa had that same feeling! Adric told her about the name he had privately given him. 'I'm not afraid of the Watcher either,' the boy added. 'But I would like to know who he is.'

Adric slowly turned the handle to peep into the console room. Through the narrow crack in the door he could see the Watcher's hands drifting over the console controls. 'He's setting the co-ordinates . . . no, he's . . .' Adric had to stand on tiptoe to see better.

Nyssa hadn't approved of the idea of spying on the Watcher, but now she said impatiently, 'Well? What is he doing?'

Adric caught his breath. 'He's unsetting the co-ordinates! He's disconnecting the co-ordinate sub-system . . . But he can't do that. Not in mid-flight!'

'What is it? What's the matter?'

The boy slammed the door shut, and by way of answer to Nyssa's question grabbed her and threw her roughly to the floor. At the same moment the TARDIS rocked violently. For several sickening oscillations the two companions rolled back and forth across the pitching corridor. Then, as the movement stabilised, the solid walls around them appeared to melt and glow, and everything within vision began to merge into a single featureless field of brilliant white. A roaring sound filled the corridor. Over it Adric heard Nyssa's voice. 'Adric? What's happening?'

He had to shout to be heard above the mounting noise. 'It's the Watcher. He's taking us out of time and space altogether!'

Adric remained conscious, but for a long time he seemed to hover on the very edge of existence, like a thought in search of a mind to think it. From time to time he caught the sound of Nyssa's voice amidst the rush and roar that filled his head, but the words were indistinct and may have been in his imagination, or perhaps in hers. His mind brimmed over with the whiteness that had no boundary in space or time. And then, slowly at first, the shapes came back. The twisting line where one corridor wall met the floor, the horizontal plane of the door, the perfect circles of the roundels inlaid into the panels, appeared one by one like fresh pencilmarks on blank paper. Eventually the roaring died, leaving them in a silent, airy brightness that was unmistakably the TARDIS corridor, but somehow infinitely more spacious between its insubstantial bounds. Nyssa was sitting beside him on the floor, 'Is that where we are?' she asked, as though nothing had interrupted the conversation. 'Outside space and time?'

'Yes,' said Adric. 'And hovering. The TARDIS isn't supposed to do that.' Nyssa stood up. 'We seem to be safe.'

Adric scrambled to his feet beside her. 'Safe, yes. That's the point, I suppose. The Doctor's told the Watcher to look after us.'

'I'd rather be with the Doctor,' said Nyssa.

'Me too,' Adric said. 'What are we going to do?' The boy knew, even as he asked, that it was an empty question. Guided by the Watcher, the TARDIS had

made the only possible escape from the deadly collapse that was spreading out from Logopolis. But the Doctor was in the middle of it, and now there was nothing they could do to help.

Nyssa's reply was calm and practical. 'Well, if the Watcher won't let us in the console room, you'd better show me round the rest of the TARDIS.'

The technician reached out for the paper cup that stood somewhat incongruously in front of the high-technology switches and LED indicators of the computer console. He had been trying to crack the problem since starting his six o'clock shift that evening, and here he was on the other side of midnight and range errors of two of the global variables were still slipping through the compiler. That was typical of the Pharos Project month after month of no data coming in from the antenna meant you filled in the time chasing petty errors out of the software until your eyes popped. The moment he lifted the paper cup he realised it was empty. The strains of Tchaikovsky's 'Nutcracker Suite' pouring into his ears through the lightweight headphones were no substitute, coffee was what he needed. He got up, stowing the cassette recorder into the pocket of his white lab coat, and, crushing the cup and lobbing it expertly into the wastepaper basket, went out into the corridor to wring fresh inspiration from the beverage dispenser.

The Pharos Project computer room was illuminated by a single lighting bar over the console, which left pools of shadow in the remoter areas where the tape and disk drives hummed on stand-by. No sooner had the technician moved out into the corridor than a new voice joined the gentle chorus: a kind of chugging noise emanating from a rapidly thickening patch of yellow that stained the gloom in one corner. The shape congealed into a stubby pillar, lonic in proportion, but with a leafy capital and base reminiscent of the Corinthian order. A door, not a usual feature of its Ancient Greek antecedents, opened up on one side, and the Master stepped into the room. 'You see,' he said quietly to the Doctor, who followed him, 'we have materialised exactly on the co-ordinates.'

'Spot on,' the Doctor conceded. 'I envy you your TARDIS, Master.' 'Excellent, Doctor. You're improving. Envy is the beginning of all true greatness.'

Tegan followed the two Time Lords out of the TARDIS, and found herself in a room so like the Monitor's Central Register, as it was before the disaster, that at first she thought the destruction of Logopolis had only been a bad dream. And then from the corridor she heard the jingle of coins in the automat; unmistakably an Earth sound.

The Doctor pulled her back against the wall. The Master was on the other side of the door when the technician came back into the room, sipping at his coffee. As the door swung shut behind him, Tegan saw the Master taking an unpleasant-looking piece of technology from his coat. He seemed to be levelling it at the technician.

The Doctor was beside him in an instant. 'No!' he said in a fierce whisper, pulling the Master down behind a disk drive cabinet.

The Master calmly handed the device over to the Doctor. 'The light speed overdrive from my TARDIS. You'll need it for transmission.' His eyes twinkled with a mockery of innocence.

'I'm sorry,' said the Doctor. 'I thought . . .

'That I would kill him, Doctor? Why should I, when you have the time and patience to explain our presence to this gentleman.' There was no mistaking the sarcasm in the Master's voice.

'Yes, well . . . I can try.'

Signalling to Tegan to get the memory boards from the Master's TARDIS the Doctor stood up. The technician was totally immersed in his music and his computations; it was certainly going to be awkward, the Doctor realised, to announce their presence without frightening the life out of him.

Such humane considerations were no hindrance to the Master, crouched behind the cabinet. Unfortunately for his plans he had just aligned the re-

dimensioner on the precise site of the posterior cerebellar notch at the back of the technician's skull when Tegan re-emerged from the TARDIS with the printed circuit boards. Instinctively she cried out.

The Doctor's head swivelled round immediately, and at the same time the weapon flashed in the Master's hand. But before the energy beam had time to arrive at its target the Doctor had dived at the technician, sending him skimming across the room on the casters of his chair.

The Doctor turned his fury on the Master. 'There must be no more deaths!' 'Never mind. You've solved our problem, Doctor.' He jerked a thumb towards where the technician lay, a crumpled unconscious heap against the wall. The Master ripped off the headphones and dropped them into the wastepaper basket while the Doctor checked the man's pulse and made him comfortable on the floor.

'I feel we've been spared a very difficult conversation,' said the Master. Then he turned to Tegan, snapping his fingers. 'Come along, now. Door . . . blinds . . . lights. If this interesting scheme is to work, there's a great deal to be done before dawn.'

Giving much thought to the task they were about to embark upon, the Doctor absent-mindedly stirred the technician's coffee with a pencil and raised it to his lips.

Despite the confusing new spaciousness of the corridors, Adric had managed to find the TARDIS cloister room again. He walked round the perimeter with Nyssa, pointing out the crumbling stonework that had started off the Doctor on his resolve to repair his ship. It looked particularly shoddy in the over-lit brilliance induced by timelessness and spacelessness.

'Things in the TARDIS often stop working for no reason,' the boy said. 'The Doctor's very good at coping with it, but it's a terrific strain on him.' 'Entropy again,' Nyssa said. 'You can't get away from it.'

Adric stopped suddenly, looking across to the other side of the cloisters. A white shape was visible through the foliage, pacing restlessly backwards and forwards much as the Doctor had done the day Adric had first discovered the cloister room.

'It's uncanny! From here . . . it might almost be the Doctor.'

The echo of Adric's whispered remark to Nyssa must have carried around the wall to the other side of the cloisters, because at that moment the Watcher stopped pacing and looked in the direction of the two companions. And exactly as the Doctor had done before, the Watcher took a pace forward and beckoned to Adric across the quad.

Nyssa wanted to hear all about what the Watcher had said, but explanations had to wait while Adric hurried her through the white brilliance of the corridors and back to the console room.

'Are we travelling again?' Nyssa asked, closing the door behind her. 'We have to log in the co-ordinate sub-systems first.' Adric waited until the row of yellow lights were all glowing above the set of initiation switches. Then he unlocked the sub-system panel, as he had seen the Doctor do so many times before.

'He actually spoke to you?' asked Nyssa.

'Yes, of course,' said Adric, smoothing out the piece of paper the Watcher had given him. He hesitated. 'At least . . . yes, he must have spoken to me.' He had the distinct impression that it had been a conversation, but when he tried to remember what the Watcher's voice was like he could only hear the Doctor speaking.

'We're going back into space and time?' asked Nyssa, looking over Adric's shoulder at the writing on the paper. 'What changed his mind?'

'It didn't change,' Adric told her, surprised at his own confidence. It was impossible for him to know the Watcher's thoughts, and yet he felt sure their new companion was in some way part of the future. His mind hadn't changed because he knew - he had always known - what was going to happen. Nyssa wanted to be shown how the TARDIS worked, but unlike Tegan her scientifically trained mind was not to be thrown into confusion by long words. Adric explained as much as he knew, but had to confess that most of the theory was too complicated even for his mathematical brain. Luckily the Watcher had told him exactly what to do. According to the piece of paper, Earth was in sector eighty twenty-five of the third quadrant. 'The temporal settings are laid in on this panel . . .' Adric told her. 'It always looks so easy when the Doctor does it.'

'But where are we going?'

'The Pharos Project. Now just leave me alone for a bit. I have to do some calculations.'

Adric settled in front of a small keyboard set into the console. Nyssa turned to the viewer screen, and saw a starfield, a million glittering diamonds scattered across a cushion of black velvet. From outside space and time she was looking down on an image of the whole universe.

Adric finished his calculations and came to stand beside her. Curved lines like meteorological isobars were inching across the screen, and as they advanced, the stars they covered dimmed and died. It was as though some black ink blot were spreading across the universe, indelibly staining out the light.

Nyssa pointed to the awesome blackness of the encroaching blot. 'Look at the entropy field. It's huge now.' Then a thought occurred to her. 'Is Earth on this star map?'

Adric pursed his lips for a moment, then indicated the edge of the map furthest from the invading darkness. 'This is Earth's galaxy. Somewhere here. The Earth people have a few hours left.'

'And Traken?' asked Nyssa.

The question took Adric by surprise. He waved his finger vaguely around the middle of the screen and said, 'Traken should be . . . Traken's . . .' And then he realised that it lay directly under the spreading dark stain of entropy.

'That's funny,' said Nyssa. 'I can't even see Mettula Orionsis . . .' And then she tailed off as she saw Adric's face.

'I'm sorry, Nyssa . . . I'll switch it off.'

She stopped him as he was reaching for the switch. 'No! Wait!' She wanted to look a little longer, giving herself time to absorb the knowledge that the death of her father had been followed by the destruction of her whole world. She had never hated the Master so much as she did at that moment. 'He killed my step-mother, and then my father . . . and now this! The world I grew up in - blotted out forever!'

Adric took hold of her hands. She looked at him for a moment, her eyes wet with tears. Then gently releasing herself from him she reached out and flicked off the viewer.

A moment later the time column juddered into life, and the lighting began to whiten again, bleaching out the shapes around them. 'Hold on,' said Adric. 'We're going back now.'

The two companions gripped the console for support as the room filled with the roaring noise that announced the beginning of their re-entry into space and time.

12.

Tegan helped the Doctor and the Master unscrew the side of the computer cabinet, then she left them with the memory boards and peeped out into the corridor. The echoing darkness hummed faintly with the sound of distant machinery as she tiptoed to a window at the end and pulled down a slat of the Venetian blinds. They were on the second floor of a building that looked down onto a fenced-off area. In the light of the high yellow lamps slung between tall poles below, the long low huts looked like a tangle of barges moored in the black asphalt. Beyond the huts the high wire fencing was interrupted by a main gate, approached by a wide open space. Tegan deduced from the white markings that it was partially a car park. Over it all a huge skeletal structure rose up into the night sky like the Eiffel Tower; but instead of coming to a point it bloomed into the familiar shape of a vast metal bowl. The Pharos antenna, she thought. The original of the one on Logopolis.

The two Time Lords worked on through the night, and Tegan kept returning to the window, until the dark horizon began to sharpen with an edge of silver. 'The dawn's coming up,' she whispered, coming back into the computer room. 'And they've got security guards out there.' She had noticed dark shapes moving by the main gate.

The collaboration between the two Time Lords was not going entirely smoothly. At the Doctor's signal the Master prodded the console keyboard again. 'It's still not running. The program is useless.'

'The Monitor gave his life trying to complete it,' the Doctor replied sharply. 'We must try to do him justice.'

'Indeed? And what makes you so sure this is going to work?' The Doctor smiled pleasantly and took over the keyboard. 'While there's life, it's six of one and half a dozen of the other.'

'Woolly thinking, Doctor,' sneered the Master.

'Very comforting, when worn next to the skin.'

The keyboard clattered under the Doctor's fingers for a moment or two. The Master leaned over to inspect the screen, which had begun to fill with figures. 'It's running,' he said, a note of surprise in his voice. 'If you can call this alien gibberish a program.'

'We'll know once we've managed to download it onto the antenna. Now, in view of the guards out there - or rather, to avoid being in view of the guards - I suggest we pop across in your TARDIS.'

The Master tapped the light speed overdrive, which was sticking out of the Doctor's top pocket. 'Not unless we deplete this, and we'll need it for transmission.'

The Doctor eyed him suspiciously. 'Are you sure?'

'Of course I'm sure. The mean free path would be reduced to a matter of millimetres. It can't be done, Doctor.' Mockingly he added, 'Not even with faith and hope.'

The Doctor glanced at the door. 'All right, we'll risk the guards. But we'll have to be careful.'

The TARDIS carrying Adric and Nyssa had arrived at its destination, and materialised discreetly in the shadows around the base of the Pharos antenna. Inside, the two companions had been watching the huge basket-like structure on the viewer screen.

'So that's what the Earth people are using to beam messages to the stars,' said Nyssa. 'Trying to call up alien intelligences.'

'Then they should be very pleased to see us,' Adric said, pulling the doorrelease lever. 'Except that they won't be.' The sound of dawn birdsong filtered in as the big double door swung inwards.

'Why not?' Nyssa asked.

'People never are when they get what they've always wanted,' Adric replied. 'You'll see.'

Together they stepped cautiously out into the cold morning air and ran for cover.

At the end of the corridor the Doctor paused to lift a slat of the venetian blinds. Tucked into the shadows on the far side of the car park, he saw the unmistakable blue shape of the TARDIS.

The double doors were ajar, and in the opening loomed the vague outline of the figure that had followed him to Logopolis and back. Something distinctly proprietorial about the patient way he waited in the TARDIS entrance sent a chill through the Doctor's body.

'Hey, Doc, are you OK?' Tegan was by his side, recalling him to the business in hand.

The Doctor turned from the window, instantly himself again. He knew the danger of showing any sign of weakness in front of the Master. 'This is going to need split-second timing,' he said crisply. 'We've got to get across to the antenna control room and re-align it on whatever's left of Logopolis. That way we should be near enough to that CVE the Monitor was trying to re-open.

The Master confirmed the plan with a nod.

'Good,' said the Doctor. 'Then follow me. And watch out for those security guards.'

Downstairs the sonic screwdriver made quick work of the chain on the safety door that lead out into the enclosure, and from there it was a short sprint across open ground to the cover of the row of huts. They pressed themselves up against the wall while a group of early morning workmen wheeled their bicycles in through the main gate and ambled past within a few feet from

where they stood. The Doctor contemplated the open ground between them and the antenna, mounted on its cluster of girders and gantries. The sky was getting lighter, and every delay made the venture more dangerous. Just as he judged it right to move, two security men pulled open the main gate, allowing a car to roll slowly in towards the Doctor and his party, cutting off their direct route to the antenna.

The Doctor pulled Tegan back into the shadow of the huts, but behind them the Master, tiring of the delay, reached into his coat for the weapon he had intended to use on the technician.

The Doctor noticed the movement, and turned in time to grab the weapon just as it was about to go off. But the noise of the scuffle alerted the two security men, and a voice shouted, 'Intruders! Come on, after them!' The Doctor broke cover, and Tegan had no choice but to follow his flapping scarf and coat. This wasn't her idea of fun, playing some maniac game of tag, in and out of the low buildings. At least the Doctor seemed to have some sense of the geography of the place, avoiding the culs-de-sacs between the huts. Then they rounded a corner and ran straight into the workmen. There was a sudden tangle of limbs and a clatter of bicycles. Tegan managed to evade the grabbing hands, but with his great loose coat and his flying scarf the Doctor was an easier quarry. Looking behind her Tegan saw the security men closing in.

Then came a brief flash of light and a short sizzling sound. The Doctor looked up from his struggle to see the Master had missed his aim at the workmen, but was still pointing the deadly weapon. With a howl of rage he shook off his assailants and dived for the Master, grabbing the device and hurling it across the asphalt path.

'Sentimental fool,' hissed the Master, throwing him back against one of the huts. 'Thanks to you we're weaponless.' The Doctor hit the slatted walls with a thud that knocked the air from his lungs.

If it hadn't been for the intervention of Adric and Nyssa at that moment he would certainly have been captured. At the approach of the workmen with their bicycles the two companions had shrunk back behind a water barrel outside one of the huts. Adric knew that the Watcher had brought them there to help the Doctor, but until the moment came he hadn't been sure exactly how.

Unfortunately Tegan had a very similar idea. As the two security men came pounding up to the scene she rushed forward waving her arms and shouting at the top of her voice, 'You've got all this totally topsy-turvy. The Doctor's here to help, and if you stop him it could be the last thing

you'll ever do.'

At the same time Adric had moved out into the open. He hadn't intended to topple the water barrel on the way, but the result certainly heightened the atmosphere of total confusion that was suddenly unleashed on the Pharos Project.

While Nyssa signalled to Tegan to stay quiet, Adric declared loudly: 'Nyssa and I have heard your message across the universe and have come to answer your call.'

The Master tugged at the Doctor's coat. 'You and I have work to do,' he whispered. Though reluctant to leave his companions, the Doctor was bound to agree. He followed the Master discreetly out of sight, around the corner of the hut.

'Message?' one of the security men was saying. 'What? Who are you people?' It was Nyssa's turn for theatricalities. 'We are the alien beings you seek.'

'We are intelligences from deep space,' Adric chimed in.

The chief security man gestured ineffectually for silence. 'Now just a minute . . . Please!'

'Every word of this is true,' Tegan shouted, her outback Aussie voice easily the loudest present. 'Well, come on, you lot! Don't just stand about. Let's go and see someone in authority!' The Doctor found himself running towards the antenna on his own. At the absurd risk of being seen by the security men the Master had hung back, losing precious moments to scan the ground. He wasn't going to let the Doctor's delicate sensibilities deprive him of the companionship of his favourite weapon.

Luckily for the Master, the two security men and the workmen were engrossed in their interrogation of Tegan, Adric and Nyssa. He scooped up the weapon and, with a sardonic glance in the direction of the antenna, where the Doctor could be seen beginning the long climb up the steel ladder, he doubled back towards the computer room.

The technician was stirring. His first, and last, conscious awareness was of powerful arms grabbing his white coat and hauling him to his feet. He felt cold metal against the side of his head, and then there was a sizzle and a smell of ozone and the world exploded into a giant dome of light. The Master pocketed the cassette recorder. A moment later he and the plump fluted column had vanished from the computer room.

From the door of the TARDIS the Watcher had seen the Master retracing his steps to the computer room, as he saw now the Doctor's perilous ascent of the Pharos antenna. These were the conditions of the moment he knew had to come. In his mind was a clock, its hands closing on the inevitable vertical of midnight.

The higher the Doctor climbed the more the wind lashed at him, bellowing out his coat like some wild red sail. His hands ached on the cold metal rungs, and at one point he paused to fumble in his pockets for gloves. He took the opportunity to look down to the dizzyingly diminished enclosure, just in time to see the tiny figures of Adric, Nyssa and Tegan being marched into the building by the security guards.

There were no gloves, and by the time he arrived at the parapet his knuckles were blue. He leant for a moment against the rail and took stock of the geography. The articulating structure he was standing on was designed to revolve about the base as the antenna tracked across the sky. The swaying metal walkway ahead formed a long thin bridge across to the bowl of the parabolic aerial. The cable strapped to the railing like the sinew of a giant arm lead back from the bowl to a large box-like construction near where the Doctor stood. He pushed open the door and looked inside. As he had deduced from the cable, it was the antenna control room. What he had not expected to find was the Master, calmly making connections to an electrical conduit in the wall.

'I decided to use my TARDIS after all,' the Master said without interrupting his work.

The Doctor noticed the ugly column in one corner of the room. He took out the light speed overdrive from his top pocket. 'You didn't miss this?' 'I gave you that to demonstrate my trust, Doctor. But I do not take foolish risks. There is the real light speed overdrive.'

The Master waved towards the work-bench, where a similar device glowed among the dials and switches. 'We have only to connect this feed from the computer room, and the job is done.' He handed the end of the jumper wire to the Doctor. 'As you devised the plan, I think the honour should be yours, Doctor.' And with that he strolled out onto the parapet.

The Doctor ran his eye over the work-bench. The light speed overdrive was hooked into the oscilloscope that metered the radio frequency output to the antenna. It wasn't an ideal arrangement, but as a quick improvisation it was perfectly workable. Once again the Doctor had to admit admiration for the Master's ingenious practicality. With the sonic screwdriver in one hand and the jumper wire in the other he began to complete the task. Outside, the Master looked down over the rail to the enclosure far below, where with a flurry of activity the establishment was beginning its working day. His thin lips curled into a smile. 'Alien intelligences! I'll show them the quality of alien intelligence.'

From his pocket he took the looted cassette recorder and, softly in order to avoid alerting the Doctor in the room behind him, began to speak into it.

'Peoples of the universe. Please attend carefully. The message that follows is vital to the future of all of you . . . '

With a sense of satisfaction the Doctor rapidly checked the connections he had made. The moment had come to throw the switch.

A deep grinding sound shook the room as the whole steel structure began to move, rotating the basket-like bowl of the antenna to point at a pin-prick in the heavens he had plotted on the co-ordinator. He studied the small circular screen of the oscilloscope excitedly and reached out to make a minute adjustment to one of the dials. The cable was now feeding the analogue converter with a regular flow of digital input from the computer room, and as far as the Doctor could judge from the feedback patterns the transmission link was established. The data was reaching the CVE, and it was stabilising!

He heard a chuckle behind him. 'So it works! Congratulations, Doctor. I always knew you would do it.'

'You did most of this,' the Doctor conceded generously.

'Oh no . . . I was little more than a humble assistant. I have learnt a great deal. And now it is time for you to go and explain the presence of your friends. There's quite a hubbub outside.'

The Doctor got up from the work-bench. 'Quite right. We'd better leave this until the new equilibrium is established. A mistake now could destroy everything.'

'I know that, Doctor. And it could happen so easily.'

Something in that level, mocking voice made the Doctor hesitate at the door. 'What do you mean?'

The cold dark eyes gazed back unblinkingly. 'The universe is hanging on a thread. A single inversion pulse down that cable and the CVE would close forever. Even a humble assistant could do it.' While he spoke the Master placed the cassette machine on the work-bench and bent the goose neck of the talk-back microphone down towards it. His finger prodded the play-back button.

The Doctor listened in horror to the whisper that came thinly from the miniature loudspeaker. 'The message that follows is vital to the future of all of you . . . At the time of speaking the fate of the universe hangs in the balance, and the fulcrum of that balance is the Pharos Project on Earth. It is from there that I am speaking. The choice for you all is simple: a continued existence under my guidance, or total annihilation . .

The Doctor had heard enough. 'Blackmail!' he exclaimed.

'No, Doctor. I am simply reporting the state of affairs. I have the power now to save them or destroy them.'

'You're utterly mad!' The Doctor made a move forward.

But the Master already had the weapon levelled at the Doctor's head. 'Please stay where you are. We cannot have the proceedings interrupted.' From his pocket he took the silver device the Doctor had seen him use to devastating effect on Logopolis and clipped it neatly on to the end of the light speed overdrive. 'Now the CVE is mine, Doctor.'

The Doctor edged away, as if intimidated by the weapon. He had no illusions about its unpleasant consequences, but his main object was to get nearer the door. There was a good chance the CVE had stabilised by now, and it would only be under the Master's power as long as the link between it and the improvised apparatus held. The Doctor remembered the long cable that snaked between the control room and the parabolic aerial. Perhaps there was a way to stop this final catastrophe. The Doctor dived out through the door, slamming it behind him.

The metal plates of the swaying walkway clattered under his feet. Dwarfed by the gigantic proportions of the great bowl, the Doctor raced across the tenuous bridge that hung in the air between the control room and the aerial. His eye scanned the handrail, tracing the path of the cable along its length. Somewhere there had to be a junction he could disconnect. Over the sound of the wind he heard the Master's voice behind him. 'Don't make any plans, Doctor. Your future ends here.'

The Doctor threw himself flat on the walkway as the beam struck sparks from the rail. Assuming a five-second recharge cycle for the weapon the Doctor scrambled to his feet again, ran on - and dived again. To his horror the shot did not come. The Master had outguessed him, and now he was a sitting target.

The Doctor jerked his head round to look back, and was astonished to find the Master's face grinning at him from behind the glass of the control room window. Of course! With his target so close to the antenna the Master dared not risk firing a high-energy beam. A ricochet could disrupt transmission. But what was he up to now?

The Doctor dismissed the question and, obeying the First Law of Crisis, concentrated on the cable. At the point where he now lay, it branched away from the railing and ran directly under the walkway. He put his head over the edge and saw the smooth line of the insulation interrupted by a bulky contusion. The connector he was looking for lay directly beneath him. So did a postage-stamp-sized stretch of asphalt car park. But he tried not to think of that as he climbed through the railing.

At that instant he discovered what the Master was up to in the control room. The whole walkway began to tilt with alarming speed, pitching him forward into space. The Doctor grabbed for the only handhold he could see, the cable itself.

It sagged under his weight, and then with a sickening snapping sound the ties on either side broke away from the struts, jerking him down until he hung fifteen feet below the girders. His hands gripped the bottom of the U formed by the cable, and he swung there with nothing beneath the soles of his shoes but thin air.

The positive aspect of the situation was that he now had control over the connector. The negative side of life had also to be faced: if he were to separate the connector, as it flew apart there would be very little chance of holding on to both ends. And whichever end he chose would almost certainly not bear his weight.

But the Master was poised to destroy the CVE. The cable powered a gigantic weapon that put the whole universe in the palm of his hand.

The angry thought silenced all debate. Inching his fingers backwards and forwards the Doctor began to unscrew the casing.

A picture floated into his mind of a distant, vaguely formed figure, folded back from the time that was to come by the turmoil of the present. Even as he methodically continued the rocking movement of his hands, screwing out the thread millimetre by millimetre, he had a sense of those eyes watching him: his own eyes from the future.

Tegan, Nyssa and Adric were being marched out of the building towards the waiting van when one of the security guards shouted, 'Up there! Come on!' The exclamation triggered a sudden flurry of officialdom towards the base of the antenna, and the three companions found themselves abandoned by most of their interrogators.

Adric cricked his neck upwards, and gasped to see the tiny figure swinging from the loop of cable below the walkway. The Doctor's plan must have gone hideously wrong. Officials were clambering up the ladder, and for a moment

there seemed to be a chance they would reach him if he could hang on long enough.

But as the helpless companions watched, the loop of cable sprayed out a cascade of sparks and came apart. For a fraction of a second the tiny figure swung on a single thread. And then it snapped.

Adric, Nyssa and Tegan ran across the asphalt towards the hideously crumpled shape on the ground. It seemed impossible that he should still be alive. But they saw the contorted figure move, and a feebly lifted arm motioned them to stay back.

Adric, who was closest, heard the familiar voice. 'This is the end . . . but the moment has been prepared for.'

The Doctor struggled to lift his head, and reached out a hand towards the shadows behind him, as if he expected someone to be there. Adric blinked: there was someone there. A vague featureless figure stepped forward without a sound and took the Doctor's hand. It was as if the Watcher had been waiting there at the base of the antenna for the Doctor's fall.

Tegan's voice was a hoarse whisper. 'What's happening to him?'

The Doctor's arm contracted, drawing the Watcher towards him, closer and closer until the two shapes seemed to blend. The faces melted together and became formless.

'He's changing . . . ' said Adric. 'The Doctor's regenerating.'

Nyssa stared as the Doctor and the Watcher melted into a blur. 'So the Watcher was the Doctor all the time . . .!'

The figure on the ground straightened its limbs and sat up slowly. A smoother, younger face was beaming somewhat vacuously up at them. 'Well, that's the end of that,' said a voice they had not heard before. 'But it's probably the beginning of something completely different.'